

#### NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

January 28, 2016

### VIA ELECTRONIC FILING

Ms. Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, DC 20426

### Re: NERC Full Notice of Penalty regarding Bonneville Power Administration, FERC Docket No. NP16-\_-000

Dear Ms. Bose:

The North American Electric Reliability Corporation (NERC) hereby provides this Notice of Penalty<sup>1</sup> regarding Bonneville Power Administration (BPA), NERC Registry ID# NCR05032,<sup>2</sup> with information and details regarding the nature and resolution of the violations<sup>3</sup> discussed in detail in the attached Settlement Agreement (Attachment A), in accordance with the Federal Energy Regulatory Commission's (Commission or FERC) rules, regulations and orders, as well as NERC's Rules of Procedure including Appendix 4C (NERC Compliance Monitoring and Enforcement Program (CMEP)).<sup>4</sup>

<sup>4</sup> See 18 C.F.R § 39.7(c)(2) and 18 C.F.R § 39.7(d).

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<sup>&</sup>lt;sup>1</sup> Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards (Order No. 672), III FERC Stats. & Regs. ¶ 31,204 (2006); Notice of New Docket Prefix "NP" for Notices of Penalty Filed by the North American Electric Reliability Corporation, Docket No. RM05-30-000 (February 7, 2008). See also 18 C.F.R. Part 39 (2015). Mandatory Reliability Standards for the Bulk-Power System, FERC Stats. & Regs. ¶ 31,242 (2007) (Order No. 693), reh'g denied, 120 FERC ¶ 61,053 (2007) (Order No. 693-A). See 18 C.F.R § 39.7(c)(2).

<sup>&</sup>lt;sup>2</sup> BPA was included on the NERC Compliance Registry as a Balancing Authority (BA), Load-Serving Entity (LSE), Planning Authority, Resource Planner, Transmission Owner (TO), Transmission Operator (TOP), Transmission Planner, and Transmission Service Provider (TSP) on June 17, 2007.

<sup>&</sup>lt;sup>3</sup> For purposes of this document, each violation at issue is described as a "violation," regardless of its procedural posture and whether it was a possible, alleged or confirmed violation.

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As explained below, Western Electricity Coordinating Council (WECC) and BPA have entered into a Settlement Agreement to resolve all outstanding issues arising from WECC's determination and findings of violations of operations and planning Reliability Standards.

On August 22, 2014, in *Southwestern Power Administration (SWPA) v. FERC*, the United States Court of Appeals for the District of Columbia Circuit ruled that FERC and by extension, NERC and the Regional Entities it oversees, could not impose monetary penalties against federal government entities. BPA is a federal nonprofit agency that is part of the U.S. Department of Energy, and WECC was bound to follow *SWPA v. FERC* in resolution of this matter.

#### **Statement of Findings Underlying the Violations**

This Notice of Penalty incorporates the findings and justifications set forth in the Settlement Agreement, by and between WECC and BPA. The details of the findings are set forth in the Settlement Agreement and herein. This Notice of Penalty filing contains the basis for approval of the Settlement Agreement by the NERC Board of Trustees Compliance Committee (NERC BOTCC).

In accordance with Section 39.7 of the Commission's regulations, 18 C.F.R. § 39.7 (2015), NERC provides the following summary table identifying each violation of a Reliability Standard resolved by the Settlement Agreement. Further information on the subject violations is set forth in the Settlement Agreement.

NERC Violation ID	Standard	Req	VRF/ VSL	App Functions	Discovery Method* Date	Violation Start-End Date	Risk	Penalty Amount
WECC200700350	INT-006-1	R1	Lower/ Lower	BA, TSP	SR 7/20/2007	6/18/2007- 7/20/2007	Minimal	
WECC200700351	FAC-003-1	R2	High/ Severe	ΤΟΡ	SR 7/20/2007	7/10/2007- 11/21/2007	Serious	
WECC200700489	BAL-005-0	R12	Medium/ Lower	BA, TOP, LSE	SR 11/15/2007	6/17/2007- 12/13/2009	Minimal	No
WECC200700533	VAR-001-1	R4	Medium/ Lower	TOP, PSE	SR 12/14/2007	6/17/2007- 2/19/2008	Minimal	Penalty
WECC200800604	PRC-008-0	R1	Medium/ Lower	ТО ВА, ТОР	SR 1/18/2008	6/17/2007- 11/15/2008	Minimal	

\*SR = Self-Report / SC = Self-Certification / CA = Compliance Audit / SPC = Spot Check / CI = Compliance Investigation

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NERC Violation ID	Standard	Req	VRF/ VSL	App Functions	Discovery Method* Date	Violation Start-End Date	Risk	Penalty Amount
WECC200800613	EOP-005-1	R1	Medium/ Moderate	PA, TP	CA 2/1/2008	6/17/2007- 5/15/2008	Moderate	
WECC200800616	TPL-002-0	R1; R1.3.7	High/ Lower		CA 2/1/2008	6/17/2007- 3/11/2008	Minimal	
WECC200800617	TPL-002-0	R2; R2.1	Medium/ Lower	PA, TP	CA 2/1/2008	6/17/2007- 3/11/2008	Minimal	
WECC200800618	TPL-002-0	R3	Lower/ Severe	РА, ТР	CA 2/1/2008	6/17/2007- 3/11/2008	Moderate	
WECC200800619	TPL-003-0	R3	Lower/ Severe	PA, TP	CA 2/1/2008	6/17/2007- 8/15/2008	Moderate	
WECC200800620	VAR-001-1	R1	High/ Lower	TOP, PSE	CA 2/1/2008	6/17/200- 7/9/2009	Minimal	
WECC200800621	VAR-001-1	R3	Lower/ Lower	TOP, PSE	CA 2/1/2008	6/17/2007- 3/26/2009	Minimal	
WECC200800872	FAC-003-1	R2	High/ LNC- Level 4	то	SR 6/30/2008	6/17/2007- 5/15/2009	Serious	
WECC200801141	PRC-001-1	R2	High/ LNC- Level 4	ВА, ТОР	SR 7/1/2008	6/30/2008- 7/13/2009	Minimal	No Penalty
WECC200801161	COM-001-1	R5	Lower/ Severe	ВА, ТОР	SR 7/1/2008	6/30/2008- 11/9/2009	Minimal	
WECC200810021	PRC-008-0	R2	Medium/ Lower	то	SR 2/1/2008	6/17/2007- 11/15/2008	Minimal	
WECC200901299	PRC-STD-005-1	WR1	LNC-Level 1/ 1 <sup>st</sup> occurrence	ТО, ТОР	SR 2/10/2009	1/30/2009- 2/4/2009	Minimal	
WECC200901405	PRC-STD-005-1	WR1	LNC-Level 1/ 2 <sup>nd</sup> occurrence	ТО, ТОР	SR 4/13/2009	6/17/2007- 11/12/2009	Minimal	
WECC200901557	TOP-006-1	R2	High/ High	ВА, ТОР	SR 7/9/2009	6/30/2008- 8/11/2010	Minimal	

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NERC Violation ID	Standard	Req	VRF/ VSL	App Functions	Discovery Method* Date	Violation Start-End Date	Risk	Penalty Amount
WECC200901558	TOP-006-1	R5	Medium/ Severe	ВА, ТОР	SR 7/9/2009	6/30/2008- 8/11/2010	Minimal	
WECC200901559	TOP-006-1	R6	High/ Severe	ВА, ТОР	SR 7/9/2009	6/30/2008- 8/11/2010	Minimal	
WECC201002065	PRC-023-1	R1	High/ Moderate	то	SR 7/27/2010	6/17/2007- 10/4/2010	Minimal	
WECC201002315	FAC-003-1	R2	High/ Moderate	то	SR 10/4/2010	5/15/2010- 9/3/2010	Minimal	
WECC2011008666	MOD-030-2	R5	Medium/ Lower	то <i>,</i> тsp	SR 11/30/2011	4/1/2011- 8/10/2015	Moderate	
WECC2011008667	MOD-030-2	R3; R3.4	Lower/ Severe	ТОР	SR 11/30/2011	4/1/2011- 8/15/2012	Minimal	
WECC2011008668	MOD-029-1a	R1; R1.1	Lower/ Lower	ТОР	SR 11/30/2011	4/1/2011- 6/29/2012	Minimal	
WECC2011009029	MOD-030-2	R2	Medium/ Severe	TOP, TSP	SR 12/23/2011	4/1/2011- 2/13/2013	Moderate	No
WECC201102748	MOD-030-2	R9	Lower/ Severe	TO, TSP	SR 4/26/2011	4/1/2011- 8/10/2015	Moderate	Penalty
WECC201102749	MOD-001-1a	R7	Lower/ Lower	TSP	SR 4/22/2011	4/1/2011- 11/15/2012	Minimal	
WECC201102751	MOD-029-1a	R7	Lower/ Lower	TSP	SR 4/1/2011	4/1/2011- 2/15/2012	Minimal	
WECC201102932	MOD-001-1a	R3; R3.1	Lower/ High	TSP	SR 8/24/2011	4/1/2011- 11/14/2012	Minimal	
WECC201103045	PRC-005-1	R2; R2.1	High/ Lower	TO, DP	SR 10/14/2011	9/13/2009- 1/27/2012	Minimal	
WECC2012009941	TOP-007-WECC-1	R1	Medium/ Severe	ТОР	SR 3/24/2012	3/1/2012- 3/1/2012	Serious	
WECC2012009942	TOP-004-2	R4	High/ Severe	ТОР	SR 3/24/2012	3/1/2012- 3/1/2012	Serious	

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NERC Violation ID	Standard	Req	VRF/ VSL	App Functions	Discovery Method* Date	Violation Start-End Date	Risk	Penalty Amount
WECC2012009943	TOP-004-2	R1	High/ Severe	ТОР	SR 3/24/2012	3/1/2012- 3/1/2012	Serious	
WECC2012009944	TOP-008-1	R1	High/ Severe	ТОР	SR 3/24/2012	3/1/2012- 3/1/2012	Serious	
WECC2012009945	TOP-008-1	R2	High/ Severe	ТОР	SR 3/24/2012	3/1/2012- 3/1/2012	Serious	
WECC2012009946	TOP-008-1	R4	Medium/ Severe	ТОР	SR 3/24/2012	3/1/2012- 3/1/2012	Serious	
WECC2012009960	TOP-004-2	R6; R6.3	Medium/ Severe	ТОР	SR 3/29/2012	6/17/2007- 5/15/2014	Serious	
WECC2012009961	TOP-007-WECC-1	R2	Lower/ High	ТОР	SR 3/29/2012	3/1/2012- 3/1/2012	Serious	
WECC2012010112	VAR-001-2	R4	Medium/ High	ТОР	SR 3/25/2012	1/1/2012- 4/11/2012	Minimal	
WECC2012011098	TOP-004-1	R4	High/ Severe	ТОР	SR 9/26/2012	6/17/2007- 10/2/2014	Minimal	No
WECC2012011142	MOD-030-2	R3	Medium/ Severe	TO, TSP	SR 9/28/2012	4/1/2011- 8/10/2015	Moderate	Penalty
WECC2012011144	MOD-030-2	R6	Medium/ Severe	TO, TSP	SR 4/26/2011	4/1/2011- 8/10/2015	Moderate	
WECC2012011386	MOD-030-2	R1	Medium/ High	TO, TSP	SR 12/23/2011	4/1/2011- 8/10/2015	Moderate	
WECC2012011390	MOD-030-2	R2	Medium/ Severe	TO, TSP	SR 11/12/2012	4/1/2011- 8/10/2015	Moderate	
WECC2012011391	MOD-030-2	R4	Medium/ Severe	TO, TSP	SR 11/12/2012	4/1/2011- 8/10/2015	Moderate	
WECC2012011392	MOD-030-2	R7	Lower/ Severe	TO, TSP	SR 5/8/2012	4/1/2011- 8/10/2015	Moderate	
WECC2012011393	MOD-030-2	R8	Medium/ Severe	TO, TSP	SR 11/12/2012	4/1/2011- 8/10/2015	Moderate	

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NERC Violation ID	Standard	Req	VRF/ VSL	App Functions	Discovery Method* Date	Violation Start-End Date	Risk	Penalty Amount
WECC2012011394	MOD-030-2	R10	Medium/ Severe	TO, TSP	SR 11/12/2012	4/1/2011- 8/10/2015	Moderate	
WECC2013011685	MOD-029-1a	R5	Lower/ Severe	TOP, TSP	SR 1/15/2013	11/27/2012 - 12/20/2012	Minimal	
WECC2013011728	MOD-029-1a	R1; R1.1	Lower/ Severe	ТОР	SR 3/29/2012	3/1/2012- 3/1/2012	Serious	
WECC2013013089	PRC-017-0	R1	High/ High	то	CA 10/11/2013	6/17/2007- 5/5/2015	Moderate	
WECC2013013091	PRC-005-1	R1; R1.1	High/ High	то	CA 10/11/2013	6/17/2007- 11/14/2014	Moderate	
WECC2014013891	TOP-004-2	R6	Medium/ Lower	ТОР	SC 6/2/2014	5/13/2013- 6/19/2013	Minimal	
WECC2014014181	MOD-001-1a	R1	Medium/ Severe	TOP, TSP	SR 8/5/2014	11/22/2013 -8/1/2014	Minimal	
WECC2014014392	PRC-011-0	R1; R1.2; R1.4; R1.5	Lower/ High	то	SR 10/8/2014	2/2/2008- 11/14/2014	Minimal	No Penalty
WECC2014014519	PRC-017-0	R1.2	High/ Lower	то	SR 12/15/2014	6/18/2007- 11/14/2014	Minimal	
WECC2015014564	PRC-011-0	R2	Lower/ LNC-Level 1	то	SR 1/15/2015	5/31/2014- 8/13/2015	Minimal	
WECC2015014565	PRC-017-0	R2	Lower/ LNC-Level 1	то	SR 1/15/2015	5/31/2014- 8/13/2015	Minimal	
WECC2015014911	MOD-001-1a	R3	Medium/ Severe	TOP, TSP	SR 5/6/2015	4/1/2011- 6/1/2015	Moderate	
WECC2015015074	TOP-002-2.1b	R11	Medium/ High	BA, GOP, LSE, TOP, TSP	SR 7/10/2015	8/18/2014- 8/3/2015	Moderate	
WECC2015015075	TOP-004-2	R1	High/ Severe	ТОР	SR 7/10/2015	8/18/2014- 8/3/2015	Moderate	

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NERC Violation ID	Standard	Req	VRF/ VSL	App Functions	Discovery Method* Date	Violation Start-End Date	Risk	Penalty Amount
WECC2015015076	TOP-004-2	R4	High/ Severe	ТОР	SR 7/10/2015	8/18/2014- 8/3/2015	Moderate	
WECC2015015077	TOP-008-1	R1	High/ Severe	ТОР	SR 7/10/2015	8/18/2014- 8/3/2015	Moderate	No Penalty
WECC2015015078	TOP-008-1	R2	High/ Severe	ТОР	SR 7/10/2015	8/18/2014- 8/3/2015	Moderate	
WECC2015015079	TOP-008-1	R4	Medium/ Moderate	ТОР	SR 7/10/2015	8/18/2014- 8/3/2015	Moderate	

### WECC200700489 BAL-005-0 R12 - OVERVIEW

WECC determined that two interchange meter points, the BPA Covington – Puget Sound Energy (PSE) White River #1 and #2 230 kV and the BPA Snohomish – PSE Beverly Park #3 and #4 115 kV lines, were telemetered to the BPA and PSE control centers but did not emanate from a common primary metering source. As a result, BPA and PSE were not using common metering on the PSE White River #1 and #2 interchange points or at Beverly Park #3 and #4 interchange points.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the bulk power system (BPS). Attachment B includes the facts regarding the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT070630 to address the referenced violation on November 11, 2007 with a proposed a completion date of December 15, 2009.

BPA certified on December 13, 2009 that it had completed its mitigation activities on December 13, 2009, and WECC verified on March 11, 2011 that BPA had completed all mitigation activities.

#### WECC200801161 COM-001-1 R5 - OVERVIEW

WECC determined that BPA failed to have documentation to demonstrate that there are written operating instructions and procedures to enable continued operations at the Grand Coulee, Hungry Horse, Minidoka, Palisades, and Bonneville Powerhouse Rooftop 115 kV switchyards during the loss of telecommunications facilities.

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WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT070630 to address the referenced violation on January 15, 2008 with a proposed completion date of November 15, 2009.

BPA certified on November 16, 2009 that it had completed its mitigation activities on November 9, 2009, and WECC verified on January 4, 2010 that BPA had completed all mitigation activities.

### WECC200800613 EOP-005-1 R1 - OVERVIEW

WECC determined that BPA's emergency restoration plan failed to include the loss of vital telecommunications and failed to address two of the nine required elements listed in Attachment 1. Specifically, BPA's restoration plan did not: 1) include necessary operating instructions and procedures to address the loss of vital telecommunication channels for voice or data communications during a system restoration as specified by R1; 2) address provisions for communication adequacy, protocol, and power supplies necessary for reliable blackstart capability as required by Attachment 1 EOP-005 item 2; and 3) include operating instructions or procedures that consider or address the possibility that restoration cannot be completed as expected.

WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT080822 to address the referenced violation on March 3, 2008 with a proposed completion date of August 15, 2008. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on August 15, 2008 that it had completed its Mitigation Plan on March 15, 2008, and WECC verified on December 2, 2008 that BPA had completed all mitigation activities.

### WECC200800872 FAC-003-1 R2 - OVERVIEW

BPA reported on June 28, 2008, that the Big Eddy-Chemewa #1 230 kV line relayed to lock out at 10:23. Linemen were unable to find the fault, and a helicopter was unavailable until the next day. BPA further reported that during an aerial patrol the following day at 08:30, the patrol found a wild cherry tree with a burnt top in the mile 103 section. The patrol cleared the tree, and the line was restored at 13:24.

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WECC determined that this violation posed a serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT080822 to address the referenced violation on March 3, 2008 with a proposed completion date of May 15, 2009. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on May 15, 2009 that it had completed its Mitigation Plan on March 15, 2008, and WECC verified on June 9, 2009 that BPA had completed all mitigation activities.

#### WECC200700351 FAC-003-1 R2 - OVERVIEW

WECC determined that BPA failed to: 1) implement transmission line inspection procedures identified in its transmission vegetation management plan (TVMP) for several spans of the BPA Marion-Alvey 500 kV transmission line; and 2) maintain clearances to prevent flashover between vegetation and energized conductors as identified in its TVMP for several spans of the BPA Marion-Alvey 500 kV transmission line.

WECC determined that this violation posed a serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT070563 to address the referenced violation on August 10, 2007 with a proposed completion date of November 15, 2007.

BPA certified on November 21, 2007 that it had completed its Mitigation Plan on November 15, 2007, and WECC verified on January 22, 2008 that BPA had completed all mitigation activities.

### WECC201002315 FAC-003-1 R2 - OVERVIEW

BPA reported that it failed to complete ground inspections for 13 line segments on 10 BPS transmission lines by May 15, 2010, as prescribed under the terms of its TVMP. WECC determined that BPA failed to create and implement an annual plan for vegetation management work to ensure the reliability of the system. Further, WECC also determined that although BPA patrolled line segments on five other transmission lines, BPA failed to record patrol data.

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WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT103821 to address the referenced violation on January 14, 2011 with a proposed completion date of February 15, 2011.

BPA certified on February 15, 2011 that it had completed its Mitigation Plan on February 11, 2011, and WECC verified on February 23, 2012 that BPA had completed all mitigation activities.

### WECC200700350 INT-006-1 R1 - OVERVIEW

WECC determined that between June 18, 2007 and June 20, 2007, BPA had multiple requests go "passive-denied," which means that for each of these requests, BPA did not actively respond within the reliability assessment period. None of the requests transitioned from an arranged interchange state to a confirmed interchange state. In each case, the transaction was either withdrawn or resulted in a dead state. BPA's tagging system, however, did perform the series of validations each request undergoes, but the result failed to be posted to the composite status of the request.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT070562 to address the referenced violation on July 20, 2007 stating, it had been completed on July 20, 2007. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on July 20, 2007 that it had completed its Mitigation Plan on July 20, 2007, and WECC verified on February 1, 2008 that BPA had completed all mitigation activities.

#### WECC201102749 MOD-001-1a R7 - OVERVIEW

WECC determined that in calculating available transfer capability (ATC) or available flowgate capability (AFC), BPA relied on assumptions that were more limiting than the ones used in the planning of operations for the corresponding time period studied.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

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BPA submitted its Mitigation Plan designated WECCMIT005396 to address the referenced violation on May 26, 2011 with a proposed completion date of November 15, 2012. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on November 16, 2012 that it had completed its Mitigation Plan on November 15, 2012, and WECC verified on December 27, 2012 that BPA had completed all mitigation activities. Attachments B and H2 provide specific information on WECC's verification of BPA's completion of the activities.

#### WECC201102932 MOD-001-1a R3; R3.1 - OVERVIEW

WECC determined that that information in BPA's ATC implementation document (ATCID) did not contain sufficient detail to ensure that, given the same information, the TSP can validate ATC or AFC calculations.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT005897 to address the referenced violation on August 7, 2012 with a proposed completion date of November 15, 2012. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on November 15, 2012 that it had completed its Mitigation Plan on November 14, 2012, and WECC verified on December 20, 2012 that BPA had completed all mitigation activities. Attachments B and I2 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC2014014181 MOD-001-1a R1 - OVERVIEW

WECC determined that BPA failed to include a path from Gridforce Energy Management (GRID) in its ATC and did not specify a methodology for the calculation for the period beginning when GRID came online until mitigation was completed.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

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BPA submitted its Mitigation Plan designated WECCMIT010951 to address the referenced violation on August 29, 2014 with a proposed completion date of February 15, 2015. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on February 13, 2015 that it had completed its Mitigation Plan on February 6, 2015, and WECC verified on March 31, 2015 that BPA had completed all mitigation activities. Attachments B and HH4 provide specific information on WECC's verification of BPA's completion of the activities.

#### WECC2015014911 MOD-001-1a R3 - OVERVIEW

WECC determined that BPA failed to conduct a thorough review of its ATCID and identified some areas where the ATCID was not current.

WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT011637 to address the referenced violation on June 10, 2015, stating it had been completed on June 1, 2015. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment MM2.

BPA certified on June 10, 2015 that it had completed its Mitigation Plan on June 1, 2015, and WECC verified on October 8, 2015 that BPA had completed all mitigation activities. Attachments B and MM4 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC201102751 MOD-029-1a R7 - OVERVIEW

WECC determined that BPA failed to use the algorithm in MOD-029-1a R7 to calculate the ATC for the Northern Intertie, an ATC path.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT005398 to address the referenced violation on September 1, 2011 with a proposed completion date of May 15, 2012. Attachment B includes a description of the mitigation activities BPA took to address this violation.

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BPA certified on February 28, 2012 that it had completed its Mitigation Plan on February 15, 2012, and WECC verified on April 27, 2012 that BPA had completed all mitigation activities.

#### WECC2011008668 MOD-029-1a R1; R1.1 - OVERVIEW

WECC determined that BPA failed to model the South Tacoma-Olympia 230 kV line as being in service between August 2010 and October 28, 2011.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT006546 to address the referenced violation on December 29, 2011 with a proposed completion date of August 15, 2012. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on August 16, 2012 that it had completed its Mitigation Plan on June 29, 2012, and WECC verified on August 24, 2012 that BPA had completed all mitigation activities. Attachments B and E2 provide specific information on WECC's verification of BPA's completion of the activities.

#### WECC2013011685 MOD-029-1a R5 - OVERVIEW

WECC determined that BPA failed, while updating system software, to use the required algorithm when calculating existing transmission commitments (ETC) for firm ETCs.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT008823 to address the referenced violation on February 13, 2013 stating it had been completed on December 20, 2012. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment CC2.

BPA certified on February 14, 2013 that it had completed its Mitigation Plan on December 20, 2012, and WECC verified on March 4, 2013 that BPA had completed all mitigation activities. Attachments B and CC4 provides specific information on WECC's verification of BPA's completion of the activities.

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#### WECC2013011728 MOD-029-1a R1; R1.1 - OVERVIEW

WECC determined that BPA exceeded the System Operating Limit (SOL) on WECC Path 3 for a period of 10 hours and 25 minutes. BPA was operating in an "unknown state." WECC determined that actual SOLs exceeded BPA's calculation of SOLs for WECC Path 3 during this period.

WECC determined that this violation posed a serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT008787 to address the referenced violation on February 12, 2013 with a proposed completion date of August 1, 2013. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment DD2.

BPA certified on August 1, 2013 that it had completed its Mitigation Plan on August 1, 2013, and WECC verified on October 2, 2013 that BPA had completed all mitigation activities.

#### WECC2011008666 MOD-030-2 R5 - OVERVIEW

WECC determined that BPA failed to include in its AFC an expected McNary-Horse Heaven outage scheduled for November 3, 2011.

WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT006547-2 to address the referenced violation on July 21, 2014 with a proposed completion date of August 17, 2015. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment D2.

BPA certified on August 10, 2015 that it had completed its Mitigation Plan on August 10, 2015, and WECC verified on August 21, 2015 that BPA had completed all mitigation activities. Attachments B and D3 provide specific information on WECC's verification of BPA's completion of the activities.

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#### WECC201102748 MOD-030-2 R9 - OVERVIEW

WECC determined that BPA failed to calculate existing transmission commitments ( $ETC_{Fi}$ ) for all timeperiods. WECC determined that the algorithm used to calculate available flowgate capability ( $AFC_{NF}$ ) did not include  $ETC_{Fi}$ .

WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT008362-1 to address the referenced violation on July 21, 2014 with a proposed completion date of August 17, 2015. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment G1.

BPA certified on August 10, 2015 that it had completed its Mitigation Plan on August 10, 2015, and WECC verified on August 21, 2015 that BPA had completed all mitigation activities. Attachments B and G3 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC2012011142 MOD-030-2 R3 - OVERVIEW

WECC determined that the model BPA used to determine AFC it provided to TSPs did not meet criteria outlined in sub-requirements R3.1 through R3.5. Specifically, BPA reported that ETC calculations used in the AFC model were not updated for system topology at least once per day as per R3.4.

WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT008365-2 to address the referenced violation on May 13, 2014 with a proposed completion date of August 17, 2015. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment U2.

BPA certified on August 10, 2015 that it had completed its Mitigation Plan on August 10, 2015, and WECC verified on August 21, 2015 that BPA had completed all mitigation activities. Attachments B and U4 provide specific information on WECC's verification of BPA's completion of the activities.

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#### WECC2012011144 MOD-030-2 R6 - OVERVIEW

WECC determined that native load and network integration transmission service for many TSPs adjacent to BPA is not scheduled and is not included as part of the ETC<sub>Fi</sub> calculation.

WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT008368-1 to address the referenced violation on July 21, 2014 with a proposed completion date of August 17, 2015. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment V2.

BPA certified on August 10, 2015 that it had completed its Mitigation Plan on August 10, 2015, and WECC verified on August 21, 2015 that BPA had completed all mitigation activities. Attachments B and V4 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC2012011390 MOD-030-2 R2 - OVERVIEW

WECC determined that BPA failed to calculate contingencies with an outage transfer distribution factor of at least 5% as required under MOD-030-2 R2.1.1 and R2.1.2.

WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT008364-1 to address the referenced violation on July 21, 2014 with a proposed completion date of August 17, 2015. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment X2.

BPA certified on August 10, 2015 that it had completed its Mitigation Plan on August 10, 2015, and WECC verified on August 21, 2015 that BPA had completed all mitigation activities. Attachments B and X4 provide specific information on WECC's verification of BPA's completion of the activities.

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#### WECC2012011391 MOD-030-2 R4 - OVERVIEW

WECC determined that BPA failed to represent the impact of transmission service in the AFC calculation. WECC also determined that BPA failed to model source and sink data as specified in the ATCID. Lastly, BPA did not model all reservations.

WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT008366-1 to address the referenced violation on July 21, 2014 with a proposed completion date of August 17, 2015. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment Y2.

BPA certified on August 10, 2015 that it had completed its Mitigation Plan on August 10, 2015, and WECC verified on August 21, 2015 that BPA had completed all mitigation activities. Attachments B and Y4 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC2012011392 MOD-030-2 R7 - OVERVIEW

WECC determined that BPA failed to calculate the existing firm transmission commitments (ETCN<sub>Fi</sub>) for any specified time-period. Further, BPA's calculation of ETCN<sub>Fi</sub> failed to include the impact of all nonfirm point-to-point transmission service and network integration transmission service with a distribution factor equal or greater than 10% for all adjacent TSPs.

WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT008369-1 to address the referenced violation on July 21, 2014 with a proposed completion date of August 17, 2015. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment Z2.

BPA certified on August 10, 2015 that it had completed its Mitigation Plan on August 10, 2015, and WECC verified on August 21, 2015 that BPA had completed all mitigation activities. Attachments B and Z4 provide specific information on WECC's verification of BPA's completion of the activities.

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### WECC2012011393 MOD-030-2 R8 - OVERVIEW WECC determined that BPA did not include ETC<sub>Fi</sub> in its calculation.

WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT008370-1 to address the referenced violation on July 21, 2014 with a proposed completion date of August 17, 2015. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment AA2.

BPA certified on August 10, 2015 that it had completed its Mitigation Plan on August 10, 2015, and WECC verified on August 21, 2015 that BPA had completed all mitigation activities. Attachments B and AA4 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC2012011394 MOD-030-2 R1 - OVERVIEW

WECC determined that BPA failed to update hourly, daily, and monthly AFC as prescribed under subrequirements R10.1, R10.2, and R10.3. WECC also determined that BPA's models used to calculate initial AFC did not utilize updated data.

WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT008371-1 to address the referenced violation on July 21, 2014 with a proposed completion date of August 17, 2015. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on August 10, 2015 that it had completed its Mitigation Plan on August 10, 2015, and WECC verified on August 21, 2015 that BPA had completed all mitigation activities. Attachments B and BB4 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC2012011386 MOD-030-2 R1 - OVERVIEW

WECC determined that BPA did not include in its ATCID criteria used by the TOP to identify sets of transmission facilities as flowgates that are required considerations in AFC calculations.

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WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT008363-1 to address the referenced violation on July 21, 2014 with a proposed completion date of August 17, 2015. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment W2.

BPA certified on August 10, 2015 that it had completed its Mitigation Plan on August 10, 2015, and WECC verified on August 21, 2015 that BPA had completed all mitigation activities. Attachments B and W4 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC2011009029 MOD-030-2 R2 - OVERVIEW

WECC determined that rather than establishing new flowgates as required under the Standard, BPA implemented a policy whereby generation dispatch maintained limiting elements below the range of the associated worst contingency. BPA implemented this policy in the Puget Sound Area, Mid-C Area, Boundary, and Lower Snake. WECC determined that because of this policy, BPA failed to identify two flowgates, South of Allston and North of Hanford, used in the AFC process. In addition, BPA was not establishing an SOL for the Monroe-Echo Lake North to South Flowgate. Absent an SOL calculation, BPA could not establish the TFC for the Flowgate as equal to the SOL.

WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT006751 to address the referenced violation on February 15, 2012 with a proposed completion date of February 15, 2013. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on February 15, 2013 that it had completed its Mitigation Plan on February 13, 2013, and WECC verified on March 14, 2013, 2008 that BPA had completed all mitigation activities. Attachments B and F2 provide specific information on WECC's verification of BPA's completion of the activities.

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#### WECC2011008667 MOD-030-2 R3; R3.4 - OVERVIEW

BPA discovered it was unable to calculate an outage on the South Tacoma Olympia 230 kV line. WECC determined that the transmission model used to calculate AFC did not contain modeling data and system topology.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT006548 to address the referenced violation on March 3, 2008 with a proposed completion date of August 15, 2012. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on August 16, 2012 that it had completed its Mitigation Plan on August 15, 2012, and WECC verified on September 7, 2012 that BPA had completed all mitigation activities.

#### WECC200801141 PRC-001-1 R2 - OVERVIEW

WECC determined that BPA and USBR failed to have any procedures for USBR to use in the event of protective relay or equipment failure that reduces system reliability.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT081167 to address the referenced violation on July 31, 2008 with a proposed completion date of August 15, 2009. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment C2.

BPA certified on August 14, 2009 that it had completed its Mitigation Plan on July 13, 2009, and WECC verified on November 17, 2010 that BPA had completed all mitigation activities. Attachments B and C4 provide specific information on WECC's verification of BPA's completion of the activities.

#### WECC2013013091 PRC-005-1 R1; R1.1 - OVERVIEW

WECC determined that BPA failed to: 1) have maintenance and testing intervals and their basis; and 2) have a basis for its battery maintenance and testing interval.

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WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT011003 to address the referenced violation on September 11, 2014 with a proposed completion date of November 15, 2014. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment FF2.

BPA certified on November 17, 2014 that it had completed its Mitigation Plan on November 14, 2014, and WECC verified on April 1, 2015 that BPA had completed all mitigation activities. Attachments B and FF4 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC201103045 PRC-005-1 R2; R2.1 - OVERVIEW

WECC determined that BPA failed to provide annual testing records for two batteries and 36-month interval testing for two relays. WECC further determined that BPA performed maintenance and testing on the Grays Harbor Battery 164 days late. BPA performed maintenance and testing on the Minidoka Battery 86 days late. Finally, BPA performed maintenance and testing on the two Harvalum Relays 712 days late.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT006132 to address the referenced violation on November 23, 2011 with a proposed completion date of November 15, 2012. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on November 16, 2012 that it had completed its Mitigation Plan on November 15, 2012, and WECC verified on December 20, 2012 that BPA had completed all mitigation activities. Attachments B and J2 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC200800604 PRC-008-0 R1 - OVERVIEW

WECC determined that BPA did not have an established policy or practice regarding the validation of customer-performed maintenance and testing on customer-owned Under Frequency Load Shedding (UFLS) relays within BPA's UFLS program.

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WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT071220 to address the referenced violation on March 14, 2008 with a proposed completion date of November 15, 2008. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on November 17, 2008 that it had completed its Mitigation Plan on November 15, 2008, and WECC verified on December 24, 2008 that BPA had completed all mitigation activities.

#### WECC200810021 PRC-008-0 R2 - OVERVIEW

WECC determined that BPA's UFLS records demonstrated that maintenance and testing implementation was not on schedule, specifically for UFLS relay maintenance and testing.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT071220 to address the referenced violation on March 14, 2008 with a proposed completion date of November 15, 2008. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on November 15, 2008 that it had completed its Mitigation Plan on November 15, 2008, and WECC verified on December 24, 2008 that BPA had completed all mitigation activities.

### WECC2015014564 PRC-011-0 R2 - OVERVIEW

WECC determined that BPA's Undervoltage Load Shedding (UVLS) maintenance and testing requires monthly battery and battery charger inspections. However, between May 1, 2014 and September 30, 2014, BPA failed to perform inspections on batteries and battery chargers at eleven substations.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT011373-1 to address the referenced violation on August 11, 2015 with a proposed completion date of August 15, 2015. Attachment B includes a

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description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment KK2.

BPA certified on August 14, 2015 that it had completed its Mitigation Plan on August 14, 2015, and WECC verified on August 21, 2015 that BPA had completed all mitigation activities. Attachments B and KK4 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC2014014392 PRC-011-0 R1; R1.2; R1.4; R1.5 - OVERVIEW

WECC determined that BPA failed to have documentation of maintenance and testing intervals and their basis for batteries. BPA failed to have a schedule for system testing. Further, BPA failed to have a schedule for system maintenance.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT011170 to address the referenced violation on November 17, 2014, stating it had been completed on November 14, 2014. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment II2.

BPA certified on November 17, 2014 that it had completed its Mitigation Plan on November 14, 2014, and WECC verified on April 2, 2015 that BPA had completed all mitigation activities. Attachments B and II2 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC2013013089 PRC-017-0 R1 - OVERVIEW

WECC determined that BPA failed to have a basis for its testing intervals. Because of these deficiencies in BPA's special protection system (SPS) maintenance and testing program, WECC concluded that BPA does not have defined intervals with a basis for those intervals, a schedule for system testing, or a schedule for system maintenance.

WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT011004 to address the referenced violation on September 11, 2014 with a proposed completion date of February 15, 2015. Attachment B includes a

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description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment EE2.

BPA certified on May 5, 2015 that it had completed its Mitigation Plan on February 25, 2015, and WECC verified on June 26, 2015 that BPA had completed all mitigation activities. Attachments B and EE4 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC2014014519 PRC-017-0 R1.2 - OVERVIEW

WECC determined that BPA's policy allowed violation of the Standard by permitting maintenance and testing to be performed after it becomes past due, perhaps on a repeated basis, renders all intervals and the basis for the intervals invalid. Thus, BPA failed to have documentation of maintenance and testing intervals and their basis for batteries.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT011546 to address the referenced violation on December 16, 2014, stating it had been completed on November 14, 2014. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment JJ2.

BPA certified on December 16, 2014 that it had completed its Mitigation Plan on November 14, 2014, and WECC verified on April 2, 2015 that BPA had completed all mitigation activities. Attachments B and JJ4 provide specific information on WECC's verification of BPA's completion of the activities.

#### WECC2015014565 PRC-017-0 R2 - OVERVIEW

WECC determined that BPA's UFLS maintenance and testing requires monthly battery and battery charger inspections. However, between May 1, 2014 and September 30, 2014, BPA failed to perform inspections on one battery and battery charger.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT011374-1 to address the referenced violation on August 11, 2015 with a proposed completion date of August 15, 2015. Attachment B includes a

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description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment LL2.

BPA certified on August 14, 2015 that it had completed its Mitigation Plan on August 14, 2015, and WECC verified on August 19, 2015 that BPA had completed all mitigation activities. Attachments B and LL4 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC201002065 PRC-023-1 R1 - OVERVIEW

WECC determined that BPA failed to correctly use any one of the PRC-023-1 criteria (R1.1 through R1.13) to prevent its phase protective relay settings from limiting transmission system loadability while maintaining reliable protection of the BPS for all fault conditions.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT102952 to address the referenced violation on August 31, 2010, stating it had been completed on August 6, 2010. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on October 4, 2010, that it had completed its Mitigation Plan on August 31, 2010, and WECC verified on October 4, 2010 that BPA had completed all mitigation activities.

### WECC200901299 PRC-STD-005-1 WR1 - OVERVIEW

WECC determined that BPA failed to perform maintenance and inspection in accordance with its Transmission Maintenance and Inspection Program (TMIP) in violation of PRC-STD-005-1 WR1.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT091563 to address the referenced violation on March 10, 2009 stating it had been completed on March 10, 2009. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on March 10, 2009 that it had completed its Mitigation Plan on March 10, 2009, and WECC verified on March 13, 2009 that BPA had completed all mitigation activities.

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#### WECC200901405 PRC-STD-005-1 WR1 - OVERVIEW

WECC determined that BPA had a violation of PRC-STD-005-1 WR1 for failing to complete the required maintenance on 336 structures in accordance with its TMIP.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT091754 to address the referenced violation on May 12, 2009 with a proposed completion date of November 15, 2009. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on November 16, 2009 that it had completed its Mitigation Plan on November 12, 2009, and WECC verified on December 28, 2009 that BPA had completed all mitigation activities.

#### WECC2015015074 TOP-002-2.1b R11 - OVERVIEW

WECC determined that BPA was in violation of TOP-002-2.1b R11 for not making proper remedial action schemes (RAS) arming levels available to the TOP.

WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT011556 to address the referenced violation on August 28, 2015 stating it had been completed on August 3, 2015. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment NN2.

BPA certified on August 28, 2015 that it had completed its Mitigation Plan on August 3, 2015, and WECC verified on September 18, 2015 that BPA had completed all mitigation activities. Attachments B and NN4 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC2012011098 TOP-004-1 R4 - OVERVIEW

WECC determined that each time BPA disabled non-redundant bus differential relays for maintenance without de-energizing the protected bus, BPA entered an unknown operating state and failed to restore operations to proven reliable power system limits within 30 minutes.

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WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT011556 to address the referenced violation on April 9, 2015, stating it had been completed on October 2, 2014. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment T1.

BPA certified on April 9, 2015 that it had completed its Mitigation Plan on October 2, 2014, and WECC verified on August 11, 2015 that BPA had completed all mitigation activities. Attachments B and T3 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC2015015075 TOP-004-2 R1 - OVERVIEW

WECC determined that BPA was in violation of TOP-004-2 R1 for not operating under the established SOLs. Specifically, BPA had an SOL exceedance of greater than 700 MW on a WECC Rated Path for 10 hours, seven minutes, and 12 seconds.

WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT011733 to address the referenced violation on August 28, 2015, stating it had been completed on August 3, 2015. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment OO2.

BPA certified on August 28, 2015 that it had completed its Mitigation Plan on August 3, 2015, and WECC verified on September 18, 2015 that BPA had completed all mitigation activities. Attachments B and OO4 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC2015015076 TOP-004-2 R4 - OVERVIEW

WECC determined that BPA was in violation of TOP-004-2 R4 for operating in an unknown operating state. Specifically, while BPA performed an analysis of events, it discovered that it should have had a generation drop armed on a certain path, but did not due to incorrect information on the study limits

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information memo which instructs BPA Dispatch on what SOLs and RAS settings to use for a particular path.

WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT011756 to address the referenced violation on August 28, 2015, stating it had been completed on August 3, 2015. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment PP2.

BPA certified on August 28, 2015 that it had completed its Mitigation Plan on August 3, 2015, and WECC verified on September 18, 2015 that BPA had completed all mitigation activities. Attachments B and PP4 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC2014013891 TOP-004-2 R6 - OVERVIEW

WECC determined that BPA failed to, individually and jointly with other TOPs, implement formal policies and procedures to provide for transmission reliability. Specifically, BPA had a scheduled outage for the generators G20 and G21 with the TO, USBR, but BPA did not have any evidence that USBR requested an outage for the circuit breakers associated with the two generators. As a result, four breakers were out of service, and BPA was required to reduce transmission capability on the North of Hanford path by 811 MW.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT010735 to address the referenced violation on June 6, 2014, stating it had been completed on June 19, 2013. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment GG2.

BPA certified on June 6, 2014 that it had completed its Mitigation Plan on June 19, 2013, and WECC verified on September 9, 2014 that BPA had completed all mitigation activities. Attachments B and GG4 provide specific information on WECC's verification of BPA's completion of the activities.

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#### WECC2012009942 TOP-004-2 R4 - OVERVIEW

WECC determined that on March 1, 2012, for a period of 10 hours and 25 minutes, BPA was operating in an unknown state. WECC determined that actual SOLs exceeded BPA's calculation of SOLs for WECC Path 3 during this period. Therefore, BPA failed to restore operations to proven reliability power system limits within 30 minutes.

WECC determined that this violation posed a serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT007811 to address the referenced violation on August 3, 2012 with a proposed completion date of August 1, 2013. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on August 1, 2013 that it had completed its Mitigation Plan on August 1, 2013, and WECC verified on September 24, 2013 that BPA had completed all mitigation activities. Attachments B and L2 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC2012009943 TOP-004-2 R1 - OVERVIEW

WECC determined that on March 1, 2012, for a period of 10 hours and 25 minutes, BPA was operating in an unknown state. WECC determined that actual SOLs exceeded BPA's calculation of SOLs for WECC Path 3 during this period.

WECC determined that this violation posed a serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT007812 to address the referenced violation on August 3, 2012 with a proposed completion date of August 1, 2013. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on August 1, 2013 that it had completed its Mitigation Plan on August 1, 2013, and WECC verified on September 24, 2013 that BPA had completed all mitigation activities. Attachments B and M2 provide specific information on WECC's verification of BPA's completion of the activities.

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#### WECC2012009960 TOP-004-2 R6; R6.3 - OVERVIEW

WECC determined that BPA failed to develop, implement, and maintain policies and procedures to ensure the coordination of planned transmission element outages. BPA had no internal mechanism in place to ensure that it modeled outages consistent with outages reported to the coordinated outage system. Further, BPA failed to coordinate the planned outage of the Broad Street Cable with Seattle City Light. WECC, therefore, determined that BPA failed to develop and maintain procedures that provide for transmission reliability that included planned outages of transmission elements.

WECC determined that this violation posed a serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT007810 to address the referenced violation on May 15, 2013 with a proposed completion date of May 15, 2014. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment Q1.

BPA certified on May 15, 2014 that it had completed its Mitigation Plan on May 15, 2014, and WECC verified on July 15, 2014 that BPA had completed all mitigation activities. Attachments B and Q3 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC200901559 TOP-006-1 R6 - OVERVIEW

WECC determined that BPA did not have the necessary monitoring equipment to monitor certain transmission facilities; specifically, the USBR-owned Grand Coulee 115 kV and Hungry Horse 230 kV Switchyards and the United States Army Corps Engineers-Portland District (USACE-NWP)-owned Bonneville Powerhouse Rooftop 115 kV Switchyard, for which it had assumed responsibility for the TOP function. Further, WECC determined that BPA's failure to have the required monitoring equipment resulted in its failure to have sufficient metering of suitable range, accuracy, and sampling rate (if applicable) to ensure accurate and timely monitoring of operating conditions under both normal and emergency situations.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

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BPA submitted its Mitigation Plan designated WECCMIT081971 to address the referenced violation on July 9, 2009 with a proposed completion date of August 15, 2010. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on October 7, 2010 that it had completed its Mitigation Plan on August 11, 2010, and WECC verified on November 5, 2010 that BPA had completed all mitigation activities.

### WECC200901558 TOP-006-1 R5 - OVERVIEW

WECC determined that BPA did not have the necessary monitoring equipment to monitor certain transmission facilities; specifically, the USBR-owned Grand Coulee 115 kV and Hungry Horse 230 kV Switchyards and the USACE-NWP-owned Bonneville Powerhouse Rooftop 115 kV Switchyard, for which it had assumed responsibility for the TOP function. WECC determined that BPA's failure to have the required monitoring equipment resulted in its failure to bring to the attention of operating personnel important deviations in operating conditions and indicate, if appropriate, the need for corrective action.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT081971 to address the referenced violation on July 9, 2009 with a proposed completion date August 15, 2010. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on October 7, 2010 that it had completed its Mitigation Plan on August 11, 2010, and WECC verified on November 5, 2010 that BPA had completed all mitigation activities.

### WECC200901557 TOP-006-1 R2 - OVERVIEW

WECC determined that BPA did not have the necessary monitoring equipment to monitor certain transmission facilities; specifically, the USBR-owned Grand Coulee 115 kV and Hungry Horse 230 kV Switchyards and the USACE-NWP-owned Bonneville Powerhouse Rooftop 115 kV Switchyard, for which it had assumed responsibility for the TOP function. WECC determined BPA's failure to have the required monitoring equipment resulted in its failure to monitor applicable transmission line status, real and reactive power flows, voltage, load-tap-changer settings, and status of rotating and static reactive resources at the three transmission facilities.

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WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT081971 to address the referenced violation on July 9, 2009 with a proposed completion date of August 15, 2010. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on October 7, 2010 that it had completed its Mitigation Plan on August 11, 2010, and WECC verified on November 5, 2010 that BPA had completed all mitigation activities.

### WECC2012009941 TOP-007-WECC-1 R1 - OVERVIEW

WECC determined that on March 1, 2012, for a period of 10 hours and 25 minutes, BPA was operating in an unknown state. WECC determined that actual SOLs exceeded BPA's calculation of SOLs for WECC Path 3 during this period. WECC determined that BPA failed to take immediate action to bring power flows under the SOLs on WECC Path 3 within 30 minutes, in violation of TOP-007-WECC-1 R1. Rather, BPA did not take any action for over five hours, during which time power flows exceeded SOLs by up to 647%. Further, once BPA discovered SOL exceedances on WECC Path 3, an additional four hours and 14 minutes elapsed before BPA action reduced power flows within SOLs.

WECC determined that this violation posed a serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT007813 to address the referenced violation on August 3, 2012 with a proposed completion date of August 1, 2013. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on August 1, 2013 that it had completed its Mitigation Plan on August 1, 2013, and WECC verified on September 24, 2013 that BPA had completed all mitigation activities. Attachments B and K2 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC2012009961 TOP-007-WECC-1 R2 - OVERVIEW

WECC determined that on March 1, 2012, for a period of 10 hours and 25 minutes, BPA was operating in an unknown state. WECC determined that actual SOLs exceeded BPA's calculation of SOLs for WECC Path 3 during this period. WECC determined that BPA Net Scheduled Interchange exceeded SOLs for a period of 10 hours and 25 minutes.

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WECC determined that this violation posed a serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT008174-1 to address the referenced violation on January 31, 2013 with a proposed completion date of August 1, 2013. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment R1.

BPA certified on August 1, 2013 that it had completed its Mitigation Plan on August 1, 2013, and WECC verified on September 24, 2013 that BPA had completed all mitigation activities. Attachments B and R3 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC2012009944 TOP-008-1 R1 - OVERVIEW

WECC determined that on March 1, 2012, for a period of 10 hours and 25 minutes, BPA was operating in an unknown state. WECC determined that actual SOLs exceeded BPA's calculation of SOLs for WECC Path 3 during this period. WECC determined that on March 1, 2012, between 0819 and 1844, BPA failed to take immediate action to relieve an SOL exceedance on WECC Path 3. Further, for a period of 10 hours and 25 minutes, BPA exceeded the correct SOL on WECC Path 3 by 167% to 647%.

WECC determined that this violation posed a serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT007809 to address the referenced violation on August 3, 2012 with a proposed completion date of August 1, 2013. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on August 1, 2013 that it had completed its Mitigation Plan on August 1, 2013, and WECC verified on August 30, 2013 that BPA had completed all mitigation activities.

### WECC2015015077 TOP-008-1 R1 - OVERVIEW

WECC determined that BPA was in violation of TOP-008-1 R1 for not taking immediate steps to relieve the SOL violation conditions. Specifically, while BPA performed an analysis of events, it discovered that it should have had generation drop armed on a certain path, but did not due to incorrect information on the study limits information memo, which instructs BPA Dispatch on what SOLs and RSA settings to

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use for a particular path. BPA originally had a valid study limits information memo, with accurate SOLs and RSA arming thresholds two weeks ahead of the outage week. However, the transmission path in scope experienced high flows.

WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT011757 to address the referenced violation on August 28, 2015, stating it had been completed on August 3, 2015. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment QQ2.

BPA certified on August 28, 2015 that it had completed its Mitigation Plan on August 3, 2015, and WECC verified on September 18, 2015 that BPA had completed all mitigation activities. Attachments B and QQ4 provide specific information on WECC's verification of BPA's completion of the activities.

### WECC2015015078 TOP-008-1 R2 - OVERVIEW

WECC determined that BPA was in violation of TOP-008-1 R2 for failing to operate to prevent the likelihood that a disturbance action or inaction that would result in an Interconnection Reliability Operation Limit (IROL) or SOL violation. Specifically, while BPA performed analysis of events, it discovered that it should have had a generation drop armed on a certain path, but did not due to incorrect information on the study limits information memo, which instructs BPA dispatch on what SOLs and RAS settings to use for a particular path. BPA originally had a valid study limits information memo, with accurate SOLs and RAS arming thresholds two weeks ahead of the outage week. However, on August 18, 2014, the transmission path in scope experienced high flows.

WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT011758 to address the referenced violation on August 28, 2015, stating it had been completed on August 3, 2015. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment RR2.

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BPA certified on August 28, 2015 that it had completed its Mitigation Plan on August 3, 2015, and WECC verified on September 18, 2015 that BPA had completed all mitigation activities. Attachments B and RR4 provide specific information on WECC's verification of BPA's completion of the activities.

#### WECC2015015079 TOP-008-1 R4 - OVERVIEW

WECC determined that BPA was in violation of TOP-008-1 R4 for failing to have sufficient information or analysis tools to determine if an SOL violation was occurring and, as a result, BPA had no real-time analysis to immediately mitigate the SOL violation. Specifically, BPA's real-time contingency analysis tool at the time of the event was not identifying where generation drop was not armed and was operating as if generation drop was always armed.

WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT011759 to address the referenced violation on August 28, 2015, stating it had been completed on August 3, 2015. Attachment B includes a description of the mitigation activities BPA took to address this violation. A copy of the Mitigation Plan is included as Attachment SS2.

BPA certified on August 28, 2015 that it had completed its Mitigation Plan on August 3, 2015, and WECC verified on September 18, 2015 that BPA had completed all mitigation activities. Attachments B and SS4 provide specific information on WECC's verification of BPA's completion of the activities.

#### WECC2012009945 TOP-008-1 R2 - OVERVIEW

WECC determined that BPA failed to operate to the most limiting factor, the northern intertie, leading to an SOL violation.

WECC determined that this violation posed a serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT007808 to address the referenced violation on August 3, 2012 with a proposed completion date of August 1, 2013. Attachment B includes a description of the mitigation activities BPA took to address this violation.

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BPA certified on August 1, 2013 that it had completed its Mitigation Plan on August 1, 2013, and WECC verified on August 30, 2013 that BPA had completed all mitigation activities. Attachments B and O2 provide specific information on WECC's verification of BPA's completion of the activities.

#### WECC2012009946 TOP-008-1 R4 - OVERVIEW

WECC determined that on March 1, 2012, BPA did not have sufficient information and analysis tools to immediately mitigate the SOL violation after discovering it at 1440. Over four hours elapsed before BPA was able to complete new studies and adjust operations within actual SOLs.

WECC determined that this violation posed a serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT007807 to address the referenced violation on August 3, 2012 with a proposed completion date of August 1, 2013. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on August 1, 2013 that it had completed its Mitigation Plan on August 1, 2013, and WECC verified on September 24, 2013 that BPA had completed all mitigation activities. Attachments B and P2 provide specific information on WECC's verification of BPA's completion of the activities.

#### WECC200800618 TPL-002-0 R3 - OVERVIEW

WECC determined that BPA did not perform a system-wide N-1 stability study since 2000. BPA did not have recent stability studies to demonstrate that the performance of N-1 contingencies meet the requirements of Table 1 for Category B. WECC concluded that BPA provided the results of the assessment of system performance and did not identify any corrective actions.

WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT080823 to address the referenced violation on March 14, 2008, stating it had been completed on March 11, 2008. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on March 14, 2008 that it had completed its Mitigation Plan on March 3, 2008, and WECC verified on December 12, 2008 that BPA had completed all mitigation activities.
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#### WECC200800616 TPL-002-0 R1; R1.3.7 - OVERVIEW

WECC determined that BPA had not performed a system wide N-1 stability study since 2000. BPA did not have recent stability studies to demonstrate that the performance of N-1 contingencies meet the requirements of Table 1 for Category B.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT080823 to address the referenced violation on March 14, 2008, stating it had been completed on March 11, 2008. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on March 14, 2008 that it had completed its Mitigation Plan on March 11, 2008, and WECC verified on December 2, 2008 that BPA had completed all mitigation activities.

#### WECC200800617 TPL-002-0 R2; R2.1 - OVERVIEW

WECC determined that BPA failed provide a written summary of the plans in its assessment of system performance after the loss of a single bulk electric system element. BPA did not perform a system-wide N-1 stability study since 2000. Further, BPA did not have recent stability studies to demonstrate that the performance of N-1 contingencies met the requirements of Table 1 for Category B.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT080823 to address the referenced violation on March 14, 2008, stating it had been completed on March 11, 2008. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on March 14, 2008 that it had completed its Mitigation Plan on March 11, 2008, and WECC verified on December 2, 2008 that BPA had completed all mitigation activities.

#### WECC200800619 TPL-003-0 R3 - OVERVIEW

WECC determined that BPA failed to perform an assessment for Category C (N-2) studies. BPA previously self-reported violations of R1 and R2 of this Standard for failing to perform all studies

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required for Category C. However, BPA did not submit a Self-Report for R3, which requires BPA to document the results of the studies in reliability assessments, identify any corrective plans, and annually provide these to WECC. WECC determined that because BPA did not have the studies documented in an assessment, BPA could not meet R3.

WECC determined that this violation posed a moderate and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT080701 to address the referenced violation on February 9, 2008 with a proposed completion date of November 15, 2008. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on August 15, 2008 that it had completed its Mitigation Plan on August 15, 2008, and WECC verified on December 2, 2008 that BPA had completed all mitigation activities.

#### WECC200800620 VAR-001-1 R1 - OVERVIEW

WECC determined that BPA failed to have or could not provide required formal policies or procedures that are jointly developed, maintained, and implemented for monitoring voltage levels and megavolt ampere reactive (MVAR) flows with the areas of neighboring TOPs.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT081342 to address the referenced violation on January 1, 2008 with a proposed completion date of July 15, 2009. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on July 15, 2009 that it had completed its Mitigation Plan on July 9, 2009, and WECC verified on September 2, 2009 that BPA had completed all mitigation activities.

#### WECC200800621 VAR-001-1 R3 - OVERVIEW

WECC determined that BPA failed to have a criterion that exempts generators from compliance with meeting voltage and MVAR schedules.

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WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT082018 to address the referenced violation on March 15, 2009 with a proposed completion date of March 26, 2009. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on May 15, 2009 that it had completed its Mitigation Plan on March 26, 2009, and WECC verified on September 2, 2009 that BPA had completed all mitigation activities.

#### WECC200700533 VAR-001-1 R4 - OVERVIEW

WECC determined that BPA failed to provide the voltage or reactive power schedule to its associated Generator Operators (GOPs). Additionally, BPA failed to direct its associated GOPs to operate in automatic voltage control mode.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

BPA submitted its Mitigation Plan designated WECCMIT072131 to address the referenced violation on January 18, 2008 with a proposed completion date of August 15, 2008. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on May 16, 2008 that it had completed its Mitigation Plan on February 19, 2008, and WECC verified on August 22, 2008 that BPA had completed all mitigation activities.

#### WECC2012010112 VAR-001-2 R4 - OVERVIEW

WECC determined that on January 1, 2012, Longview Fiber Paper Packaging (LVF) commissioned commercial operation of a 45 MW cogeneration facility. However, BPA failed to provide a voltage or reactor power schedule to LVF until April 11, 2012.

WECC determined that this violation posed a minimal and not serious or substantial risk to the reliability of the BPS. Attachment B includes the facts in place during the violation that WECC considered in its risk assessment.

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BPA submitted its Mitigation Plan designated WECCMIT007617 to address the referenced violation on July 19, 2012 with a proposed completion date of February 15, 2013. Attachment B includes a description of the mitigation activities BPA took to address this violation.

BPA certified on February 14, 2013 that it had completed its Mitigation Plan on February 6, 2013, and WECC verified on March 14, 2013 that BPA had completed all mitigation activities. Attachments B and S2 provide specific information on WECC's verification of BPA's completion of the activities.

#### Regional Entity's Basis for Penalty

According to the Settlement Agreement, WECC has not assessed a penalty for the referenced violations. In reaching this determination, WECC considered the following factors:

- 1. BPA is a federal nonprofit agency that is part of the U.S. Department of Energy, and WECC was bound to follow *SWPA v. FERC* in resolution of this matter;
- 2. the instant violations constitute BPA's first occurrence of violations of the subject NERC Reliability Standards;
- 3. BPA had an internal compliance program at the time of the violations which WECC considered a mitigating factor, as discussed in Attachment B;
- 4. BPA has invested significant time and effort to implement its internal compliance program. WECC considers BPA's use of a Rapid Response Team for the self-reporting process to be an exemplary practice. This Rapid Response Team has specific time-based performance targets.
- 5. BPA self-reported 58 violations, and 9 violations were discovered during a Compliance Audit;
- 6. BPA was cooperative throughout the compliance enforcement process;
- 7. there was no evidence of any attempt to conceal a violation nor evidence of intent to do so;
- the violations of WECC200700489, WECC200801161, WECC201002315, WECC200700350, WECC201102749, WECC201102932, WECC2014014181, WECC201102751, WECC2011008668, WECC2013011685, WECC2011008667, WECC200801141, WECC201103045, WECC200800604, WECC200810021, WECC2015014564, WECC2014014392, WECC2014014519, WECC2015014565, WECC201002065, WECC200901299, WECC200901405, WECC2012011098, WECC2014013891, WECC200901559, WECC200901558, WECC200901557, WECC200800616, WECC200800617, WECC200800620, WECC200800621, WECC200700533, and WECC2012010112 posed a minimal risk but did not pose a serious or substantial risk to the reliability of the BPS, as discussed in Attachment B. The violations of WECC200800613, WECC2015014911, WECC2011008666, WECC201102748, WECC2012011142,

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> WECC2012011144, WECC2012011390, WECC2012011391, WECC2012011392, WECC2012011393, WECC2012011394, WECC2012011386, WECC2011009029, WECC2013013091, WECC2013013089, WECC2015015074, WECC2015015075, WECC2015015076, WECC2015015077, WECC2015015078, WECC2015015079, WECC200800618, and WECC200800619 posed a moderate risk but did not pose a serious or substantial risk to the reliability of the BPS, as discussed in Attachment B. The violations of WECC200800872, WECC200700351, WECC2012009942, WECC2012009943, WECC2012009960, WECC2012009941, WECC2012009961, WECC2012009944, WECC2012009945, and WECC2012009946 posed a posed a serious or substantial risk to the reliability of the BPS, as discussed in Attachment B; and

9. there were no other mitigating or aggravating factors or extenuating circumstances that would affect the assessed penalty.

After consideration of the above factors, WECC determined that, in this instance, no penalty is appropriate.

#### Statement Describing the Assessed Penalty, Sanction or Enforcement Action Imposed<sup>5</sup>

#### **Basis for Determination**

Taking into consideration the Commission's direction in Order No. 693, the NERC Sanction Guidelines and the Commission's July 3, 2008, October 26, 2009 and August 27, 2010 Guidance Orders,<sup>6</sup> the NERC BOTCC reviewed the Settlement Agreement and supporting documentation on December 16, 2015 and approved the Settlement Agreement. In approving the Settlement Agreement, the NERC BOTCC reviewed the applicable requirements of the Commission-approved Reliability Standards and the underlying facts and circumstances of the violations at issue.

For the foregoing reasons, the NERC BOTCC approved the Settlement Agreement and believes that no penalty is appropriate for the violations and circumstances at issue.

<sup>&</sup>lt;sup>5</sup> See 18 C.F.R. § 39.7(d)(4).

<sup>&</sup>lt;sup>6</sup> North American Electric Reliability Corporation, "Guidance Order on Reliability Notices of Penalty," 124 FERC ¶ 61,015 (2008); North American Electric Reliability Corporation, "Further Guidance Order on Reliability Notices of Penalty," 129 FERC ¶ 61,069 (2009); North American Electric Reliability Corporation, "Notice of No Further Review and Guidance Order," 132 FERC ¶ 61,182 (2010).

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Pursuant to 18 C.F.R. § 39.7(e), the penalty will be effective upon expiration of the 30-day period following the filing of this Notice of Penalty with FERC, or, if FERC decides to review the penalty, upon final determination by FERC.

#### Attachments to be Included as Part of this Notice of Penalty

During the eight years WECC and BPA have worked to resolve the issues addressed herein, there have been ERO Enterprise wide data system changes as well as personnel changes. As a result, several supporting documents cannot be located. Nonetheless, the details of the violations were preserved and are included in the Spreadsheet included as Attachment B.

The attachments to be included as part of this Notice of Penalty are the following documents:

- a) Settlement Agreement by and between WECC and BPA executed November 24, 2015, included as Attachment A;
- b) Spreadsheet provided by WECC detailing the violations dated October 27, 2015, included as Attachment B;
- c) Record documents for the violation of PRC-001-1 R2 (WECC200801141), included as Attachment C:
  - 1. BPA's Self-Report dated July 1, 2008;
  - 2. BPA's Mitigation Plan designated as WECCMIT081167 submitted July 31, 2008; and
  - 3. BPA's Certification of Mitigation Plan Completion dated August 6, 2009;
  - 4. WECC's Verification of Mitigation Plan Completion dated November 23, 2010.
- d) Record documents for the violation of MOD-030-2 R5 (WECC2011008666), included as Attachment D:
  - 1. BPA's Mitigation Plan designated as WECCMIT006547-2 submitted July 21, 2014; and
  - 2. BPA's Certification of Mitigation Plan Completion dated November 16, 2012;
  - 3. WECC's Verification of Mitigation Plan Completion dated August 21, 2015.
- e) Record documents for the violation of MOD-029-1a R1 (WECC2011008668), included as Attachment E:
  - 1. BPA's Certification of Mitigation Plan Completion dated August 16, 2012;
  - 2. WECC's Verification of Mitigation Plan Completion dated October 26, 2012.
- f) Record documents for the violation of MOD-030-2 R2 (WECC2011009029), included as Attachment
  F:

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- 1. BPA's Certification of Mitigation Plan Completion dated February 15, 2013;
- 2. WECC's Verification of Mitigation Plan Completion dated March 22, 2013.
- g) Record documents for the violation of MOD-030-2 R9 (WECC201102748), included as Attachment G:
  - 1. BPA's Mitigation Plan designated as WECCMIT008362-1 submitted July 21, 2014; and
  - 2. BPA's Certification of Mitigation Plan Completion dated August 25, 2015;
  - 3. WECC's Verification of Mitigation Plan Completion dated August 21, 2015.
- h) Record documents for the violation of MOD-001-1a R7 (WECC201102749), included as Attachment H:
  - 1. BPA's Certification of Mitigation Plan Completion dated November 16, 2012;
  - 2. WECC's Verification of Mitigation Plan Completion dated January 4, 2013.
- i) Record documents for the violation of MOD-001-1a R3 (WECC201102932), included as Attachment I:
  - 1. BPA's Certification of Mitigation Plan Completion dated November 16, 2012;
  - 2. WECC's Verification of Mitigation Plan Completion dated December 21, 2012.
- j) Record documents for the violation of PRC-005-1 R2 (WECC201103045), included as Attachment J:
  - 1. BPA's Certification of Mitigation Plan Completion dated November 16, 2012;
  - 2. WECC's Verification of Mitigation Plan Completion dated December 21, 2012.
- k) Record documents for the violation of TOP-007-WECC-1 R1 (WECC2012009941), included as Attachment K:
  - 1. BPA's Certification of Mitigation Plan Completion dated August 2, 2013;
  - 2. WECC's Verification of Mitigation Plan Completion dated September 24, 2013.
- Record documents for the violation of TOP-004-2 R4 (WECC2012009942), included as Attachment L:
  - 1. BPA's Certification of Mitigation Plan Completion dated August 2, 2013;
  - 2. WECC's Verification of Mitigation Plan Completion dated September 24, 2013.
- m) Record documents for the violation of TOP-004-2 R1 (WECC2012009943), included as Attachment M:

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- 1. BPA's Certification of Mitigation Plan Completion dated August 2, 2013;
- 2. WECC's Verification of Mitigation Plan Completion dated September 24, 2013.
- n) Record documents for the violation of TOP-008-1 R1 (WECC2012009944), included as Attachment N:
  - 1. BPA's Certification of Mitigation Plan Completion dated August 2, 2013;
  - 2. WECC's Verification of Mitigation Plan Completion dated August 30, 2013.
- Record documents for the violation of TOP-008-1 R2 (WECC2012009945), included as Attachment
  O:
  - 1. BPA's Certification of Mitigation Plan Completion dated August 2, 2013;
  - 2. WECC's Verification of Mitigation Plan Completion dated August 30, 2013.
- p) Record documents for the violation of TOP-008-1 R4 (WECC2012009946), included as Attachment
  P:
  - 1. BPA's Certification of Mitigation Plan Completion dated August 2, 2013;
  - 2. WECC's Verification of Mitigation Plan Completion dated September 24, 2013.
- q) Record documents for the violation of TOP-004-2 R6 (WECC2012009960), included as Attachment Q:
  - 1. BPA's Mitigation Plan designated as WECCMIT007810 submitted May 15, 2013; and
  - 2. BPA's Certification of Mitigation Plan Completion dated May 19, 2014;
  - 3. WECC's Verification of Mitigation Plan Completion dated July 15, 2014.
- r) Record documents for the violation of TOP-007-WECC-1 R2 (WECC2012009961), included as Attachment R:
  - 1. BPA's Mitigation Plan designated as WECCMIT008174 submitted January 31, 2013;
  - 2. BPA's Certification of Mitigation Plan Completion dated August 2, 2013;
  - 3. WECC's Verification of Mitigation Plan Completion dated September 24, 2013.
- s) Record documents for the violation of VAR-001-2 R4 (WECC2012010112), included as Attachment S:
  - 1. BPA's Certification of Mitigation Plan Completion dated February 15, 2013;
  - 2. WECC's Verification of Mitigation Plan Completion dated March 22, 2013.

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- t) Record documents for the violation of TOP-004-1 R4 (WECC2012011098), included as Attachment T:
  - 1. BPA's Mitigation Plan designated as WECCMIT011556 submitted April 9, 2015;
  - 2. BPA's Certification of Mitigation Plan Completion dated August 11, 2015;
  - 3. WECC's Verification of Mitigation Plan Completion dated August 11, 2015.
- u) Record documents for the violation of MOD-030-2 R3 (WECC2012011142), included as Attachment U:
  - 1. BPA's Self-Report dated November 26, 2012;
  - 2. BPA's Mitigation Plan designated as WECCMIT008365-2 submitted May 13, 2014; and
  - 3. BPA's Certification of Mitigation Plan Completion dated August 25, 2015;
  - 4. WECC's Verification of Mitigation Plan Completion dated August 21, 2015.
- v) Record documents for the violation of MOD-030-2 R6 (WECC2012011144), included as Attachment V:
  - 1. BPA's Self-Report dated September 28, 2012;
  - 2. BPA's Mitigation Plan designated as WECCMIT008368-1 submitted July 21, 2014; and
  - 3. BPA's Certification of Mitigation Plan Completion dated August 25, 2015;
  - 4. WECC's Verification of Mitigation Plan Completion dated August 21, 2015.
- w) Record documents for the violation of MOD-030-2 R1 (WECC2012011386), included as Attachment W:
  - 1. BPA's Self-Report dated November 12, 2012;
  - 2. BPA's Mitigation Plan designated as WECCMIT008363-1 submitted July 21, 2014; and
  - 3. BPA's Certification of Mitigation Plan Completion dated August 25, 2015;
  - 4. WECC's Verification of Mitigation Plan Completion dated August 21, 2015.
- Record documents for the violation of MOD-030-2 R2 (WECC2012011390), included as Attachment X:
  - 1. BPA's Self-Report dated November 12, 2012;
  - 2. BPA's Mitigation Plan designated as WECCMIT008364-1 submitted July 21, 2014; and
  - 3. BPA's Certification of Mitigation Plan Completion dated August 25, 2015;

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- 4. WECC's Verification of Mitigation Plan Completion dated August 21, 2015.
- y) Record documents for the violation of MOD-030-2 R4 (WECC2012011391), included as Attachment Y:
  - 1. BPA's Self-Report dated November 12, 2012;
  - 2. BPA's Mitigation Plan designated as WECCMIT008366-1 submitted July 21, 2014; and
  - 3. BPA's Certification of Mitigation Plan Completion dated August 25, 2015;
  - 4. WECC's Verification of Mitigation Plan Completion dated August 21, 2015.
- Record documents for the violation of MOD-030-2 R7 (WECC2012011392), included as Attachment
  Z:
  - 1. BPA's Self-Report dated November 12, 2012;
  - 2. BPA's Mitigation Plan designated as WECCMIT008369-1 submitted July 21, 2014; and
  - 3. BPA's Certification of Mitigation Plan Completion dated August 25, 2015;
  - 4. WECC's Verification of Mitigation Plan Completion dated August 21, 2015.
- aa) Record documents for the violation of MOD-030-2 R8 (WECC2012011393), included as Attachment AA:
  - 1. BPA's Self-Report dated November 12, 2012;
  - 2. BPA's Mitigation Plan designated as WECCMIT008370-1 submitted July 21, 2014; and
  - 3. BPA's Certification of Mitigation Plan Completion dated August 25, 2015;
  - 4. WECC's Verification of Mitigation Plan Completion dated August 21, 2015.
- bb) Record documents for the violation of MOD-030-2 R10 (WECC2012011394), included as Attachment BB:
  - 1. BPA's Self-Report dated November 12, 2012;
  - 2. BPA's Mitigation Plan designated as WECCMIT008371-1 submitted July 21, 2014; and
  - 3. BPA's Certification of Mitigation Plan Completion dated August 25, 2015;
  - 4. WECC's Verification of Mitigation Plan Completion dated August 21, 2015.
- cc) Record documents for the violation of MOD-029-1a R5 (WECC2013011685), included as Attachment CC:
  - 1. BPA's Self-Report dated January 25, 2013;

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- 2. BPA's Mitigation Plan designated as WECCMIT008823 submitted February 14, 2013; and
- 3. BPA's Certification of Mitigation Plan Completion dated February 14, 2013;
- 4. WECC's Verification of Mitigation Plan Completion dated April 4, 2013.
- dd) Record documents for the violation of MOD-029-1a R1 (WECC2013011728), included as Attachment DD:
  - 1. WECC's Violation Discovery Record dated January 23, 2013;
  - 2. BPA's Mitigation Plan designated as WECCMIT008787 submitted February 12, 2013; and
  - 3. BPA's Certification of Mitigation Plan Completion dated August 2, 2013.
- ee) Record documents for the violation of PRC-017-0 R1 (WECC2013013089), included as Attachment EE:
  - 1. WECC's Violation Discovery Record dated October 21, 2013;
  - 2. BPA's Mitigation Plan designated as WECCMIT011004 submitted September 11, 2014; and
  - 3. BPA's Certification of Mitigation Plan Completion dated June 29, 2015;
  - 4. WECC's Verification of Mitigation Plan Completion dated June 26, 2015.
- ff) Record documents for the violation of PRC-005-1 R1 (WECC2013013091), included as Attachment FF:
  - 1. WECC's Violation Discovery Record dated October 21, 2013;
  - 2. BPA's Mitigation Plan designated as WECCMIT011003 submitted September 11, 2014; and
  - 3. BPA's Certification of Mitigation Plan Completion dated November 18, 2014;
  - 4. WECC's Verification of Mitigation Plan Completion dated April 1, 2015.
- gg) Record documents for the violation of TOP-004-2 R6 (WECC2014013891), included as Attachment GG:
  - 1. WECC's Violation Discovery Record dated June 2, 2014;
  - 2. BPA's Mitigation Plan designated as WECCMIT010735 submitted June 6, 2014; and
  - 3. BPA's Certification of Mitigation Plan Completion dated June 9, 2014;
  - 4. WECC's Verification of Mitigation Plan Completion dated September 9, 2014.
- hh) Record documents for the violation of MOD-001-1a R1 (WECC2014014181), included as Attachment HH:

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- 1. BPA's Self-Report dated August 5, 2014;
- 2. BPA's Mitigation Plan designated as WECCMIT010951 submitted August 29, 2014; and
- 3. BPA's Certification of Mitigation Plan Completion dated March 31, 2015;
- 4. WECC's Verification of Mitigation Plan Completion dated March 31, 2015.
- ii) Record documents for the violation of PRC-011-0 R1 (WECC2014014392), included as Attachment II:
  - 1. BPA's Self-Report dated October 9, 2014;
  - 2. BPA's Mitigation Plan designated as WECCMIT011170 submitted November 17, 2014; and
  - 3. BPA's Certification of Mitigation Plan Completion dated November 18, 2014;
  - 4. WECC's Verification of Mitigation Plan Completion dated April 2, 2015.
- jj) Record documents for the violation of PRC-017-0 R1 (WECC2014014519), included as Attachment JJ:
  - 1. BPA's Self-Report dated December 15, 2014;
  - 2. BPA's Mitigation Plan designated as WECCMIT011546 submitted December 16, 2014; and
  - 3. BPA's Certification of Mitigation Plan Completion dated December 16, 2014;
  - 4. WECC's Verification of Mitigation Plan Completion dated April 2, 2015.
- kk) Record documents for the violation of PRC-011-0 R2 (WECC2015014564), included as Attachment KK:
  - 1. BPA's Self-Report dated January 15, 2015;
  - 2. BPA's Mitigation Plan designated as WECCMIT011373-1 submitted August 11, 2015; and
  - 3. BPA's Certification of Mitigation Plan Completion dated August 20, 2015;
  - 4. WECC's Verification of Mitigation Plan Completion dated August 19, 2015.
- Record documents for the violation of PRC-017-0 R2 (WECC2015014565), included as Attachment LL:
  - 1. BPA's Self-Report dated January 15, 2015;
  - 2. BPA's Mitigation Plan designated as WECCMIT011734-1 submitted August 11, 2015; and
  - 3. BPA's Certification of Mitigation Plan Completion dated August 19, 2015;

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- 4. WECC's Verification of Mitigation Plan Completion dated August 19, 2015.
- mm) Record documents for the violation of MOD-001-1a R3 (WECC2015014911), included as Attachment MM:
  - 1. BPA's Self-Report dated May 6, 2015;
  - 2. BPA's Mitigation Plan designated as WECCMIT011637 submitted September 22, 2015; and
  - 3. BPA's Certification of Mitigation Plan Completion dated October 13, 2015;
  - 4. WECC's Verification of Mitigation Plan Completion dated October 8, 2015.
- nn) Record documents for the violation of TOP-002-2.1b R11 (WECC2015015074), included as Attachment NN:
  - 1. BPA's Self-Report dated July 10, 2015;
  - 2. BPA's Mitigation Plan designated as WECCMIT011731 submitted August 28, 2015; and
  - 3. BPA's Certification of Mitigation Plan Completion dated September 25, 2015;
  - 4. WECC's Verification of Mitigation Plan Completion dated September 25, 2015.
- oo) Record documents for the violation of TOP-004-2 R1 (WECC2015015075), included as Attachment OO:
  - 1. BPA's Self-Report dated July 10, 2015;
  - 2. BPA's Mitigation Plan designated as WECCMIT011733 submitted August 28, 2015; and
  - 3. BPA's Certification of Mitigation Plan Completion dated September 25, 2015;
  - 4. WECC's Verification of Mitigation Plan Completion dated September 25, 2015.
- pp) Record documents for the violation of TOP-004-2 R4 (WECC2015015076), included as Attachment PP:
  - 1. BPA's Self-Report dated July 10, 2015;
  - 2. BPA's Mitigation Plan designated as WECCMIT011756 submitted August 28, 2015; and
  - 3. BPA's Certification of Mitigation Plan Completion dated September 25, 2015;
  - 4. WECC's Verification of Mitigation Plan Completion dated September 25, 2015.
- qq) Record documents for the violation of TOP-008-1 R1 (WECC2015015077), included as Attachment QQ:
  - 1. BPA's Self-Report dated July 10, 2015;

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- 2. BPA's Mitigation Plan designated as WECCMIT011757 submitted August 28, 2015; and
- 3. BPA's Certification of Mitigation Plan Completion dated September 25, 2015;
- 4. WECC's Verification of Mitigation Plan Completion dated September 25, 2015.
- rr) Record documents for the violation of TOP-008-1 R2 (WECC2015015078), included as Attachment RR
  - 1. BPA's Self-Report dated July 10, 2015;
  - 2. BPA's Mitigation Plan designated as WECCMIT011758 submitted August 28, 2015; and
  - 3. BPA's Certification of Mitigation Plan Completion dated September 25, 2015;
  - 4. WECC's Verification of Mitigation Plan Completion dated September 25, 2015.
- ss) Record documents for the violation of TOP-008-1 R4 (WECC2015015079), included as Attachment SS:
  - 1. BPA's Self-Report dated July 10, 2015;
  - 2. BPA's Mitigation Plan designated as WECCMIT011759 submitted August 28, 2015; and
  - 3. BPA's Certification of Mitigation Plan Completion dated September 25, 2015.
  - 4. WECC's Verification of Mitigation Plan Completion dated September 25, 2015.

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**Notices and Communications:** Notices and communications with respect to this filing may be addressed to the following:

Jim Robb*	Sonia C. Mendonça*
Chief Executive Officer	Vice President of Enforcement and Deputy
Western Electricity Coordinating Council	General Counsel
155 North 400 West, Suite 200	North American Electric Reliability
Salt Lake City, UT 84103	Corporation
(801) 883-6853	1325 G Street N.W.
(801) 883-6894 – facsimile	Suite 600
jrobb@wecc.biz	Washington, DC 20005
	(202) 400-3000
Michael Moon*	(202) 644-8099 – facsimile
Vice President Entity Oversight	sonia.mendonca@nerc.net
Western Electricity Coordinating Council	
155 North 400 West, Suite 200	Edwin G. Kichline*
Salt Lake City, UT 84103	Senior Counsel and Associate Director,
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Heather Laws\* Manager of Enforcement Western Electricity Coordinating Council 155 North 400 West, Suite 200 Salt Lake City, UT 84103 (801) 819-7642 (801) 883-6894 – facsimile hlaws@wecc.biz

Jeff Cook\* Acting VP Planning & Asset Management Bonneville Power Administration 905 NE 11 Avenue Portland, OR 97232 (360) 418-8981 jwcook@bpa.gov

\*Persons to be included on the Commission's service list are indicated with an asterisk. NERC requests waiver of the Commission's rules and regulations to permit the inclusion of more than two people on the service list.

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#### Conclusion

NERC respectfully requests that the Commission accept this Notice of Penalty as compliant with its rules, regulations, and orders.

Respectfully submitted,

#### /s/ Edwin G. Kichline

Sonia C. Mendonça Vice President of Enforcement and Deputy **General Counsel** Edwin G. Kichline Senior Counsel and Associate Director, Enforcement **Gizelle Wray** Associate Counsel North American Electric Reliability Corporation 1325 G Street N.W. Suite 600 Washington, DC 20005 (202) 400-3000 (202) 644-8099 - facsimile sonia.mendonca@nerc.net edwin.kichline@nerc.net gizelle.wray@nerc.net (202) 400-3000 (202) 644-8099 - facsimile

cc: Bonneville Power Administration Western Electricity Coordinating Council

Attachments



# **Attachment A**

# Settlement Agreement by and between WECC and BPA executed November 24, 2015.

#### SETTLEMENT AGREEMENT

OF

#### WESTERN ELECTRICITY COORDINATING COUNCIL

#### AND

#### THE UNITED STATES OF AMERICA

#### DEPARTMENT OF ENERGY

#### acting by and through the

#### BONNEVILLE POWER ADMINISTRATION

1. Western Electricity Coordinating Council ("WECC") and the United States of America, Department of Energy, acting by and through the Bonneville Power Administration ("Bonneville") (collectively the "Parties") hereby enter into this Settlement Agreement ("Agreement") on this 224 day of Northern, 2015.

2. The Parties desire to enter into this Agreement to resolve all issues arising from Self-Reports, Self-Certifications, and audits of Bonneville by WECC that resulted in sixty-two (62) alleged Operations and Planning (O&P) violations of the North American Electric Reliability Corporation ("NERC") Reliability Standards ("Reliability Standards" or "Standards"). See "Appendix A" for information regarding each violation.

#### BACKGROUND

3. Bonneville is a federal power marketing administration within the U.S. Department of Energy, and is located in the Pacific Northwest. It markets wholesale electrical power from thirty-one (31) federal hydroelectric projects in the Columbia River Basin, one nonfederal nuclear plant and several other small nonfederal power plants. About one-third of the electric power used in the Northwest comes from Bonneville. Bonneville operates and maintains over 15,000 miles of high-voltage transmission ranging up to 1,000 kV in Idaho, Oregon, Washington, western Montana and small parts of eastern Montana, California, Nevada, Utah and Wyoming. Bonneville's headquarters is located at 905 NE 11th Avenue, Portland, Oregon, 97232. Bonneville is registered on the NERC Compliance Registry as a Balancing Authority ("BA"), Transmission Operator ("TOP"), Transmission Planner ("TP"), Planning Authority ("PA"), and Load Serving Entity ("LSE").

4. Bonneville first became subject to the NERC Reliability Standards on June 18, 2007. Bonneville became subject to additional Reliability Standards as those Standards became effective. These Reliability Standards include O&P Standards, which are the subject of the current Agreement, as well as Critical Infrastructure Protection ("CIP") Standards.

5. WECC was formed on April 18, 2002 by the merger of the Western Systems Coordinating Council, Southwest Regional Transmission Association, and Western Regional Transmission Association. WECC is one of eight Regional Entities in the United States responsible for coordinating and promoting electric system reliability and enforcing the mandatory Reliability Standards created by NERC under the authority granted in Section 215 of the Federal Power Act. WECC's region encompasses a vast area of nearly 1.8 million square miles extending from Canada to Mexico and including 14 western states. It is the largest and most diverse of the eight Regional Entities in the United States.

6. Section 215(b)(1) of the Federal Power Act grants the Federal Energy Regulatory Commission ("FERC") jurisdiction over "all users, owners and operators of the bulk-power system, including but not limited to the entities described in section 824(f) of this title, for purposes of approving reliability standards . . . and enforcing compliance." The United States is an entity described in section 824(f). In Southwestern Power Admin. v. FERC, 763 F.3d 27, 32 (D.C. Cir. 2014), the United States Court of Appeals for the District of Columbia Circuit ("DC Circuit") held that "section 215(b)(1)'s general grant of jurisdiction to FERC to approve and enforce compliance with reliability standards thus includes the United States within the field of covered 'users, owner, and operators." However, the DC Circuit also determined that section 215(e), under which WECC derives its authority to assess penalties, did not specifically define "users, owners and operators" to include the United States, and was thus not sufficiently clear to waive the United States' sovereign immunity. Id. Therefore, while federal agencies are subject to FERC's "jurisdiction to enforce compliance" and "subject to FERC's imposition of nonmonetary means of enforcement, such as compliance orders or directives, enforcement audits, and the like," they are not subject to monetary penalties, in contrast to registered entities that are not federal agencies. Id. at 33.

7. The holding in *Southwestern Power Admin.* that section 215 (e) of the Federal Power Act did not waive the United States' sovereign immunity precludes WECC from issuing a "monetary award against the federal government." *Id*.

8. Because of these legal proceedings, WECC has not previously entered into any formal settlement agreement with a federal agency resolving violations, including with Bonneville. Bonneville's alleged violations, and the information available to WECC regarding those alleged violations, date back to 2007. Since the Reliability Standards became effective with FERC Order No. 693 in 2007, NERC and the Regional Entities have evolved in the information gathered from registered entities and provided to FERC for use in a Notice of Penalty. *See Mandatory Reliability Standards for the Bulk-Power System*, FERC Stats. & Regs. ¶ 31,242, P1 (2007), *order on reh'g*, Order No. 693-A, 120 FERC ¶ 61,053, (2007). Older alleged violations found in Appendix A contain "all relevant facts, in sufficient detail, to indicate the nature of each violation and its duration," so as to complete the record regarding those alleged violations. *Guidance on Filing Reliability Notices of Penalty*, 124 FERC ¶ 61,015 P 26 (2008). However, information gathered for and reported on more recent alleged violations is increasingly robust. As such, the quality and quantity of information available for older alleged violations found in Appendix A may be less than more recent alleged violations. Nonetheless, each alleged

violation described in Appendix A contains the necessary facts and details to describe each alleged violation and its duration, as required by FERC, for a Notice of Penalty.

9. In a letter dated May 13, 2015, Bonneville asserted that it also was not subject to nonmonetary penalties, stating that "if there is no longer a continuing violation, WECC is no longer 'enforcing compliance'. . . but assessing a 'penalty' under section 215(e)," and that *Southwestern Power Admin.* was "absolutely clear that the United States did not waive sovereign immunity under section 215(e)." WECC does not agree with Bonneville's position. By entering into this Agreement, neither Party concedes its position on this issue, and does not waive its rights to raise this issue in future proceedings.

10. The Parties are entering into this Agreement to settle all issues resulting from the sixtyseven (67) alleged O&P violations listed in Appendix A. It is in the Parties' and the public's best interests to resolve this matter efficiently without the delay and burden associated with a contested proceeding. Thus, for the purposes of this Agreement, Bonneville does not contest the facts set forth herein and agrees that the alleged violations addressed in Appendix A may be treated as Confirmed Violations as set forth in the NERC Rules of Procedure.

11. Nothing contained in this Agreement shall be construed as a waiver of either party's rights, except as otherwise contained herein. Nothing in this Agreement shall limit or prevent WECC from evaluating Bonneville for subsequent violations of the same Reliability Standards addressed herein and taking enforcement action, if necessary. Additionally, nothing shall prevent WECC from exercising its jurisdiction to enforce compliance with the standards applicable to Bonneville, and the imposition of non-monetary means of enforcement, such as compliance orders or directives, enforcement audits, and the like. Such enforcement action can include consideration of the violations resolved herein as prior non-compliance with Reliability Standards.

#### SETTLEMENT TERMS

12. WECC agrees Bonneville has mitigated the past alleged violations listed in Appendix A. As a result, no further enforcement action is required for these past violations.

13. As a federal power marketing administration, Bonneville is not subject to monetary penalties under section 215(e) of the Federal Power Act. As provided in paragraph 9 of this Agreement, the Parties disagree as to the applicability of non-monetary penalties to federal entities. However, non-monetary penalties are not a term of this Agreement.

14. The terms of this Agreement are subject to approval by NERC and FERC. Upon NERC approval of the Agreement, NERC will file a Notice of Penalty with FERC and will post the Agreement publicly. If either NERC or FERC rejects the Agreement, then WECC will attempt to negotiate a revised settlement agreement with Bonneville that includes any changes to the Agreement specified by NERC or FERC. If the Parties cannot reach a settlement agreement, the Compliance Monitoring and Enforcement Program ("CMEP") governs the enforcement process.

#### **ADDITIONAL TERMS**

15. <u>Authority</u>. The undersigned representative of each party warrants that he or she is authorized to represent and bind the designated party.

. 16. <u>Representations</u>. The undersigned representative of each party affirms that he or she has read the Agreement, that all matters set forth in the Agreement are true and correct to the best of his or her knowledge, information, or belief, and that he or she understands that the Agreement is entered into by each party in express reliance on the representations set forth herein.

17. <u>Review</u>. Each party agrees that it has had the opportunity to consult with legal counsel regarding the Agreement and to review it carefully. Each party enters the Agreement voluntarily. No presumption or rule that ambiguities shall be construed against the drafting party shall apply to the interpretation or enforcement of this Agreement.

18. <u>Entire Agreement</u>. The Agreement represents the entire agreement between the Parties. No tender, offer, or promise of any kind outside the terms of the Agreement by any member, employee, officer, director, agent, or representative of Bonneville or WECC has been made to induce the signatories or the Parties to enter into the Agreement. No oral representations shall be considered a part of the Agreement.

19. <u>Effective Date</u>. The Agreement shall become effective upon FERC's approval of the Agreement by order or operation of law.

20. <u>Waiver of Right to Further Proceedings</u>. The Parties agree that this Agreement, upon approval by NERC and FERC, is a final settlement of all matters set forth herein. The Parties waive their rights to further hearings and appeal, unless and only to the extent that the Parties contend that any NERC or FERC action concerning the Agreement contains one or more material modifications to the Agreement and further negotiations are unsuccessful.

21. <u>Reservation of Rights</u>. WECC reserves all of its rights to initiate enforcement, penalty or sanction actions against Bonneville in accordance with the Agreement, the CMEP, the NERC Rules of Procedure, and applicable laws. In the event that Bonneville fails to comply with any of the terms of this Agreement, WECC shall have the right to pursue enforcement, penalty or sanction actions against Bonneville up to the maximum penalty allowed by the NERC Rules of Procedure and applicable laws. Bonneville shall retain all of its rights to defend against such enforcement actions in accordance with the CMEP, the NERC Rules of Procedure, and applicable laws. Failure by WECC to enforce any provision hereof on occasion shall not constitute a waiver by WECC of its enforcement rights or be binding on WECC on any other occasion.

22. <u>Consent</u>. Bonneville consents to the use of WECC's determinations, findings, and conclusions set forth in this Agreement for the future purpose of assessing the factors, including the factor of determining Bonneville's history of violations, in accordance with the NERC Sanction Guidelines and applicable Commission orders and policy statements. Such use may be in any enforcement action or compliance proceeding undertaken by WECC, NERC and/or FERC; provided, however, that Bonneville does not consent to the use of the specific acts set forth in this Agreement as the sole basis for any other action or proceeding brought by WECC, NERC and/or FERC, nor does Bonneville consent to the use of this Agreement by any other party in any other action or proceeding.

23. <u>Amendments</u>. Any amendments to the Agreement shall be in writing. No amendment to the Agreement shall be effective unless it is in writing and executed by the Parties.

24. <u>Successors and Assigns</u>. The Agreement shall be binding on successors or assigns of the Parties.

25. <u>Governing Law</u>. The Agreement shall be governed by and construed under Federal Law.

26. <u>Captions</u>. The Agreement's titles, headings and captions are for the purpose of convenience only and in no way define, describe or limit the scope or intent of the Agreement.

27. <u>Counterparts and Facsimiles</u>. The Agreement may be executed in counterparts, in which case each of the counterparts shall be deemed to be an original.

[Remainder of page intentionally left blank]

ADDENUX A	A	-	-	-	-	1	1	A
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No.	NERC Violation ID	Standard/ Requirement	VRF	VSL
1	WECC2015014564	PRC-011-0 R2	Lower	LNC-Level 1
2	WECC2015014565	PRC-017-0 R2	Lower	LNC-Level 1
3	WECC2014014519	PRC-017-0 R1	High	Lower
4	WECC2014014392	PRC-011-0 R1.	Lower	High
5	WECC2014013891	TOP-004-2 R6	Medium	Lower
6	WECC2014014181	MOD-001-1a R1	Medium	Severe
7	WECC2013011685	MOD-029-1a R5	Lower	Severe
8	WECC2013011728	MOD-029-1a R1; R1.1	Lower	Severe
9	WECC2013013089	PRC-017-0 R1	High	High
10	WECC2013013091	PRC-005-1 R1; R1.1	High	High
11	WECC2012009941	TOP-007-WECC-1 R1	Medium	Severe
12	WECC2012009942	TOP-004-2 R4	High	Severe
13	WECC2012009943	TOP-004-2 R1	High	Severe
14	WECC2012009944	TOP-008-1 R1	High	Severe
15	WECC2012009945	TOP-008-1 R2	High	Severe
16	WECC2012009946	TOP-008-1 R4	Medium	Severe
17	WECC2012009960	TOP-004-2 R6; R6.3	Medium	Severe
18	WECC2012009961	TOP-007-WECC-1 R2	Lower	High
19	WECC2012010112	VAR-001-2 R4	Medium	High
20	WECC2012011098	TOP-004-1 R4	High	Severe
21	WECC2012011144	MOD-030-2 R6; R6.1; R6.1.1; R6.1.2; R6.2; R6.2.1; R6.2.2	Medium	Severe
22	WECC2012011142	MOD-030-2 R3	Medium	Severe

No.	NERC Violation ID	Standard/ Requirement	VRF	VSL
23	WECC2012011386	MOD-030-2 R1; R1.1	Medium	High
24	WECC2012011390	MOD-030-2 R2; R2.1; R2.1.1; R2.1.2	Medium	Severe
25	WECC2012011391	MOD-030-2 R4	Medium	Severe
26	WECC2012011392	MOD-030-2 R7; R7.1; R7.2; R7.3; R7.4; R7.5; R7.6; R7.7	Lower	Severe
27	WECC2012011393	MOD-030-2 R8	Medium	Severe
28	WECC2012011394	MOD-030-2 R10; R10.1; R10.2; R10.3	Medium	Severe
29	WECC201102932	MOD-001-1a R3; R3.1	Lower	High
30	WECC201102748	MOD-030-2 R9	Lower	Severe
31	WECC201102749	MOD-001-1a R7	Lower	Lower
32	WECC201102751	MOD-029-1a R7	Lower	Lower
33	WECC201103045	PRC-005-1 R2; R2.1	High	Lower
34	WECC2011008666	MOD-030-2 R5; R5.2	Medium	Severe
35	WECC2011008667	MOD-030-2 R3; R3.4	Lower	Severe
36	WECC2011008668	MOD-029-1a R1; R1.1.1.1	Lower	Lower
37	WECC2011009029	MOD-030-2 R2	Medium	Severe
38	WECC201002065	PRC-023-1 R1	High	Moderate
39	WECC201002315	FAC-003-1 R2	High	Moderate
40	WECC200901299	PRC-STD-005-1 WR1	Level One Noncompliance	Level One Noncompliance
41	WECC200901405	PRC-STD-005-1 WR1	Level One Noncompliance;	Level One Noncompliance;
42	WECC200901557	TOP-006-1 R2	High	High
43	WECC200901558	TOP-006-1 R5	Medium	Severe

No.	NERC Violation ID	Standard/ Requirement	VRF	VSL
44	WECC200901559	TOP-006-1 R6	High	Severe
45	WECC200800604	PRC-008-0 R1	Medium	Lower
46	WECC200800613	EOP-005-1 R1	Medium	Moderate
47	WECC200800616	TPL-002-0 R1; R1.3.7	High	Lower
48	WECC200800617	TPL-002-0 R2; R2.1	Medium	Lower
49	WECC200800618	TPL-002-0 R3	Lower	Severe
50	WECC200800619	TPL-003-0 R3	Lower	Severe
51	WECC200800620	VAR-001-1 R1	High	Lower
52	WECC200800621	VAR-001-1 R3	Lower	Lower
53	WECC200800872	FAC-003-1 R2	High	LNC - Level 4
54	WECC200801141	PRC-001-1 R2	High	LNC - Level 4
55	WECC200801161	COM-001-1 R5	Lower	Severe
56	WECC200810021	PRC-008-0 R2	Medium	Lower
57	WECC200700350	INT-006-1 R1	Lower	Lower
58	WECC200700351	FAC-003-1 R3	High	Severe
59	WECC200700489	BAL-005-0 R12	Medium	Lower
60	WECC200700533	VAR-001-1 R4	Medium	Lower
61	WECC2015014911	MOD-001-1a R3	Medium	Severe
62	WECC2015015074	TOP-002-2.1b R11	Medium	High
63	WECC2015015075	TOP-004-2 R1	High	Severe
64	WECC2015015076	TOP-004-2 R4	High	Severe
65	WECC2015015077	TOP-008-1 R1	High	Severe
66	WECC2015015078	TOP-008-1 R2	High	Severe
67	WECC2015015079	TOP-008-1 R4	Medium	Moderate

Agreed to and accepted:

WESTERN ELECTRICITY COORDINATING COUNCIL

Name: MEHALL T. MOON Title: VP, Register J Entity Cre-sight

11/24/5 Date

BONNEVILLE POWER ADMINISTRATION

11/23/2015

Name: Jeffrey W. Cook Date Title: Acting VP, Planning & Asset Management



## **Attachment B**

# Spreadsheet provided by WECC detailing the violations dated October 27, 2015. Please see separately attached spreadsheet.



# **Attachment C**

# Record documents for the violation of PRC-001-1 R2 (WECC200801141)

C-1. BPA's Self-Report dated July 1, 2008;

C-2. BPA's Mitigation Plan designated as MIT-08-1167 submitted July 31, 2008;

C-3. BPA's Certification of Mitigation Completion dated August 6, 2009;

C-4. WECC's Verification of Mitigation Completion dated November 23, 2010



### **Compliance Violation Self-Reporting Form**

Please complete an <u>individual</u> Self-Reporting Form for each NERC Reliability Standard that indicates any level(s) of non-compliance and return to <u>Compliance@WECC.biz</u>

Registered Entity Name: Bonneville Power Administration

Contact Name: Brian Furumasu

Contact Phone: 503-230-4999

Contact email: <u>bcfurumasu@bpa.gov</u>

Date noncompliance was discovered: 30 June 2008

Date noncompliance was reported: 1 July 2008

Standard Title: System Protection Coordination

Standard Number: PRC-001-1

Requirement Number(s)<sup>1</sup>: R2 (R2.2)

How was the noncompliance found? (e.g. Routine Readiness Evaluation, Self-evaluation, Internal Audit, etc.)

Self evaluation through detailed analysis of roles and responsibilities with the Federal Columbia River Power System members.

\*Submit a Mitigation Plan in conjunction with this form to show that corrective steps are being taken within ten (10) business days. If a mitigation plan is not being submitted with this form please complete the following:

Describe the cause of non-compliance:

\*Technical issue: Analysis reveals that a process, procedure and/or agreement needs to be created and put in place.

<sup>1</sup> Violations are on a per requirement basis PRC-001-1 R2\_Self-Report\_FCRPS.doc Describe the reliability impact of this non-compliance:

Based upon our long standing record of excellent communication between Reclamation and BPA, our continued use of our current approach will have minimal impact to system reliability during the tenure of the mitigation plan.

Expected date of Mitigation Plan submittal: 1 August 2008





# **Mitigation Plan Submittal Form**

New 🛛 or Revised 🗌

Date this Mitigation Plan is being submitted: 07/31/08

If this Mitigation Plan has already been completed:

- Check this box 🗌 and
- Provide the Date of Completion of the Mitigation Plan:

#### Section A: Compliance Notices & Mitigation Plan Requirements

A.1 Notices and requirements applicable to Mitigation Plans and this Submittal Form are set forth in "Appendix A - Compliance Notices & Mitigation Plan Requirements" to this form. Review the notices and check this box is to indicate that you have reviewed and understand the information provided therein. This Submittal Form and the Mitigation Plan submitted herein are incomplete and cannot be accepted unless the box is checked.

#### Section B: Registered Entity Information

B.1 Identify your organization:

Company Name: Bonneville Power Administration Company Address: P.O. Box 3621 DG-7 Portland, OR 97208 NERC Compliance Registry ID: NCR05032

B.2 Identify the individual in your organization who will be the Entity Contact to WECC regarding this Mitigation Plan.

Name:	Brian Furumasu
Title:	NERC Compliance Officer
Email:	<u>bcfurumasu@bpa.gov</u>
Phone:	503-230-7681





### Section C: Identity of Reliability Standard Violations Associated with this Mitigation Plan

This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

- C.1 Standard: *PRC-001-1* [*Identify by Standard Acronym* (e.g. FAC-001-1)]
- C.2 Requirement(s) violated and violation dates:

NERC Violation	WECC	Requirement	Violation	Alleged or	Method of
ID #	Violation ID	Violated	Risk	confirmed	Detection
[if known]	#	(e.g. R3)	Factor	Violation	(e.g. audit,
	[if known ]			Date <sup>(*)</sup>	self-report,
				(MM/DD/YY)	investigation)
		R2		06/30/2008	Self-
					evaluation
		R 2.2		06/30/2008	Self-
					evaluation

(\*) Note: The Violation Date shall be: (i) the violation occurred; (ii) the date that the violation was self-reported; or (iii) the date that the violation has been deemed to have occurred on by WECC. Questions regarding the date to use should be directed to the WECC.

#### C.3 Identify the cause of the violation(s) identified above:

During negotiations between BPA and the US Bureau of Reclamation that concluded in late June 2008 related to BPA as Transmission Operator for Reclamation for the Hungry Horse, Grand Coulee, Palisades, and Minidoka Switchyards (Switchyards) and self evaluation through detailed analysis of roles and responsibilities between Reclamation and BPA, it was determined that formal documented procedures are not in place for Reclamation to provide information to BPA on protective relay or other protective system failures for the Switchyards.





C.4 **[Optional]** Provide any relevant additional information regarding the violations associated with this Mitigation Plan:

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

BPA will continue using its existing procedures for notifying its Reliability Coordinator, affected Transmission Operators and Balancing Authorities when protective relay or equipment failure reduces system reliability.

#### Section D: Details of Proposed Mitigation Plan

#### Mitigation Plan Contents

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violations identified above in Part C.2 of this form:

BPA and Reclamation will develop a formal documented process/procedure for Reclamation to provide information to BPA on protective relay or other protective system failures for the facilities identified in C.3 above

Check this box and proceed to Section E of this form if this Mitigation Plan, as set forth in Part D.1, has already been completed; otherwise respond to Part D.2, D.3 and, optionally, Part D.4, below.

#### Mitigation Plan Timeline and Milestones

D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

BPA and Reclamation will complete the formal documented process/procedure by August 15, 2009.





D.3 Enter Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Proposed Completion Date* (shall not be more than 3 months apart)
Status update to WECC	8/15/08
BPA and Reclamation agree on and develop list of specific topics/issues to be addressed in formal documented process/procedure and develop schedule for negotiations. Status update to WECC	11/15/08
Prepare first draft of formal documented process/procedure. Status update to WECC	2/15/09
Review of draft formal documented process/procedure and begin development of final formal documented process/procedure. Status update to WECC	5/15/09
Final formal documented process/procedure signed by both BPA and Reclamation. Status update to WECC	8/15/09

(\*) Note: Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined for not completing work associated with accepted milestones.

[Note: Provide your response here; additional detailed information may be provided as an attachment as necessary]

#### Additional Relevant Information (Optional)

D.4 If you have any relevant additional information that you wish to include regarding the mitigation plan, milestones, milestones dates and completion date proposed above you may include it here:

[Provide your response here; additional detailed information may be provided as an attachment as necessary]





### Section E: Interim and Future Reliability Risk

# Check this box and proceed and respond to Part E.2 and E.3, below, if this Mitigation Plan, as set forth in Part D.1, has already been completed.

#### Abatement of Interim BPS Reliability Risk

E.1 While your organization is implementing the Mitigation Plan proposed in Part D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

Minimal risks to system reliability. BPA and Reclamation have a longstanding record of excellent communication and have existing informal processes that have been successful in achieving reliable operations for many years. This communication and these informal processes will continue to be used while the formal documented process/procedure is negotiated and signed.

#### Prevention of Future BPS Reliability Risk

E.2 Describe how successful completion of the Mitigation Plan as laid out in Part D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

BPA has put in place a reliability organizational structure and processes to continually manage our compliance.

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Part D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Part C.2, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

[Provide your response here; additional detailed information may be provided as an attachment as necessary]




# Section F: Authorization

An authorized individual must sign and date this Mitigation Plan Submittal Form. By doing so, this individual, on behalf of your organization:

- a) Submits the Mitigation Plan, as laid out in Section D of this form, to WECC for acceptance by WECC and approval by NERC, and
- b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and
- c) Acknowledges:
  - 1. I am Brian Silverstein of Bonneville Power Administration.
  - 2. I am qualified to sign this Mitigation Plan on behalf of *Bonneville Power Administration*.
  - 3. I have read and understand *Bonneville Power Administration* obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure, including Appendix 4(C) (Compliance Monitoring and Enforcement Program of the North American Electric Reliability Corporation" (NERC CMEP)).
  - 4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
  - 5. Bonneville Power Administration agrees to be bound by, and comply with, the Mitigation Plan, including the timetable completion date, as approved by WECC and approved by NERC.

## Authorized Entity Officer Signature:

in (Electronic signatures are acceptable; see CMEP)

Name (Print): Title: Date: Brian Silverstein VP, Planning & Asset Management 07/31/08





## Section G: Comments and Additional Information

You may use this area to provide comments or any additional relevant information not previously addressed in this form.

[Provide your response here; additional detailed information may be provided as an attachment as necessary]

Please direct any questions regarding completion of this form to:

Jim Stuart, Sr. Compliance Engineer Email: <u>Jstuart@wecc.biz</u> Phone: (801) 883-6887





## Attachment A – Compliance Notices & Mitigation Plan Requirements

- I. Section 6.2 of the CMEP1 sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:
  - (1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section 2.0.
  - (2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.
  - (3) The cause of the Alleged or Confirmed Violation(s).
  - (4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).
  - (5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).
  - (6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.
  - (7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.
  - (8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined for not completing work associated with accepted milestones.
  - (9) Any other information deemed necessary or appropriate.
  - (10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self-Certification or Self Reporting submittals.
- II. This submittal form may be used to provide a required Mitigation Plan for review and approval by WECC and NERC.

<sup>&</sup>lt;sup>1</sup> "Uniform Compliance Monitoring and Enforcement Program of the North American Electric Reliability Corporation;" a copy of the current version approved by the Federal Energy Regulatory Commission is posted on NERC's website.





- III. The Mitigation Plan shall be submitted to the WECC and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.
- IV. This Mitigation Plan form may be used to address one or more related violations of one Reliability Standard. A separate mitigation plan is required to address violations with respect to each additional Reliability Standard, as applicable.
- V. If the Mitigation Plan is approved by WECC and NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission in accordance with applicable Commission rules, regulations and orders.
- VI. WECC or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.
- VII. Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.



# **Certification of Mitigation Plan Completion Form**

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for Western Electricity coordinating Council (WECC) to verify completion of the Mitigation Plan. WECC may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6.)

Registered Entity Name: Bonneville Power Administration

NERC Registry ID. NCR05032

Date of Submittal of Certification: August 14, 2009

NERC Violation ID No(s) (if Known):

Standard: PRC-001-1

Requirement (s): R2, R2.2

Date Mitigation Plan was actually completed: July 13, 2009

Additional Comments (or List of Documents Attached):

The attached countersigned letter demonstrates that BPA and U.S. Bureau of Reclamation (Reclamation) have developed procedures whereby Reclamation operators will notify BPA System Dispatchers of protective relay or equipment failures on Reclamation transmission facilities in its Grand Coulee 115 kV Switchyard, Grand Coulee 230 kV Switchyard, Grand Coulee 500 kV Switchyard, Hungry Horse 230 kV Switchyard, Minidoka 138 kV Switchyard, and Palisades 115 kV Switchyard; that BPA will notify its Reliability Coordinator and others if the failure reduces system reliability; and that Reclamation will take appropriate corrective action as required by PRC-001-1, R2 and R2.2.

I certify that the Mitigation Plan for the above named violation has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: *Hardev Juj* 

Title: Acting Vice President, Planning and Asset Management

Email: *hsjuj@bpa.gov* 

### **Non-Public and CONFIDENTIAL**

Authorized Signature:

Date:

# 6/6/09

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#### **Department of Energy**

Bonneville Power Administration P.O. Box 939 Mead, Washington 99021-0939

July 1, 2009

In reply refer to: TOV

Mr. Terrald Kent Regional Power Manager Power Operations and Maintenance US Bureau of Reclamation 1150 North Curtis Road, Suite 100 Boise, ID 83706

Dear Mr. Kent:

BPA and the U.S. Bureau of Reclamation have developed these procedures to provide BPA Dispatchers with the ability to carry out its Transmission Operator responsibilities as it relates to the Grand Coulee 115 kV Switchyard, Grand Coulee 230 kV Switchyard, Grand Coulee 500 kV Switchyard, Hungry Horse 230 kV Switchyard, Minidoka 138 kV Switchyard, and Palisades 115 kV Switchyard (Switchyards).

The procedures are required (1) due to BPA having assumed the responsibilities for Transmission Operator functions for the above-referenced Switchyards in the Memorandum of Understanding for Performance of Certain Activities Required under Electric Reliability Standards, BPA No. 08TX-13644 (MOU), between the Bureau of Reclamation (Pacific Northwest Region) and BPA and (2) to demonstrate compliance with certain Mandatory Reliability Standards and Requirements (NERC PRC-001-1, R2 and 2.2, and WECC PRC-STD-003-1).

#### Purpose

NERC Reliability Standard PRC-001-1, R2 and 2.2, directs Transmission Operators to notify reliability entities of protective relay or equipment failures that reduce system reliability. In order for BPA to perform its Transmission Operator responsibilities for the Reclamation Switchyards, BPA and Reclamation must develop procedures for Reclamation to notify BPA of protective relay or equipment failures on Reclamation transmission facilities.

#### Procedures

1. Reclamation has alarms at the Grand Coulee 115 kV, 230 kV, and 500 kV Switchyards, Hungry Horse 230 kV Switchyard, Palisades 115 kV Switchyard, and Minidoka 138 kV Switchyard that notify Reclamation operators of protective relay or related system special protection equipment abnormal conditions and, in a some cases, failures.

2. With confirmation of a failure of transmission equipment or its protective functions, the appropriate Reclamation operator shall, as soon as possible, call the appropriate BPA Control Center, either Dittmer Control Center (DCC) or Munro Control Center (MCC), to report the equipment failure. Reclamation will determine and diagnose the cause of the equipment failure.

BPA MCC System Dispatcher may be reached at (509) 465-465-3084 or 877-836-6632 or DATS 900-113.

BPA DCC System Dispatcher may be reached at (360) 418-2281 or DATS 922-111.

3. BPA will determine whether the failure reduces system reliability and, if system reliability is reduced, notify its Reliability Coordinator well as affected Transmission Operators and Balancing Authorities.

4. If there was a protective relay or system special protection equipment misoperation, Reclamation must complete corrective action for Reclamation-owned equipment within the time requirements set out in Requirement WR1 of WECC's Standard PRC-STD-003-1 or its successor.

5. If it is necessary to remove and repair or replace equipment, Reclamation operators would request verbal approval from the appropriate BPA Control Center to switch the equipment out of service. BPA approval would also be required to return the equipment back into service when the repair or replacement is completed.

If at any time there is a need identified by either party to revise these procedures, BPA and U.S. Bureau of Reclamation will work to modify the procedures as soon as is practical.

If you agree with these procedures, please sign where indicated below and return one signed original of this letter to me at the address shown on the letterhead. Retain the second copy for your files.

Sincerely,

Theodore M. Snodgrass Manager, Munro Dispatch

Concur:

Name

Decked ne Power MANAger Title

Date



(801) 883-6887 cluras@wecc.biz

VIA COMPLIANCE WEB PORTAL

November 23, 2010

Mark Thompson FERC Compliance Supervisor Bonneville Power Administration PO Box 3621 Portland, Oregon 97208-3621

NERC Registration ID: NCR05032 NERC Violation ID: WECC200801141

Subject: Notice of Completed Mitigation Plan Acceptance Reliability Standard PRC-001-1 Requirement 2

Dear Mark,

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion and evidence submitted by Bonneville Power Administration (BPA) on August 14, 2009 for the possible violation of Reliability Standard PRC-001-1 Requirement 2. After a thorough review, WECC accepted the Certification of Mitigation Plan Completion.

If you have any questions or concerns, please contact Mary Rieger at mrieger@wecc.biz.

Sincerely,

Chris Luras Manager of Compliance Enforcement

CL:rph

cc: Jenifur Rancourt, BPA Compliance Specialist John McGhee, WECC Director of Audits and Investigations Mary Rieger, WECC Compliance Engineer



# **Attachment D**

# Record documents for the violation of MOD-030-2 R5 (WECC2011008666)

D-1. BPA's Mitigation Plan designated as WECCMIT006547-2 submitted July 21, 2014;

**D-2. BPA's Certification of Mitigation Completion dated November 16, 2012;** 

D-3. WECC's Verification of Mitigation Completion dated August 21, 2015.

# Mitigation Plan

## Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
null	WECC2011008666	MOD-030-2 R5	02/01/2012	3
	Mitigation Plan Subm	itted On: July 21, 2014		
Mitigation Plan Accepted On:				
Mitigation Plan Proposed Completion Date: August 17, 2015				
Actual Completion Date of Mitigation Plan:				
Mitigation Plan Certified Complete by BPA On:				
Mitigation Plan Completion Verified by WECC On:				
Miti	gation Plan Completed? (	Yes/No): No		

### Section A: Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

#### Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: Bonneville Power Administration NERC Compliance Registry ID: NCR05032 Address: 905 NE 11 Avenue Portland OR 97232

B.2 Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Tanner H. Brier Title: Compliance Specialist Email: thbrier@bpa.gov Phone: 503-230-3649

#### Section C: Identification of Reliability Standard Violation(s) Associated with this Mitigation Plan

#### C.1 This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement	
Requirement Description			
WECC2011008666 11/02/2011 MOD-030-2 R5			
When calculating AFCs, the Transmission Service Provider shall: [Violation Risk Factor: To Be Determined] [Time			

Horizon: Operations Planning]

C.2 Brief summary including the cause of the violation(s) and mechanism in which it was identified above:

#### ORIGINAL MITIGATION PLAN

MOD-030-2 R5 became effective on April 1, 2011. R.5 states:

�[R5]When calculating AFCs, the Transmission Service Provider shall: [Violation Risk Factor: To Be Determined] [Time Horizon: Operations Planning]

[R5.2] �Include in the transmission model expected generation and Transmission outages, additions, and retirements within the scope of the model as specified in the ATCID and in effect during the applicable period of the AFC calculation for the Transmission Service Provider�s area, all adjacent Transmission Service Providers, and any Transmission Service Providers with which coordination agreements have been executed.�

On November 2, 2011, the new TFC for West of McNary was issued with a start date/time of November 2, 2011 at 10:45. New TFC for West of McNary were to be entered into the system during the baseline process with a start date/time of November 4, 2011 at 00:00. A new limit for the McNary-Horse Heaven outage (already in progress) was also issued starting November 2, 2011, at 07:00, but given to capacity desk after 08:00 deadline for preschedule day November 3, 2011. After 15:00, new limits were entered into webTrans for the short-term (0 - 13 months), but the previous Operations "all lines in service" outage was not ended. This resulted in the TFC remaining at 2870MW.

At approximately 20:00 on November 2, 2011, this was corrected by one of BPA-TS real-time staff via a phone call. The McNary-Horse Heaven outage with the new studied limits was updated on November 3, 2011 at approximately 07:00, with a start time of November 4, 2011 at 00:00.

Additionally, on November 2, 2011, BPA-TS Reservation Desk performed baseline procedures to release the new TFC and new ETC for the West of

McNary-JohnDay build to the short-term market. However, this procedure did not include releasing the TFC and ETC for this build to the Hourly market since the BPA-TS Reservation Desk was not able to shut down the hourly market. To baseline this market, BPA-TS would have to shut down it down in order to

capture a  $i_{i}j_{2}$ snapshot $i_{i}j_{2}$  of the AFC for the baseline process and recalculate the AFC values and associated calculations to include the new TFC and ETC for the West of McNary-JohnDay build. Since the Hourly market was still active, the AFC values and associated calculations kept changing as sales occurred.

#### 130208 REVISED MITIGATION PLAN

BPA Transmission Services (BPAT) identified compliance gaps in its implementation of MOD-030-02. These gaps were realized as BPAT was looking at the solutions for its current NERC MOD mitigation plans. BPAT has gained more experience with the MOD standards and has increased its understanding of the complexity of the requirements.

BPAT implemented MOD-030-02 on April 1, 2011, based on its understanding and interpretation of the requirements at the time. Since April 1, 2011, BPAT has self-reported on several violations with MOD-030-02. In looking at solutions for its current NERC MOD mitigation plans, BPAT visited PJM Interconnection, Southwest Power Pool, and Tennessee Valley Authority. These benchmarking trips broadened BPAT's understanding of the complexity of the requirements in MOD-030-02, and informed BPAT's knowledge of the processes and automation necessary to sustainably comply with them.

The current compliance gaps identified are in BPATâ€<sup>™</sup>s implementation of MOD-030-02. BPAT believes that it has a gap in implementation of Requirements 3 and 5 because BPAT does not use expected generation or Transmission outages, additions, or retirements to update the Existing Transmission Commitments (ETC) derived from its power flow studies. BPAT has been updating Transmission outages into the transmission model through Power Distribution Factors (PTDFs). These PTDFs are uploaded into BPATâ€<sup>™</sup>s commercial system and used to re-calculate a portion of BPATâ€<sup>™</sup>s ETC.

Because the transmission outages are not incorporated into the ETC determined in the power flow study, BPATâ€<sup>™</sup>s model is not uniformly updated for system topology at least once per day. Although this process is in line with BPATâ€<sup>™</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>™</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirements 3 and 5.

Additionally, BPAT believes it has a compliance gap on Requirement 6 of MOD-030-02 due to a gap in its calculation of ETC for Network Integration Transmission Service. BPATâ€<sup>TM</sup>s ETC calculation does not always include load forecasts for the time period being calculated. BPATâ€<sup>TM</sup>s ETC calculation from the power flow study includes a seasonal load forecast, although BPAT has monthly load forecasts available. BPAT needs automated tools in order to run more frequent power flow studies to reflect the load forecasts for the time period being calculated. BPAT also cannot ensure that it captures all designated network resources that are committed or have the legal obligation to run during the time period being calculated in its power flow ETC studies. Although this process is in line with BPATâ€<sup>TM</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>TM</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirement 6.

In some cases, the above gaps represent work that BPAT is not currently doing and that is not presently assigned to any organization or individual across the organization. These gaps were realized as BPAT was working on solutions for its current NERC MOD mitigation plans and with the benefit of BPAT's expanded experience with MOD-030-02 requirements. BPAT now recognizes that, in order to perform the calculations using consistent models and with the frequency and data granularity required by the MODs, BPAT will need dedicated staff, a process re-design and automated tools. The goal of this mitigation plan is to holistically solve the organizational, process and automation gaps that are at the root cause of BPAT's compliance violations on MOD-030-02. Addressing these items will allow BPAT to close the gaps with Requirements 3, 5 and 6, as well to ensure sustainable compliance with MOD-030-02.

BPAT believes that, while it has not presently identified specific violations with the other requirements in MOD-030-02, filing a blanket mitigation plan on MOD-030-02 is prudent. The MOD-030-02 gaps prevent BPAT from ensuring compliance with the other requirements in MOD-030-02. BPAT will remain at risk of recurring violations on the other requirements until the organizational, process, and automated tool gaps can be addressed. This blanket plan allows BPAT and WECC to reduce their administrative burden of managing individual self-reports each time a new compliance gap is identified, and allows BPAT to focus on holistically rebuilding our approach to MOD-030-02 compliance.

#### Update on 7/3/2014

BPA has concluded that complying with MOD-029 rather than MOD-030 is a more appropriate choice given our transmission network, regional data sharing or availability, and certain aspects of the MOD-030 standard. Additionally, BPA understands that its current process for uploading its Existing Transmission Commitments to its commercial systems is not in violation of MOD-001, R7. As a result, the remaining 18 months of milestones for BPA's 36 month mitigation plan on MOD-030 focus on tasks required to transition BPA's current MOD-030 network flowgates to MOD-029 paths.

For this transition, BPA has identified tasks in two focus areas:

- 1. Addition of new ATC Paths
- 2. Process controls and documentation

#### Addition of new ATC Paths

BPA identifies all of its control area to control area interconnections as ATC Paths and has chosen either MOD-029 or MOD-030 as the methodology for each interconnection. BPA has not established Flowgates for the control area to control area interconnections for which BPA has chosen MOD-030 due to language in MOD-030 R2.1.1.3 and R2.1.2.3 that states "lf any limiting element is kept within its limit for its associated worst Contingency by operating within the limits of another Flowgate, then no new Flowgate needs to be established for such limiting elements or Contingencies.†BPA's current MOD-030 network flowgates and MOD-029 paths protect for the control area to control area interconnections for which BPA is using MOD-030. Therefore, BPA concluded that additional Flowgates for these interconnections were not required under MOD-030.

BPA will be transitioning its MOD-030 network flowgates to MOD-029 paths. Since MOD-029 does not contain language similar to MOD-030 R2.1.1.3 and R2.1.2.3, BPA needs to analyze whether additional ATC Paths are required to account for the control area to control area interconnections for which MOD-030 is currently used. If new ATC Paths are needed, BPA will complete the studies and post the new ATC Paths and calculations in its OASIS.

Process controls and documentation

BPA will assess current process controls and enhance these controls if needed. The documentation in the ATCID will be updated to reflect the transition from MOD-030 to MOD-029.

C.3 Provide any relevant information regarding the identification of the violation(s) associated with this Mitigation Plan:

BPA ID# P150

The McNary-Horse Heaven outage was listed as a potential violation in the self-report. However, upon further investigation, BPA is retracting this as a potential violation. According to the Reliability Limits and Outages Information, Version 3 bulletin planned outages on flowgates are updated if they are provided before 08:00 of the WECC Preschedule Day. Since the McNary-Horse Heaven outage information was received after 08:00 on November 2, 2011, it was not updated in the system until 07:00 on November 3, 2011 for 00:00 on November 4, 2011.

#### Section D: Details of Proposed Mitigation Plan

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

#### ORIGINAL MITIGATION PLAN

Releasing new TFC and new ETC:

1. Research and document possible methods and logic for effectively releasing new TFC and ETC.

2. Design and develop the functionality and processes necessary for including new TFC and ETC.

3. Select the alternative and develop the functionally and processes necessary to effectively release TFC and ETC.

4. If necessary, revise the ATCID to describe any changes resulting from the alternative. Notify the entities identified in Section XI of the ATCID of the changes implemented and provide the ATCID to those entities.

5. If necessary, implement changes to the BPA production systems and processes such that new TFC and ETC are included for all markets.

#### 130208 REVISED MITIGATION PLAN ADDS THE FOLLOWING STEPS

In order to close the gaps identified above, BPAT has determined that changes to its organizational structure and Available Flowgate Capability calculation processes are needed, in addition to automated tools. This mitigation plan outlines the milestones needed to accomplish these changes so that the identified gaps can be closed.

BPAT believes that it will need 36 months to make the appropriate organizational changes, to close calculation and data gaps, and to automate the resulting processes. Since this mitigation plan covers a significant process redesign, BPAT feels that the early milestone results will drive the details of the later milestones and therefore is submitting high level actions for the latter half of this mitigation plan at this time. BPAT will submit final milestones no later than 2/15/2014. This work will result in sustainable compliance with MOD-001-1 and MOD-030-02. 1. Gain Transmission Executive approval to form an Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

2. Staff Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

3. Identify roles and responsibilities of Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through

17). 4. Identify and select data sources for base cases, including information on system topology, load and generation information Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R1, 2, 3, 5, 6, 7 5. Design the process for collecting data necessary to produce monthly power flow studies Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R1, 2, 3, 5, 6, 7 6. Design a process for keeping the assumptions on system topology aligned between the Total Flowgate Capability (TFC), ETC and PTDF calculations in the power flow studies Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R1, 2, 3, 4, 5, 6, 7 7. Design the process for creating more frequent power flow cases Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R2, 5, 6, 7 8. Design a process for aligning the webTrans ETC with more frequent updates of the power flow ETC Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R3, 4, 5, 6, 7, 8, 9, 10, 11 9. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in webTrans Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R3, 4, 5, 6, 7, 8, 9, 10, 11 10. Receive Agency Prioritization Steering Committee funding approval for automation initiatives needed to build more frequent power flow cases, based on the above process re-design Facilitates compliance with all requirements of MOD-030-02, but especially: MOD-001-01, R7 MOD-030-02, R3, 5, 6, 7 11. Deliver final milestones for remaining 18 months of this mitigation plan. Develop preliminary list of ATC Paths that may need to be added under MOD-29 12. Finalize list of ATC Paths, if any, that need to be added under MOD-29 13. If new ATC Paths need to be added, design the process for ETC calculations for the new ATC Paths 14. 15. If new ATC Paths need to be added, design the process for TTC calculations for the new ATC Paths 16. Analyze to determine whether new or further developed processes and internal process controls are required 17. If new ATC Paths need to be added, implement new ATC Paths in OASIS 18. Implement new or further developed processes and internal process controls 19. Update the ATCID, send updated ATCID to entities specified in MOD- 001 R4 and post the updated ATCID on BPA's ATC Methodology webpage

D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: August 17, 2015

D.3 Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
2-15-2012 Milestone	1. Research and document possible methods and logic for effectively releasing new TFC and ETC.	02/15/2012	01/13/2012
5-15-2012 Milestone	2. Design and develop the functionality and processes necessary for including new TFC and ETC.	05/15/2012	05/08/2012
8-15-2012 Milestone	3. Select the alternative and develop the functionally and processes necessary to effective releasing TFC and ETC.	08/15/2012	08/15/2012
11-15-2012 Milestone	<ol> <li>If necessary, revise the ATCID to describe any changes resulting from the alternative. Notify the entities identified in Section XI of the ATCID of the changes implemented and provide the ATCID to those entities.</li> </ol>	11/15/2012	11/15/2012
	5. If necessary, implement changes to the BPA production systems and processes such that new TFC and ETC are included for all markets.		
	NEW STEP #1 from November 2012 MPG for all MOD-030 1. Gain Transmission Executive approval to form an Energy Delivery Modeling group		
130215 Milestone	<ol> <li>Staff Energy Delivery Modeling group</li> <li>Identify roles and responsibilities of Energy Delivery Modeling group</li> </ol>	02/15/2013	02/15/2013
130515 Milestone	<ul> <li>4. Identify and select data sources for seed cases, including information on system topology, load and generation information</li> <li>5. Design the process for collecting data necessary to produce monthly power flow cases</li> </ul>	05/15/2013	05/15/2013
130815 Milestone	<ul> <li>6. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in the power flow studies</li> <li>7. Design the process for creating more</li> </ul>	08/15/2013	08/15/2013

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater	Actual Completion Date
	frequent power flow cases	than 3 months apart)	
131115 Milestone	<ul> <li>8. Design a process for aligning the webTrans ETC with more frequent updates of the power flow ETC</li> <li>9. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in webTrans</li> </ul>	11/15/2013	11/15/2013
140215 Milestone	10. Receive Agency Prioritization Steering Committee funding approval for automation initiatives needed to build more frequent power flow cases, based on the above process re-design	02/15/2014	02/15/2014
140328 Milestone	11. Deliver milestones for remaining 18 months of this mitigation plan	03/28/2014	03/28/2014
140515 Milestone	12. Develop preliminary list of ATC Paths that may need to be added under MOD-29	05/15/2014	05/15/2014
130815 Milestone	13. Finalize list of ATC Paths, if any, that need to be added under MOD-29	08/15/2014	
141115 Milestone	14. If new ATC Paths need to be added, design the process for ETC calculations for the new ATC Paths	11/15/2014	
150215 Milestone	15. If new ATC Paths need to be added, design the process for TTC calculations for the new ATC Paths	02/15/2015	
150515 Milestone	16. Analyze to determine whether new or further developed processes and internal process controls are required	05/15/2015	
150815 Milestone	<ul> <li>17. If new ATC Paths need to be added, implement new ATC Paths in OASIS</li> <li>18. Implement new or further developed processes and internal process controls</li> <li>19. Update the ATCID, send updated ATCID to entities specified in MOD- 001 R4 and post the updated ATCID on BPAâ€<sup>™</sup>s ATC Methodology webpage</li> </ul>	08/15/2015	

#### Section E: Interim and Future Reliability Risk

#### E.1 Abatement of Interim BPS Reliability Risk

While your organization is implementing the Mitigation Plan proposed in Section D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

The impact to the BPS is minimal.

Not releasing the new TFC for the West of McNary-JohnDay build to all markets could have potentially limited sales of available capacity. To avoid impacts to the market until the Mitigation Plan is completed, the baseline process will not be performed within a timeframe that would potentially negatively impact sales.

MOD-030-02 is based on load and generation forecasts, so to a large extent, the projected values across the network flowgates are likely never 100% accurate compared to minute-by-minute flow. BPAT does not believe that the above violations have introduced significantly more variability than already exists in the load and generation forecasts necessary for MOD-030-02 in general.

BPAT does not believe that the above violations have introduced significantly more variability than already exists in the load and generation forecasts that are used to perform calculations for BPA's internal paths.

#### E.2 Prevention of Future BPS Reliability Risk

Describe how successful completion of the Mitigation Plan as laid out in Section D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

Upon completion of this Mitigation Plan, BPA will have implemented alternative(s) to release new TFC and new ETC to the market.

Upon project completion, BPAT will have a consolidated source for load, generation and system topology information for hourly, daily and monthly calculations and the ability to create multiple study cases for use in calculating transfer capabilities. BPAT will develop data, systems and processes, and implement tools, to perform transfer capability calculations at the granularity and frequency required. BPAT will also have the capability to replicate and validate these calculations. Development of these systems, processes, and tools supports increased coordination and data transparency among adjacent and external systems and transmission service providers.

#### 7-3-2014 update

Upon project completion, BPAT will transition its MOD-030 network flowgates to MOD-029 paths. BPA believes that this transition will provide for sustainable compliance with the NERC ATC MODs.

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Section D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Section C.1, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

#### Section F: Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

(a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and

(b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and

(c) Acknowledges:

- 1. I am VP, Planning & Asset Management, Transmission Services of Bonneville Power Administration
- 2. I am qualified to sign this Mitigation Plan on behalf of Bonneville Power Administration
- 3. I have read and understand Bonneville Power Administration's obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
- 4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
- 5. Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authorities in Canada.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Hardev S. Juj

Title: VP, Planning & Asset Management, Transmission Services

Authorized On: July 15, 2014

# Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: Bonneville Power Administration NERC Registry ID: NCR05032 NERC Violation ID(s): WECC2011008666 Mitigated Standard Requirement(s): MOD-030-2 R5. Scheduled Completion as per Accepted Mitigation Plan: August 17, 2015 Date Mitigation Plan completed: August 10, 2015 WECC Notified of Completion on Date: August 10, 2015

Entity Comment: Please see attached completion packet for supporting evidence

	Additional Comments			
From	Comment	User Name		
Entity	Refer to the attached PDF for authorized signature	Rachael Ferrin		
Entity	WECC consolidated this plan with part of the 3-year big MOD-030 plan for R5. In revising this, BPA has left the original plan, and added the language from the additional plan.	Rachael Ferrin		
Entity	Lindsay Wickizer at BPA and Brent Read at WECC were working on this in the spring of 2014. At that time, BPA decided to switch from MOD-030 to MOD-029. Instead of updating all cases at once, and WECC having to reject them if they were unsatisfactory, Lindsay and Brent decided to update MOD-030 R3 only, and the remainder if WECC accepted the plan. While WECC was reviewing the plan, WECC rejected BPA's self-report on MOD-001 R7. BPA then needed to revise the mitigation plan to remove steps that addressed the MOD-001 R7 mitigation plan. As such, the revised steps were submitted to WECC prior to March 28, 2014, and then revised and re-submitted (in the same test-case manner on MOD-030 R3) in May. WECC accepted the plan in June 2014. BPA completed the milestones as required by its plan, but was unable to upload them in CDMS, because the plans had not been updated yet.	Tanner Brier		

	Additional Documents			
From	Document Name	Description	Size in Bytes	
Entity	111229 MOD 030 R5_2 signed mitigation plan P150.pdf	PDF of mitigation plan with authorized signature	769,433	
Entity	121115 MOD-030 R5 Signed	This is an Adobe Portfolio, click on the paperclip in	680,309	

	Additional Documents			
From	Document Name	Description	Size in Bytes	
Entity	Mitigation Plan Completion Packet.pdf	the lower left-hand corner to access the documents attached.	680,309	
Entity	130208 MOD-030 R5 P174r Revised Signed Mitigation Plan.pdf	Revised mitigation plan	462,362	
Entity	140716 MOD-030 R5 signed revised revised mitigation plan p174.pdf	Second Revised Mitigation Plan	706,281	
Entity	150810 BPA P174 MOD-030- 02 R1-R10 Mitigation Plan Completion Package.pdf	BPA's Mitigation Completion Packet. All supporting evidence is attached to this PDF. This packet also contains the approval signature of BPA's Acting Reliability Officer: Jeff Cook.	14,750,719	

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Jeff Cook

Title: Acting - Vice President, Planning & Asset Management

Email: jwcook@bpa.gov

Phone: 1 (360) 418-8981

Authorized Signature

Date \_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2011008666 Standard/Requirement: MOD-030-2 R5. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/09/2015 for the violation of MOD-030-2 R5.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

#### Thank you, OATI

CONFIDENTIAL INFORMATION: This email and any attachment(s) contain confidential and/or proprietary information of Open Access Technology International, Inc. Do not copy or distribute without the prior written consent of OATI. If you are not a named recipient to the message, please notify the sender immediately and do not retain the message in any form, printed or electronic.

[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment E**

# Record documents for the violation of MOD-029-1a R1 (WECC2011008668)

E-1. BPA's Certification of Mitigation Completion dated August 16, 2012;

**E-2. WECC's Verification of Mitigation Completion dated October 26, 2012** 

# Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: Bonneville Power Administration

NERC Registry ID: NCR05032

NERC Violation ID(s): WECC2011008668

Mitigated Standard Requirement(s): MOD-029-1a R1,

Scheduled Completion as per Accepted Mitigation Plan: August 15, 2012

Date Mitigation Plan completed: August 15, 2012

WECC Notified of Completion on Date: August 16, 2012

Entity Comment:

Additional Comments			
From	Comment	User Name	
Entity	Refer to attached PDF for authorized signature	Tanner Brier	
Entity	All completion documents submitted as an Adobe Portfolio. Please call if you have any questions.	Tanner Brier	
Entity	The time stamp right now says 8-15-12 at 22:58, but the completion I just submitted on MOD-030 R3 said it was submitted on 8-16.	Tanner Brier	
	Please note, these were both submitted on their due date, 8-15-12.		

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	111229 MOD 029 r1_1_1_1 signed mitigation plan P152.pdf	PDF of mitigation plan with authorized signature	703,072
Entity	120815 MOD-029 R1 Signed Completion.pdf	signed completion packet	2,553,391

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Kevin Carman

Title: Acting VP, Planning and Asset Management, Transmission Services

Email: kecarman@bpa.gov

Phone: 1 (360) 428-8980

Authorized Signature	Date	

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)



Chris Luras Director of Enforcement

> (801) 883-6887 cluras@wecc.biz

## VIA WECC ENHANCED FILE TRANSFER SERVER

October 26, 2012

Jenifur Rancourt Compliance Specialist Bonneville Power Administration Portland, OR 97232

NERC Registration ID: NCR05032 NERC Violation ID: WECC2011008668

Subject: Notice of Completed Mitigation Plan Acceptance Reliability Standard MOD-029-1a Requirement 1

Jenifur,

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration (BPA) on August 16, 2012 for the violation of Reliability Standard MOD-029-1a Requirement 1. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

If you have any questions or concerns, please contact SME at <u>SME@wecc.biz</u>.

Sincerely,

Chris Luras Director of Enforcement

CL:dlc

cc: Mark Thompson, BPA FERC Compliance Supervisor Keshav Sarin, WECC Manager, O&P and CIP



# **Attachment F**

# Record documents for the violation of MOD-030-2 R2 (WECC2011009029)

**F-1. BPA's Certification of Mitigation Completion dated February 15, 2013;** 

F-2. WECC's Verification of Mitigation Completion dated March 22, 2013.

# Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name:	Bonneville Power Administration
NERC Registry ID:	NCR05032
NERC Violation ID(s):	WECC2011009029
Mitigated Standard Requirement(s):	MOD-030-2 R2,
Scheduled Completion as per Accepted Mitigation Plan:	February 15, 2013
Date Mitigation Plan completed:	February 15, 2013
WECC Notified of Completion on Date:	February 15, 2013
Entity Comment:	Signed completion packet is being submitted with this completion. The packet is an Adobe Portfolio, to access the evidence, click the paperclip in the lower left-hand corner. If it doesn't work, please let BPA know.

	Additional Comments	
From	Comment	User Name
Entity	A signed copy of the mitigation plan is attached.	Tanner Brier

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	120215 MOD-030 R2 (P155) SIGNED Mitigation Plan.pdf	Signed mitigation plan (P155)	910,619
Entity	130215 MOD-030 R2 Signed Mitigation Completion Packet.pdf		15,790,469
Entity	E. 8_15_2012_Milestone_Flowga te Prelim studies.zip	This is the document in the completion package referred to by letter 'E." Zip files won't work in an Adobe Portfolio, so it is submitted here separately. I don't know if CDMS will take zip files, so if not, please let me know and I can submit it via the EFT portal also.	4,982,147

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: John L. Hairston

Title: Chief Compliance Officer

Email: jlhairston@bpa.gov

Authorized Signature

Date \_\_\_\_\_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)



Chris Luras Director of Enforcement

> (801) 883-6887 cluras@wecc.biz

## VIA WECC ENHANCED FILE TRANSFER SERVER

March 22, 2013

Jenifur Rancourt Compliance Specialist Bonneville Power Administration 905 NE 11 Avenue Portland, OR 97232

NERC Registration ID: NCR05032 NERC Violation ID: WECC2011009029

Subject: Notice of Completed Mitigation Plan Acceptance Reliability Standard MOD-030-2 Requirement 2

Jenifur,

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration (BPA) on February 15, 2013 for the violation of Reliability Standard MOD-030-2 Requirement 2. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

If you have any questions or concerns, please contact Keshav Sarin at ksarin@wecc.biz.

Sincerely,

Chris Luras Director of Enforcement

CL:dlc

cc: Mark Thompson, BPA FERC Compliance Supervisor Keshav Sarin, WECC Manager, O&P and CIP



# **Attachment G**

# Record documents for the violation of MOD-030-2 R9 (WECC201102748)

G-1. BPA's Mitigation Plan designated as WECCMIT008362-1 submitted July 21, 2014;

**G-2. BPA's Certification of Mitigation Completion dated August 25, 2015;** 

G-3. WECC's Verification of Mitigation Completion dated August 21, 2015.
## Mitigation Plan

### Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
null	WECC201102748	MOD-030-2 R9	01/31/2012	2
	Mitigation Plan Subm	itted On: July 21, 2014		
Mitigation Plan Accepted On:				
Mitigation Plan Proposed Completion Date: August 17, 2015				
Actual Completion Date of Mitigation Plan:				
Mitigation Plan Certified Complete by BPA On:				
Mitigation Plan Completion Verified by WECC On:				
Miti	gation Plan Completed? (	Yes/No): No		

### Section A: Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

### Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: Bonneville Power Administration

NERC Compliance Registry ID: NCR05032

Address: 905 NE 11 Avenue Portland OR 97232

B.2 Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Tanner Brier Title: Compliance Specialist Email: thbrier@bpa.gov Phone: 503-230-3649

### Section C: Identification of Reliability Standard Violation(s) Associated with this Mitigation Plan

C.1 This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement		
	Requirement Description			
WECC201102748	04/26/2011	MOD-030-2 R9		
When calculating non-firm AFC for a Flowgate for a specified period, the Transmission Service Provider shall use the following algorithm (subject to allocation processes described in the ATCID): [Violation Risk Factor: To Be Determined] [Time Horizon: Operations Planning]				
- Please refer to NERC Standard for algorit	- Please refer to NERC Standard for algorithm			

C.2 Brief summary including the cause of the violation(s) and mechanism in which it was identified above:

BPA Transmission Services (BPAT) recently identified compliance gaps in its implementation of MOD-030-02. These gaps were realized as BPAT was looking at the solutions for its current NERC MOD mitigation plans. BPAT has gained more experience with the MOD standards and has increased its understanding of the complexity of the requirements.

BPAT implemented MOD-030-02 on April 1, 2011, based on its understanding and interpretation of the requirements at the time. Since April 1, 2011, BPAT has self-reported on several violations with MOD-030-02. In looking at solutions for its current NERC MOD mitigation plans, BPAT visited PJM Interconnection, Southwest Power Pool, and Tennessee Valley Authority. These benchmarking trips broadened BPAT's understanding of the complexity of the requirements in MOD-030-02, and informed BPAT's knowledge of the processes and automation necessary to sustainably comply with them.

The current compliance gaps identified are in BPATâ€<sup>™</sup>s implementation of Requirements 3, 5 and 6 of MOD-030-02. BPAT believes that it has a gap in implementation of Requirements 3 and 5 because BPAT does not use expected generation or Transmission outages, additions, or retirements to update the Existing Transmission Commitments (ETC) derived from its power flow studies. BPAT has been updating Transmission outages into the transmission model through Power Distribution Factors (PTDFs). These PTDFs are uploaded into BPATâ€<sup>™</sup>s commercial system and used to re-calculate a portion of BPATâ€<sup>™</sup>s ETC.

Because the transmission outages are not incorporated into the ETC determined in the power flow study, BPATâ€<sup>™</sup>s model is not uniformly updated for system topology at least once per day. Although this process is in line with BPATâ€<sup>™</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>™</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirements 3 and 5.

Additionally, BPAT believes it has a compliance gap on Requirement 6 of MOD-030-02 due to a gap in its calculation of ETC for Network Integration Transmission Service. BPATâ€<sup>TM</sup>s ETC calculation does not always include load forecasts for the time period being calculated. BPATâ€<sup>TM</sup>s ETC calculation from the power flow study includes a seasonal load forecast, although BPAT has monthly load forecasts available. BPAT needs automated tools in order to run more frequent power flow studies to reflect the load forecasts for the time period being calculated. BPAT also cannot ensure that it captures all designated network resources that are committed or have the legal obligation to run during the time period being calculated in its power flow ETC studies. Although this process is in line with BPATâ€<sup>TM</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>TM</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirement 6.

In some cases, the above gaps represent work that BPAT is not currently doing and that is not presently assigned to any organization or individual across the organization. These gaps were realized as BPAT was working on solutions for its current NERC MOD mitigation plans and with the benefit of BPAT's expanded experience with MOD-030-02 requirements. BPAT now recognizes that, in order to perform the calculations using consistent models and with the frequency and data granularity required by the MODs,

BPAT will need dedicated staff, a process re-design and automated tools. The goal of this mitigation plan is to holistically solve the organizational, process and automation gaps that are at the root cause of BPAT's compliance violations on MOD-030-02. Addressing these items will allow BPAT to close the gaps with Requirements 3, 5 and 6, as well to ensure sustainable compliance with MOD-030-02.

BPAT believes that, while it has not presently identified specific violations with the other requirements in MOD-030-02, filing a blanket mitigation plan on MOD-030-02 is prudent. The MOD-030-02 gaps prevent BPAT from ensuring compliance with the other requirements in MOD-030-02. BPAT will remain at risk of recurring violations on the other requirements until the organizational, process, and automated tool gaps can be addressed. This blanket plan allows BPAT and WECC to reduce their administrative burden of managing individual self-reports each time a new compliance gap is identified, and allows BPAT to focus on holistically rebuilding our approach to MOD-030-02 compliance.

### Update on 5/12/2014

BPA has concluded that complying with MOD-029 rather than MOD-030 is a more appropriate choice given our transmission network, regional data sharing or availability, and certain aspects of the MOD-030 standard. Additionally, BPA understands that its current process for uploading its Existing Transmission Commitments to its commercial systems is not in violation of MOD-001, R7. As a result, the remaining 18 months of milestones for BPA's 36 month mitigation plan on MOD-030 focus on tasks required to transition BPA's current MOD-030 network flowgates to MOD-029 paths.

For this transition, BPA has identified tasks in two focus areas:

- 1. Addition of new ATC Paths
- 2. Process controls and documentation

### Addition of new ATC Paths

BPA identifies all of its control area to control area interconnections as ATC Paths and has chosen either MOD-029 or MOD-030 as the methodology for each interconnection. BPA has not established Flowgates for the control area to control area interconnections for which BPA has chosen MOD-030 due to language in MOD-030 R2.1.1.3 and R2.1.2.3 that states "lf any limiting element is kept within its limit for its associated worst Contingency by operating within the limits of another Flowgate, then no new Flowgate needs to be established for such limiting elements or Contingencies.†BPAâ€<sup>TM</sup>s current MOD-030 network flowgates and MOD-029 paths protect for the control area to control area interconnections for which BPA is using MOD-030. Therefore, BPA concluded that additional Flowgates for these interconnections were not required under MOD-030.

BPA will be transitioning its MOD-030 network flowgates to MOD-029 paths. Since MOD-029 does not contain language similar to MOD-030 R2.1.1.3 and R2.1.2.3, BPA needs to analyze whether additional ATC Paths are required to account for the control area to control area interconnections for which MOD-030 is currently used. If new ATC Paths are needed, BPA will complete the studies and post the new ATC Paths and calculations in its OASIS.

### Process controls and documentation

BPA will assess current process controls and enhance these controls if needed. The documentation in the ATCID will be updated to reflect the transition from MOD-030 to MOD-029.

C.3 Provide any relevant information regarding the identification of the violation(s) associated with this Mitigation Plan: BPA ID P174

### Section D: Details of Proposed Mitigation Plan

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

In order to close the gaps identified above, BPAT has determined that changes to its organizational structure and Available Flowgate Capability calculation processes are needed, in addition to automated tools. This mitigation plan outlines the milestones needed to accomplish these changes so that the identified gaps can be closed.

BPAT believes that it will need 36 months to make the appropriate organizational changes, to close calculation and data gaps, and to automate the resulting processes. Since this mitigation plan covers a significant process redesign, BPAT feels that the early milestone results will drive the details of the later milestones and therefore is submitting high level actions for the latter half of this mitigation plan at this time. BPAT will submit final milestones no later than 2/15/2014. This work will result in sustainable compliance with MOD-001-1 and MOD-030-02.

1. Gain Transmission Executive approval to form an Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

2. Staff Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

3. Identify roles and responsibilities of Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

4. Identify and select data sources for base cases, including information on system topology, load and generation information

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 5, 6, 7

5. Design the process for collecting data necessary to produce monthly power flow studies

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 5, 6, 7

6. Design a process for keeping the assumptions on system topology aligned between the Total Flowgate Capability (TFC), ETC and PTDF calculations in the power flow studies

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 4, 5, 6, 7

7. Design the process for creating more frequent power flow cases Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R2, 5, 6, 7 8. Design a process for aligning the webTrans ETC with more frequent updates of the power flow ETC Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R3, 4, 5, 6, 7, 8, 9, 10, 11 9. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in webTrans Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R3, 4, 5, 6, 7, 8, 9, 10, 11 10. Receive Agency Prioritization Steering Committee funding approval for automation initiatives needed to build more frequent power flow cases, based on the above process re-design Facilitates compliance with all requirements of MOD-030-02, but especially: MOD-001-01, R7 MOD-030-02, R3, 5, 6, 7 11. Deliver final milestones for remaining 18 months of this mitigation plan. 12. Develop preliminary list of ATC Paths that may need to be added under MOD-29 13. Finalize list of ATC Paths, if any, that need to be added under MOD-29 14. If new ATC Paths need to be added, design the process for ETC calculations for the new ATC Paths 15. If new ATC Paths need to be added, design the process for TTC calculations for the new ATC Paths 16. Analyze to determine whether new or further developed processes and internal process controls are required 17. If new ATC Paths need to be added, implement new ATC Paths in OASIS 18. Implement new or further developed processes and internal process controls 19. Update the ATCID, send updated ATCID to entities specified in MOD-001 R4 and post the updated ATCID on BPA's ATC Methodology webpage

D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: August 17, 2015

D.3 Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
121115 Milestone	1. Gain Transmission Executive approval to form an Energy Delivery Modeling group	11/15/2012	11/15/2012
130215 Milestone	<ol> <li>Staff Energy Delivery Modeling group</li> <li>Identify roles and responsibilities of Energy Delivery Modeling group</li> </ol>	02/15/2013	02/15/2013
130515 Milestone	4. Identify and select data sources for seed cases, including information on system topology, load and generation information	05/15/2013	05/15/2013

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater	Actual Completion Date
	5. Design the process for collecting data necessary to produce monthly power flow cases	than 3 months apart)	
130815 Milestone	6. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in the power flow studies	08/15/2013	08/15/2013
	7. Design the process for creating more frequent power flow cases		
131115 Milestone	8. Design a process for aligning the webTrans ETC with more frequent updates of the power flow ETC	11/15/2013	11/15/2013
	9. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in webTrans		
140215 Milestone	10. Receive Agency Prioritization Steering Committee funding approval for automation initiatives needed to build more frequent power flow cases, based on the above process re-design	02/15/2014	02/15/2014
140328 Milestone	11. Deliver final milestones for remaining 18 months of this mitigation plan.	03/28/2014	03/28/2014
140515 Milestone	12. Develop preliminary list of ATC Paths that may need to be added under MOD-29	05/15/2014	05/15/2014
140815 Milestone	13. Finalize list of ATC Paths, if any, that need to be added under MOD-29	08/15/2014	
141115 Milestone	14. If new ATC Paths need to be added, design the process for ETC calculations for the new ATC Paths	11/15/2014	
150215 Milestone	15. If new ATC Paths need to be added, design the process for TTC calculations for the new ATC Paths	02/15/2015	
150515 Milestone	16. Analyze to determine whether new or further developed processes and	05/15/2015	

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
	internal process controls are required		
150815 Milestone	17. If new ATC Paths need to be added, implement new ATC Paths in OASIS	08/15/2015	
	18. Implement new or further developed processes and internal process controls		
	19. Update the ATCID, send updated ATCID to entities specified in MOD-001 R4 and post the updated ATCID on BPA's ATC Methodology webpage		

D.4 Additional Relevant Information (Optional)

### Section E: Interim and Future Reliability Risk

### E.1 Abatement of Interim BPS Reliability Risk

While your organization is implementing the Mitigation Plan proposed in Section D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

The impact to the BPS is minimal.

MOD-030-02 is based on load and generation forecasts, so to a large extent, the projected values across the network flowgates are likely never 100% accurate compared to minute-by-minute flow. BPAT does not believe that the above violations have introduced significantly more variability than already exists in the load and generation forecasts necessary for MOD-030-02 in general.

### E.2 Prevention of Future BPS Reliability Risk

Describe how successful completion of the Mitigation Plan as laid out in Section D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

Upon project completion, BPAT will transition its MOD-030 network flowgates to MOD-029 paths. BPA believes that this transition will provide for sustainable compliance with the NERC ATC MODs.

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Section D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Section C.1, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

### Section F: Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

(a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and

(b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and

(c) Acknowledges:

- 1. I am Vice President, Planning & Asset Management, Transmission of Bonneville Power Administration
- 2. I am qualified to sign this Mitigation Plan on behalf of Bonneville Power Administration
- 3. I have read and understand Bonneville Power Administration's obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
- 4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
- 5. Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authorities in Canada.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Hardev Juj

Title: Vice President, Planning & Asset Management, Transmission

Authorized On: May 13, 2014

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: Bonneville Power Administration NERC Registry ID: NCR05032 NERC Violation ID(s): WECC201102748 Mitigated Standard Requirement(s): MOD-030-2 R9. Scheduled Completion as per Accepted Mitigation Plan: August 17, 2015 Date Mitigation Plan completed: August 10, 2015 WECC Notified of Completion on Date: August 10, 2015

Entity Comment: Please see attached completion packet for supporting evidence

	Additional Comments			
From	Comment	User Name		
Entity	This is part of BPA's holistic MOD-030-02 mitigation plan. BPA ID P174.	Rachael Ferrin		
Entity	Lindsay Wickizer at BPA and Brent Read at WECC were working on this in the spring of 2014. At that time, BPA decided to switch from MOD-030 to MOD-029. Instead of updating all cases at once, and WECC having to reject them if they were unsatisfactory, Lindsay and Brent decided to update MOD-030 R3 only, and the remainder if WECC accepted the plan. While WECC was reviewing the plan, WECC rejected BPA's self-report on MOD-001 R7. BPA then needed to revise the mitigation plan to remove steps that addressed the MOD-001 R7 mitigation plan. As such, the revised steps were submitted to WECC prior to March 28, 2014, and then revised and re-submitted (in the same test-case manner on MOD-030 R3) in May. WECC accepted the plan in June 2014. BPA completed the milestones as required by its plan, but was unable to upload them in CDMS, because the plans had not been updated yet. This plan was originally uploaded to MOD-030 R3, as the sample requirement for WECC's review on 5-13-14.	Tanner Brier		

	Additional Documents			
From	Document Name	Description	Size in Bytes	
Entity	121108 MOD-030-02 ALL Signed Mitigation Plan P174.pdf	Signed mitigation plan document	779,103	
Entity	140513 MOD-030 r1, r2, r3, r4, r6, r7, r8, r9, r10 revised	revised mitigation plan	215,508	

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	revised mitigation plan signed.pdf	revised mitigation plan	215,508
Entity	150810 BPA P174 MOD-030- 02 R1-R10 Mitigation Plan Completion Package.pdf	BPA's Mitigation Completion Packet. All supporting evidence is attached to this PDF. This packet also contains the approval signature of BPA's Acting Reliability Officer: Jeff Cook.	14,750,719

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Jeff Cook

Title: Acting - Vice President, Planning & Asset Management

Email: jwcook@bpa.gov

Phone: 1 (360) 418-8981

Authorized Signature

Date \_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC201102748 Standard/Requirement: MOD-030-2 R9. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/09/2015 for the violation of MOD-030-2 R9.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

### Thank you, OATI

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[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment H**

# Record documents for the violation of MOD-001-1 R7 (WECC201102749)

H-1. BPA's Certification of Mitigation Completion dated November 16, 2012;

H-2. WECC's Verification of Mitigation Completion dated January 4, 2013.

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name:	Bonneville Power Administration
NERC Registry ID:	NCR05032
NERC Violation ID(s):	WECC201102749
Mitigated Standard Requirement(s):	MOD-001-1a R7,
Scheduled Completion as per Accepted Mitigation Plan:	November 15, 2012
Date Mitigation Plan completed:	November 15, 2012
WECC Notified of Completion on Date:	November 16, 2012
Entity Comment:	Per comment below, completion packet, with signed form was submitted, in addition to a comment, on 11-15-12, as the form would not allow BPA to submit a completion. The form was unlocked today, so the official completion is being submitted, but credit for endeavoring to submit it (and submiting a "completion" in the comment, and via signed hard-copy) is

requested as of 11-15-12.

	Additional Comments	
From	Comment	User Name
Entity	I spoke to WECC enforcement yesterday, inquiring how to handle this mitigation plan. The original self-report was submitted in April 2011. The mitigation plan, and completion, were submitted in May 2011. An expansion letter was submitted in February 2012, and a revised mitigation plan was submitted (via the EFT server) in March 2012, which indicated the completion was to be in May 2012. Subsequently, the SME discovered that more time was needed and enforcement indicated yesterday that the re-revised plan should be submitted, and no extension request was necessary.	Tanner Brier
Entity	I just uploaded a signed completion. BPA had submitted a completion on this earlier, then submitted an expansion of scope and re-opened the mitigation plan. WebCDMS will not allow me to access the completion, but please consider this comment a completion. The completion was signed by Hardev Juj on 11-15-12. He is the Vice President, Planning & Asset Management at BPA. His phone number is 360-418-8981, and his email is hsjuj@bpa.gov.	Tanner Brier

Additional Documents			
From	Document Name	Description	Size in Bytes

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	120427 MOD-001 R7 P134r Second Revised Mitigation Plan Signed.pdf		828,071
Entity	121115 MOD-001 R7 Signed Mitigation Plan Completion Packet.pdf	The document attached is an Adobe portfolio. To access the attachments, click the paperclip in the lower left-hand corner.	5,139,958

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Hardev Juj

Title: Vice President, Planning & Asset Management

Email: hsjuj@bpa.gov

Phone: 1 (360) 418-8981

Authorized	Signature
------------	-----------

Date \_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)



Chris Luras Director of Enforcement

> (801) 883-6887 cluras@wecc.biz

### VIA WECC ENHANCED FILE TRANSFER SERVER

January 4, 2013

Jenifur Rancourt Compliance Specialist Bonneville Power Administration 905 NE 11 Avenue Portland, OR 97232

NERC Registration ID: NCR05032 NERC Violation ID: WECC201102749

Subject: Notice of Completed Mitigation Plan Acceptance Reliability Standard MOD-001-1a Requirement 7

Jenifur,

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration (BPA) on November 16, 2012 for the violation of Reliability Standard MOD-001-1a Requirement 7. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

If you have any questions or concerns, please contact Keshav Sarin at ksarin@wecc.biz.

Sincerely,

Chris Luras Director of Enforcement

CL:dlc

cc: Mark Thompson, BPA FERC Compliance Supervisor Keshav Sarin, WECC Manager, O&P and CIP



# **Attachment I**

# Record documents for the violation of MOD-001-1a R3 (WECC201102932)

I-1. BPA's Certification of Mitigation Completion dated November 16, 2012;

**I-2. WECC's Verification of Mitigation Completion dated December 21, 2012** 

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: Bonneville Power Administration NERC Registry ID: NCR05032 NERC Violation ID(s): WECC201102932 Mitigated Standard Requirement(s): MOD-001-1a R3, Scheduled Completion as per Accepted Mitigation Plan: November 15, 2012 Date Mitigation Plan completed: November 15, 2012 WECC Notified of Completion on Date: November 15, 2012

Entity Comment:

	Additional Comments		
From	Comment	User Name	
Entity	There are four (4) attachments which include (1) a signed copy of the mitigation plan; (2) a signed copy of the mitigation plan completion form; (3) the newest version of the ATCID with the corrections; and (4) an email announcing a new version of the ATCID which was sent to other entities	Tanner Brier	
Entity	BPA submitted a reponse to the NOAV from WECC today, January 3, 2012. In that NOAV, regarding this requirement, WECC combined two (2) self-reports. In order to combine those elements, BPA is submitting this REVISED mitigation plan. Please note, here and in the NOAV, the completion date of this REVISED mitigation plan is May 15, 2012.Tanner BrierA signed copy of the Mitigation Plan is attached hereto.A		
Entity	There is a Milestone with a "*" above, which shows a completion date of January 3, 2012. In the prior mitigation plan, there was a milestone for 8- 17-11, but that one cannot be here, since milestones can be no more than 92 days apart, and there is too much time between 8-17-11 and 2-15-12. So, per conversation with Rachel Hays, I was to delete the milestone, but that does not appear to be an option (or at least I could not figure out how to do it). So there is a "blank" milestone, today, the day of submission, January 3, 2012. There is no work in the signed and attached Mitigation Plan to be accomplished today. The Milestone is in the form, solely because I could not delete the prior one.	Tanner Brier	
Entity	I spoke to WECC enforcement yesterday, inquiring how to handle this mitigation plan. The original self-report was submitted in April 2011. The mitigation plan, and completion, were submitted in May 2011. This was part of a NOAV that WECC sent BPA in December 2011 (combined with a	Tanner Brier	

	Additional Comments	
From	Comment	User Name
Entity	self-report WECC had dismissed), so BPA submitted a revised Mitigation Plan in January, to consolidate those issues, and include additional issues that had been discovered (based on a conversation with enforcement). Subsequently a revised mitigation plan was submitted (via the EFT server) in March 2012, which indicated the completion was to be in May 2012. Subsequently, the SME discovered that more time was needed and enforcement indicated yesterday that the re-revised plan should be submitted, and no extension request was necessary. The proposed completion for this plan is November 2012.	Tanner Brier
Entity	Uploaded new version of this mitigation plan today to address the expansion of scope submitted in June 2012. Note, the changes to the mitigation plan were to add steps to the 8-15-12 and 11-15-12 milestones. Signed version is doc #141953.	Tanner Brier

		Additional Documents	
From	Document Name	Description	Size in Bytes
Entity	110824 MOD 029 R3_1 P143 signed mitigation plan.pdf	Mitigation Plan signed by the authorized individual	2,959,712
Entity	110824 MOD 029 R3_1 P143 signed mitigation plan completion.pdf	Mitigation Plan Completion signed by the authorized individual	2,104,857
Entity	110818_ATCID_V3.pdf	Corrected ATCID (item #1 on the completion form)	1,190,698
Entity	110817 Revision to BPA's ATCID.msg	Email message announcing new ATCID version publication (item #2 on the completion form)	148,992
Entity	120103 REVISED MOD-001 R3_1 P143 mitigation plan signed.pdf	January 3, 2012 REVISED mitigation plan, MOD-001 R3.1, BPA ID #P143.	152,296
Entity	120314 MOD-001 R7 revised mitigation plan SIGNED.pdf	This document was uploaded in error. Please disregard	838,617
Entity	120427 MOD-001 R3 P143r Second Revised Signed Mitigation Plan.pdf		844,742
Entity	120427 MOD-001 R3 P143r Second Revised Signed Mitigation Plan.pdf		844,742
Entity	120807 MOD-001 R3 Signed Third Revised Mitigation Plan.pdf	Signed version of the mitigation plan uploaded 8-7-12	129,587
Entity	121115 MOD-001 R3 Signed Mitigation Plan Closure Packet.pdf	This is an Adobe Portfolio, click on the paperclip in the lower left-hand corner to access the documents attached. Note, the explanation attached is also a portfolio and that has most of the documents attached to it.	9,008,006

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Hardev Juj

Title: Vice President, Planning & Asset Management

Email: hsjuj@bpa.gov

Phone: 1 (360) 418-8981

Authorized Signature	Date
(Electronic signature was received by the Regional Office v	via CDMS. For Electronic Signature Policy see CMEP.)



Chris Luras Director of Enforcement

> (801) 883-6887 cluras@wecc.biz

### VIA WECC ENHANCED FILE TRANSFER SERVER

December 21, 2012

Jenifur Rancourt Compliance Specialist Bonneville Power Administration 905 NE 11 Avenue Portland, OR 97232

NERC Registration ID: NCR05032 NERC Violation ID: WECC201102932

Subject: Notice of Completed Mitigation Plan Acceptance Reliability Standard MOD-001-1a Requirement 3

Jenifur,

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration (BPA) on November 15, 2012 for the violation of Reliability Standard MOD-001-1a Requirement 3. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

If you have any questions or concerns, please contact Keshav Sarin at ksarin@wecc.biz.

Sincerely,

Chris Luras Director of Enforcement

CL:dlc

cc: Mark Thompson, BPA FERC Compliance Supervisor Keshav Sarin, WECC Manager, O&P and CIP



# **Attachment J**

# Record documents for the violation of PRC-005-1 R2 (WECC201103045)

J-1. BPA's Certification of Mitigation Completion dated November 16, 2012;

**J-2. WECC's Verification of Mitigation Completion dated December 21, 2012** 

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name	Bonneville Power Administration
NERC Registry ID	NCR05032
NERC Violation ID(s)	WECC201103045
Mitigated Standard Requirement(s)	PRC-005-1 R2,
Scheduled Completion as per Accepted Mitigation Plan	November 15, 2012
Date Mitigation Plan completed	November 15, 2012
WECC Notified of Completion on Date	: November 16, 2012
Entity Comment	Mitigation Plan Completion Form with all documentation attached.

Submitted 11/15/12 16:51 Pacific Time

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	P147 PRC-005 R2 Mitigation Plan Form in OATI FormatE- SIGNATURE.doc		178,688
Entity	121115_P147_PRC_005_1_R 2_MP_Closure.pdf	Mitigation Plan Completion Form with all documentation attached. Submitted 11/15/12 16:51 Pacific Time	3,173,534

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Hardev S. Juj

Title: VP, Planning & Asset Mgmt./Reliability Officer

Email: hsjuj@bpa.gov

Phone:

Authorized Signature

Date \_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)



Chris Luras Director of Enforcement

> (801) 883-6887 cluras@wecc.biz

### VIA WECC ENHANCED FILE TRANSFER SERVER

December 21, 2012

Jenifur Rancourt Compliance Specialist Bonneville Power Administration 905 NE 11 Avenue Portland, OR 97232

NERC Registration ID: NCR05032 NERC Violation ID: WECC201103045

Subject: Notice of Completed Mitigation Plan Acceptance Reliability Standard PRC-005-1 Requirement 2

Jenifur,

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration (BPA) on November 16, 2012 for the violation of Reliability Standard PRC-005-1 Requirement 2. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

If you have any questions or concerns, please contact Keshav Sarin at ksarin@wecc.biz.

Sincerely,

Chris Luras Director of Enforcement

CL:dlc

cc: Mark Thompson, BPA FERC Compliance Supervisor Keshav Sarin, WECC Manager, O&P and CIP



# **Attachment K**

# **Record documents for the violation of TOP-007-WECC-1 R1 (WECC2012009941)**

K-1. BPA's Certification of Mitigation Completion dated August 2, 2013;

**K-2. WECC's Verification of Mitigation Completion dated September 24, 2013** 

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: Bonneville Power Administration NERC Registry ID: NCR05032 NERC Violation ID(s): WECC2012009941 Mitigated Standard Requirement(s): TOP-007-WECC-1 R1, Scheduled Completion as per Accepted Mitigation Plan: August 01, 2013 Date Mitigation Plan completed: August 01, 2013 WECC Notified of Completion on Date: August 01, 2013

Entity Comment: Completion form attached is an PDF Portfolio. The evidence is attached and can be accessed by clicking on the paperclip in the lower-left-hand corner.

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	120803 TOP-007-WECC-1 R1 Signed Mitigation Plan.pdf	Signed Mitigation Plan	56,328
Entity	130801 SOL Mitigation Plan Completion signed without iCRS.pdf	Signed Completion document with evidence	19,663,504

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Hardev Juj

Title: VP, Planning & Asset Management, Transmission Services

Email: hsjuj@bpa.gov

Phone: 1 (360) 418-8981

Authorized Signature

Date \_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

#### **E-Mail Notification Detail**

From:	noreply@oati.net
Sent:	09/24/2013 18:23:38
To:	reliabilitycompliance@bpa.gov
Subject:	WECC Notice - Completed Mitigation Plan Acceptance - TOP-007-WECC-1 R1 - Bonneville Power Administration

### Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2012009941 Standard/Requirement: TOP-007-WECC-1 R1 Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/01/2013 for the violation of TOP-007-WECC-1 R1. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

If you have any questions or concerns, please contact Keshav Sarin at ksarin@wecc.biz.

**Note:** Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

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[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment L:**

## Record documents for the violation of TOP-004-2 R4 (WECC2012009942)

L-1. BPA's Certification of Mitigation Completion dated August 2, 2013;

L-2. WECC's Verification of Mitigation Completion dated September 24, 2013

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name:	Bonneville Power Administration
NERC Registry ID:	NCR05032
NERC Violation ID(s):	WECC2012009942
Mitigated Standard Requirement(s):	TOP-004-2 R4,
Scheduled Completion as per Accepted Mitigation Plan:	August 01, 2013
Date Mitigation Plan completed:	August 01, 2013
WECC Notified of Completion on Date:	August 01, 2013
Entity Comment:	The evidence of completion is attached in the signed completion form attached. The signed completion form is a PDF Portfolio and the evidence can be accessed by clicking on

		Additional Documents	
From	Document Name	Description	Size in Bytes
Entity	120803 TOP-004-2 R4 Signed Mitigation Plan.pdf	Signed Mitigation Plan	76,086
Entity	130801 SOL Mitigation Completion with iCRS.pdf	Signed completion document	21,363,755

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Hardev Juj

Title: VP, Planning & Asset Management, Transmission Services

Email: hsjuj@bpa.gov

Phone: 1 (360) 418-8981

Authorized Signature

Date \_\_\_\_

the paperclip in the lower-left-hand corner.

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

#### **E-Mail Notification Detail**

From:	noreply@oati.net
Sent:	09/24/2013 18:20:44
То:	reliabilitycompliance@bpa.gov
Subject:	WECC Notice - Completed Mitigation Plan Acceptance - TOP-004-2 R4 - Bonneville Power Administration

### Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2012009942 Standard/Requirement: TOP-004-2 R4 Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/01/2013 for the violation of TOP-004-2 R4. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

If you have any questions or concerns, please contact Keshav Sarin at ksarin@wecc.biz.

**Note:** Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

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[OATI Information - Email Template: MitPlan\_Completed]



## **Attachment M**

# Record documents for the violation of TOP-004-2 R1 (WECC2012009943)

M-1. BPA's Certification of Mitigation Completion dated August 2, 2013;

M-2. WECC's Verification of Mitigation Completion dated September 24, 2013

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name:	Bonneville Power Administration
NERC Registry ID:	NCR05032
NERC Violation ID(s):	WECC2012009943
Mitigated Standard Requirement(s):	TOP-004-2 R1,
Scheduled Completion as per Accepted Mitigation Plan:	August 01, 2013
Date Mitigation Plan completed:	August 01, 2013
WECC Notified of Completion on Date:	August 01, 2013
Entity Comment:	Evidence is contained in the signed completion document attached. The completion document is a PDF Portfolio and the avidence can be accessed by clicking on the paperclip in the

evidence can be accessed by clicking on the paperclip in the lower-left-hand corner.

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	120803 TOP-004-2 R1 Signed Mitigation Plan.pdf	Signed Mitigation Plan	100,298
Entity	130801 SOL Mitigation Completion with iCRS.pdf	signed completion packet	21,363,755

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Hardev Juj

Title: VP, Planning & Asset Management, Transmission Services

Email: hsjuj@bpa.gov

Phone: 1 (360) 418-8981

Authorized Signature

Date \_\_\_\_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

#### **E-Mail Notification Detail**

From:	noreply@oati.net	
Sent:	09/24/2013 18:22:28	
То:	ilitycompliance@bpa.gov	
Subject:	WECC Notice - Completed Mitigation Plan Acceptance - TOP-004-2 R1 - Bonneville Power Administration	

### Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2012009943 Standard/Requirement: TOP-004-2 R1 Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/01/2013 for the violation of TOP-004-2 R1. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

If you have any questions or concerns, please contact Keshav Sarin at ksarin@wecc.biz.

**Note:** Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

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[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment N**

# Record documents for the violation of TOP-008-1 R1 (WECC2012009944)

N-1. BPA's Certification of Mitigation Completion dated August 2, 2013;

N-2. WECC's Verification of Mitigation Completion dated August 30, 2013.
# Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name:	Bonneville Power Administration
NERC Registry ID:	NCR05032
NERC Violation ID(s):	WECC2012009944
Mitigated Standard Requirement(s):	TOP-008-1 R1,
Scheduled Completion as per Accepted Mitigation Plan:	August 01, 2013
Date Mitigation Plan completed:	August 01, 2013
WECC Notified of Completion on Date:	August 01, 2013
Entity Comment:	Evidence is attached to the signed completion document that is being submitted. The signed completion document is a PDF Portfolio and the evidence can be accessed by clicking on the

Portfolio and the evidence can be accessed by clicking on the paperclip in the lower-left-hand corner.

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	120803 TOP-008-1 R1 Signed Mitigation Plan.pdf	Signed Mitigation Plan	73,527
Entity	130801 SOL Mitigation Completion with iCRS.pdf	Signed Completion Document	21,363,755

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Hardev Juj

Title: VP, Planning & Asset Management, Transmission Services

Email: hsjuj@bpa.gov

Phone: 1 (360) 418-8981

Authorized Signature

Date \_\_\_\_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

#### **E-Mail Notification Detail**

From:	noreply@oati.net
Sent:	08/30/2013 14:08:09
То:	reliabilitycompliance@bpa.gov
Subject:	WECC Notice - Completed Mitigation Plan Acceptance - TOP-008-1 R1 - Bonneville Power Administration

#### Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2012009944 Standard/Requirement: TOP-008-1 R1 Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/01/2013 for the violation of TOP-008-1 R1. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

If you have any questions or concerns, please contact Keshav Sarin at ksarin@wecc.biz.

**Note:** Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

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[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment O**

# Record documents for the violation of TOP-008-1 R2 (WECC2012009945)

**O-1. BPA's Certification of Mitigation Completion dated August 2, 2013;** 

**O-2. WECC's Verification of Mitigation Completion dated August 30, 2013.** 

# Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name:	Bonneville Power Administration
NERC Registry ID:	NCR05032
NERC Violation ID(s):	WECC2012009945
Mitigated Standard Requirement(s):	TOP-008-1 R2,
Scheduled Completion as per Accepted Mitigation Plan:	August 01, 2013
Date Mitigation Plan completed:	August 01, 2013
WECC Notified of Completion on Date:	August 01, 2013
Entity Comment:	Evidence is attached to the signed completion document that is attached. The signed completion document is a PDF Portfolio

and the evidence can be accessed by clicking on the paperclip in the lower-left-hand corner.

Additional Documents			
From Document Name Description Si		Size in Bytes	
Entity	120803 TOP-008-1 R2 Signed Mitigation Plan.pdf	Signed Mitigation Plan	73,432
Entity	130801 SOL Mitigation Completion with iCRS.pdf	signed completion document	21,363,755

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Hardev Juj

Title: VP, Planning & Asset Management, Transmission Services

Email: hsjuj@bpa.gov

Phone: 1 (360) 418-8981

Authorized Signature

Date \_\_\_\_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

#### **E-Mail Notification Detail**

From:	noreply@oati.net
Sent:	08/30/2013 14:09:19
То:	reliabilitycompliance@bpa.gov
Subject:	WECC Notice - Completed Mitigation Plan Acceptance - TOP-008-1 R2 - Bonneville Power Administration

#### Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2012009945 Standard/Requirement: TOP-008-1 R2 Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/01/2013 for the violation of TOP-008-1 R2. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

If you have any questions or concerns, please contact Keshav Sarin at ksarin@wecc.biz.

**Note:** Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

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[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment P**

# Record documents for the violation of TOP-008-1 R4 (WECC2012009946)

P-1. BPA's Certification of Mitigation Completion dated August 2, 2013;

P-2. WECC's Verification of Mitigation Completion dated September 24, 2013

# Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name:	Bonneville Power Administration
NERC Registry ID:	NCR05032
NERC Violation ID(s):	WECC2012009946
Mitigated Standard Requirement(s):	TOP-008-1 R4,
Scheduled Completion as per Accepted Mitigation Plan:	August 01, 2013
Date Mitigation Plan completed:	August 01, 2013
WECC Notified of Completion on Date:	August 01, 2013
Entity Comment:	Evidence is attached to the signed completion document. The signed completion document is a PDF Portfolio and the evidence can be accessed by clicking on the paperclip in the

lower-left-hand corner.

Additional Documents			
From Document Name Description		Size in Bytes	
Entity	120803 TOP-008-1 R4 Signed Mitigation Plan.pdf	Signed mitigation plan	87,733
Entity	130801 SOL Mitigation Completion with iCRS.pdf	signed completion document	21,363,755

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Hardev Juj

Title: VP, Planning & Asset Management, Transmission Services

Email: hsjuj@bpa.gov

Phone: 1 (360) 418-8981

Authorized Signature

Date \_\_\_\_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

#### **E-Mail Notification Detail**

From:	noreply@oati.net
Sent:	09/24/2013 18:19:34
То:	reliabilitycompliance@bpa.gov
Subject:	WECC Notice - Completed Mitigation Plan Acceptance - TOP-008-1 R4 - Bonneville Power Administration

#### Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2012009946 Standard/Requirement: TOP-008-1 R4 Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/01/2013 for the violation of TOP-008-1 R4. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

If you have any questions or concerns, please contact Keshav Sarin at ksarin@wecc.biz.

**Note:** Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

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[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment Q**

# Record documents for the violation of TOP-004-2 R6 (WECC2012009960)

Q-1. BPA's Mitigation Plan designated as WECCMIT007810 submitted May 15, 2013;

Q-2. BPA's Certification of Mitigation Completion dated May 19, 2014;

Q-3. WECC's Verification of Mitigation Completion dated July 15, 2014.

# Mitigation Plan

# Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
	WECC2012009960	TOP-004-2 R6	03/31/2012	2
	Mitigation Plan Subm	nitted On: May 15, 2013		
	Mitigation Plan Acce			
Mitigation Plan Proposed Completion Date: May 15, 2014				
Actual Completion Date of Mitigation Plan:				
Mitigation Plan Certified Complete by BPA On:				
Mitigation Plan Completion Verified by WECC On:				
Mitigation Plan Completed? (Yes/No): No				

# Section A: Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

### Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: Bonneville Power Administration

NERC Compliance Registry ID: NCR05032

Address: 905 NE 11 Avenue Portland OR 97232

B.2 Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Tanner Brier Title: Compliance Specialist Email: thbrier@bpa.gov Phone: 503-230-3649

## Section C: Identification of Reliability Standard Violation(s) Associated with this Mitigation Plan

C.1 This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement		
Requirement Description				
WECC2012009960	03/01/2012	TOP-004-2 R6		
Transmission Operators, individually and jointly with other Transmission Operators, shall develop, maintain, and				

Transmission Operators, individually and jointly with other Transmission Operators, shall develop, maintain, and implement formal policies and procedures to provide for transmission reliability. These policies and procedures shall address the execution and coordination of activities that impact inter- and intra-Regional reliability, including:

C.2 Brief summary including the cause of the violation(s) and mechanism in which it was identified above:

On April 3, 2013, WECCâ€<sup>™</sup>s Director of Enforcement sent BPA a letter indicating that BPAâ€<sup>™</sup>s August 3, 2012, Mitigation Plan did "not address the root cause of the†violation for TOP-004-2, R6. BPA was asked to submit a revised Mitigation Plan to address the creation of a policy document that explicitly addresses how BPA will coordinate and execute planned outages, including how outage communications will be represented accurately in models. New milestones have been added to this Mitigation Plan to address WECCâ€<sup>™</sup>s request.

The balance of this section is unchanged from BPA's August 3, 2012, Mitigation Plan.

On March 1, 2012, BPA was operating its interconnection with BC Hydro (WECC Path 3) based on outages it was aware of for that day that affect the System Operating Limit (SOL) of that path. Those were outages for BPAâ€<sup>TM</sup>s Chief Joseph – Snohomish #4 345 kV transmission line and Seattle City Lightâ€<sup>TM</sup>s (SCL) Massachusetts – Union St #2 115 kV transmission line. As described in the WECC Path Rating Catalog, WECC Path 3 is divided into westside and eastside Interties. The SOLs which appear to be violated on March 1 were the SOLs produced for the westside Intertie (Custer - Ingledow #1&2 500kV transmission lines). (During this time of year, the predominant flow on WECC Path 3 is in the south-to-north direction. It is the fact that BPA exceeded SOLs for heavy load conditions in the south-to-north direction that were the cause of this potential violation.)

SCL entered outage 1-116199 into the WECC Coordinated Outage System (COS) on January 9, 2012 and revised the outage in COS on February 6, 2012. Both versions included an outage of the Massachusetts – Union St. - Broad 115 kV cable.

BPA developed SOLs for WECC Path 3 on February 22, 2012, including an outage for the Massachusetts – Union St #2 115 kV transmission line rather than the Massachusetts – Union St. - Broad 115 kV cable. Those SOLs were provided to BPA's Dispatchers via a study report called "Official BPA Study Limits Information Memo (SLIM) NI\_22FEB12\_420â€, also referred to as Nomogram 420. The SOLs were implemented by BPA's Dispatchers at 0708 on March 1.

BPA and other utilities participated in numerous regional planned outage coordination activities, including publishing outage plans and participating in coordination calls, through March 1, 2012. During those activities, it was not recognized that BPA believed there was an outage on the Massachusetts â€" Union St #2 115 kV transmission line rather than the Massachusetts â€" Union St. - Broad 115 kV cable.

At approximately 1430 on March 1, during a phone call from BPAâ€<sup>™</sup>s technical operations engineer to a SCL operations engineer to discuss proper outage configurations for future planned studies, BPAâ€<sup>™</sup>s technical operations engineer was made aware that the SCL transmission line that was presently out of service was not Massachusetts â€<sup>™</sup> Union St. #2 115 kV transmission line, but was Massachusetts â€<sup>™</sup> Union â€<sup>™</sup> Broad St 115 kV cable instead. That outage would likely have a different effect on the WECC Path 3 SOLs.

BPAâ€<sup>™</sup>s technical operations engineer verified the outage with BPAâ€<sup>™</sup>s Dispatch organization to determine what SCL outage had been input into the WECC Coordinated Outage System (COS) for March 1. The Massachusetts â€<sup>"</sup> Union St. - Broad 115 kV cable outage was confirmed by BPAâ€<sup>™</sup>s Outage Office at approximately 1440. SCLâ€<sup>™</sup>s Massachusetts â€<sup>"</sup> Union St. - Broad 115 kV cable outage the state of the state of

switched out of service at 0819 the morning of March 1 with an estimated return to service on March 4 at 2000.

BPA determined that it needed to perform a new study to determine appropriate SOLs given the new information. A new study with BPA's Chief Joseph – Snohomish #4 345kV transmission line and SCL's Massachusetts – Union St. - Broad 115 kV cable out of service was performed beginning at approximately 1525. The study was completed at approximately 1812 and study results were provided to BPA Dispatch at 1815. The new results were provided in Nomogram 423. This new nomogram resulted in a significant reduction in the south-to-north SOLs.

If BPA had operated to the SOLs provided in SLIM 423 starting at 0819 when SCL switched the Massachusetts – Union St. – Broad St. 115 kV cable out of service with

Puget Sound area generation and load patterns as they were on March 1, the south to north flows on the westside Intertie portion of WECC Path 3 would have exceeded that SOL from 0819 to 1844 (a total of 10hrs and 25 minutes). Based on these assumptions the actual westside Intertie flow would have exceeded the SOL by range of 246 – 966 MW depending upon the specific hour.

BPA Dispatch implemented Nomogram 423 at 1828. BPAâ€<sup>™</sup>s Transmission Scheduling organization began implementing curtailments on WECC Path 3 following notification from BPA Dispatch at 1831. BPAâ€<sup>™</sup>s Dispatch organization called the WECC RC advising it of the new nomogram, of the fact that SOLs had been exceeded, and of BPAâ€<sup>™</sup>s intent to curtail transmission schedules in order to bring actual flows below the new SOL. Actual flows on the Westside of WECC Path 3 in the south-to-north direction had been exceeded from 0819 to1844 on March 1 (10 hours and 25 minutes).

After implementing Nomogram 423 at 1828, BPA sent the required WECCNet advising of the new nomogram at 1835 to all WECCNet subscribers.

WECC Path 3 west side flows and total actual flows of WECC Path 3 were brought below the SOL at 1844.

A second study was run to refine and confirm the earlier results from Nomogram 423. There was no change in the SOL results for the south-to-north conditions that were experienced on March 1; that is, heavy load conditions. These results were once again provided to BPAâ€<sup>™</sup>s Dispatch organization and implemented at 1955. After implementing Nomogram 423R1, BPA sent the required WECCNet advising of the new nomogram at 2001.

BPA, SCL, and other members of the Northwest Power Pool (NWPP) follow the NWPP Outage Coordination Process (Process) dated October 7, 2010. BPA coordinates planned outages on behalf of the NWPP and bases its studies to determine SOLs on the final outage plan developed under the 45-day outage planning process (45-day process) contained in the larger Process.

The 45-day process related to planned outages of transmission elements is a voluntary process. However, the first step in the process is for NWPP members to enter outages into the WECC COS 45-days prior to the start of the planned outage month. BPA incorrectly entered SCL outages from SCLâ€<sup>TM</sup>s initial WECC COS submittal to the WECC RC into the outage plans BPA developed using the 45-day process. The incorrect outage was published in the Initial Outage Plan, Coordinated Outage Plan and Final Outage Plan for March 2012 as well as in BPAâ€<sup>TM</sup>s WECC RC Path Report submitted to the WECC RC for March 1, 2012. BPA, SCL and the WECC RC did not find the error during the review periods under the 45-day process and as a result BPA Northern Intertie Westside SOL was based on a nomogram with incorrect outage assumptions for March 1, 2012.

C.3 Provide any relevant information regarding the identification of the violation(s) associated with this Mitigation Plan:
 BPA ID P#165

### Section D: Details of Proposed Mitigation Plan

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

BPAâ€<sup>™</sup>s original Mitigation Plan had BPA taking actions in the four areas identified below with completion on August 1, 2013. Milestones 2 through 6 under Outage planning and coordination are new milestones added as a result of WECC Enforcementâ€<sup>™</sup>s April 3, 2013, letter requesting this revised Mitigation Plan. Completion for these new milestones is May 15, 2014.BPA will take actions in the four areas identified below between now and August 1, 2013.

#### Outage planning and coordination

1. Prepare and send a letter to outage process participants indicating the need for accurate and timely outage information (via COS), participation in the monthly NWPP outage coordination reviews, and review of the coordinated outage plan for accuracy.

2. Determine and document the scope and basic requirements of a BPA outage planning policy and procedures.

3. Prepare a project plan to identify automation requirements to ensure that BPA is using correct and accurate internal and external planned outage information of transmission elements and that supports BPA's outage planning policy and procedures. The project plan will include specific automation projects and schedules for completion.

- 4. Provide draft of BPAâ€<sup>™</sup>s planned outage information policy and procedures to neighboring TOPs and others.
- 5. Implement the automation identified in the automation project plan.
- 6. Finalize and implement BPAâ€<sup>™</sup>s planned outage information policy and procedures.

#### Validation of Outages

1. Implement alarming (on SCADA Intertie Protection Scheme (IPS)) for a change in status to SCL lines and equipment that are identified in the relevant Dispatcher Standing Order(s) (DSO) as having an affect on SOLs for WECC Path 3.

2. Implement alarming (on SCADA IPS) for a change in status to remaining utilities lines and equipment that are identified in the relevant Dispatcher Standing Order(s) (DSO) as having an affect on SOLs for BPA defined flowgates or WECC-identified paths for which BPA is the path operator.

3. Develop and implement a process to ensure SCADA IPS alarming is kept up-to-date with lines and equipment added to new and existing DSOs.

#### Establish SOLs for Unanticipated Events

1. Develop a plan to do the following: (a) complete studies to establish the most conservative limits to account for unplanned conditions for all WECC-identified Paths for which BPA is the path operator and for BPA internal flowgates and (b) update all relevant DSOs with SOLs for BPA's Dispatchers' use for unplanned conditions.

2. Update all relevant DSOs with default SOLs that have been developed through studies to account for unplanned conditions (i.e., unanticipated events). These default SOLs apply to all WECC-identified Paths for which BPA is the path operator and to BPA internal flowgates and will be used by BPA's Dispatchers during unplanned conditions.

#### State Estimator

1. Develop a project plan to expand BPA's State Estimation and Contingency Analysis capabilities to fully meet study needs. The plan will address:

 $\hat{a} \in \hat{c}$  24x7 availability of solved SE cases for use in the study process,

• a process to ensure continued data visibility from external entities needed to support the SE model quality, and

 $\hat{a} \in \phi$  a process to ensure correct non-telemetered equipment status.

- 2. Report on status of project showing on-time delivery of key project milestones.
- 3. Report on status of project showing on-time delivery of key project milestones.
- 4. Complete implementation of expanded SE/CA capabilities.
- D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: May 15, 2014

#### D.3 Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
120815 Milestone	<ol> <li>Implement alarming (on SCADA Intertie Protection Scheme (IPS)) for a change in status to SCL lines and equipment that are identified in the relevant Dispatcher Standing Order(s) (DSO) as having an affect on SOLs for WECC Path 3</li> <li>Develop a plan to do the following: (a) complete studies to establish the most conservative limits to account for unplanned conditions for all WECC- identified Paths for which BPA is the path operator and for BPA internal flowgates and (b) update all relevant DSOs with SOLs for BPA's Dispatchers' use for unplanned conditions.</li> <li>Develop a project plan to expand BPA's State Estimation and Contingency Analysis capabilities to fully meet study needs. The plan will address:</li> </ol>	<u>tnan 3 months apart)</u> 08/15/2012	08/15/2012
	aty 24x7 availability of solved SE Cases		

		*Proposed Completion Date	Actual Completion
Milestone Activity	Description	(Shall not be greater than 3 months apart)	Date
	for use in the study process, • a process to ensure continued data visibility from external entities needed to support the SE model quality, and • a process to ensure correct non- telemetered equipment status.		
121115 Milestone	<ul> <li>4. Prepare and send a letter to outage process participants indicating the need for accurate and timely outage information (via COS), participation in the monthly NWPP outage coordination reviews, and review of the coordinated outage plan for accuracy.</li> <li>5. Update all relevant DSOs with default SOLs that have been developed through studies to account for unplanned conditions (i.e., unanticipated events). These default SOLs apply to all WECC-identified Paths for which BPA is the path operator and to BPA internal flowgates and will be used by BPA's Dispatchers during unplanned conditions.</li> <li>6. Report on status of state estimator project showing on-time delivery of key</li> </ul>	11/15/2012	11/15/2012
130215 Milestone	<ul> <li>7. Implement alarming (on SCADA IPS) for a change in status to remaining utilities lines and equipment that are identified in the relevant Dispatcher Standing Order(s) (DSO) as having an affect on SOLs for BPA defined flowgates or WECC-identified paths for which BPA is the path operator.</li> <li>8. Report on status of state estimator project showing on-time delivery of key project milestones.</li> </ul>	02/15/2013	02/15/2013
130515 Milestone	9. Develop and implement a process to ensure SCADA IPS alarming is kept up-to-date with lines and equipment added to new and existing DSOs.	05/15/2013	05/15/2013
130801 Milestone	10. Complete implementation of expanded SE/CA capabilities.	08/01/2013	

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
130815 Milestone	<ol> <li>Determine and document the scope and basic requirements of a BPA outage planning policy and procedures.</li> </ol>	08/15/2013	
131115 Milestone	12. Prepare a project plan to identify automation requirements to ensure that BPA is using correct and accurate internal and external planned outage information of transmission elements and that supports BPA's outage planning policy and procedures. The project plan will include specific automation projects and schedules for completion.	11/15/2013	
140215 Milestone	<ol> <li>Provide draft of BPA's planned outage information policy and procedures to neighboring TOPs and others.</li> </ol>	02/15/2014	
140515 Milestone	<ul> <li>14. Implement the automation identified in the automation project plan.</li> <li>15. Finalize and implement BPAâ€<sup>™</sup>s planned outage information policy and procedures.</li> </ul>	05/15/2014	

# D.4 Additional Relevant Information (Optional)

## Section E: Interim and Future Reliability Risk

#### E.1 Abatement of Interim BPS Reliability Risk

While your organization is implementing the Mitigation Plan proposed in Section D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

Beginning March 19, 2012, BPAâ€<sup>™</sup>s two Control Centers (Munro Control Center and Dittmer Control Center) instituted a new procedure for night-shift Dispatchers wherein night-shift Dispatchers confirm next-day outages with foreign utilities. This is done during every night shift. Any discrepancies from the planned outages that BPA has are communicated to the Senior Dispatcher on shift for a determination of next steps.

#### E.2 Prevention of Future BPS Reliability Risk

Describe how successful completion of the Mitigation Plan as laid out in Section D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

Upon completion of this mitigation plan, BPA will have addressed several areas needing improvement regarding outage planning and coordination, the ability to validate outages on facilities that can affect SOLs, and system studies and tools used to determine SOLs. The improvements will achieve the dual goals of preventing recurrence of NERC standards violations and ensuring reliable operation of the BES. In addition to the issues that led to this mitigation plan, BPA will consider lessons learned from recent industry events in planning of the improvements. BPA will work both internally and externally with appropriate parties on many of these initiatives.

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Section D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Section C.1, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

In its May 1, 2013, response to WECC regarding WECC's April 1, 2013, Notice of Alleged Violation related to TOP-004-2, R6, and other alleged violations, BPA stated that "/t/he issue in outage coordination is a regional problem that needs to be addressed regionally . . . †Therefore, BPA will work with the WECC RC and others to encourage the WECC RC to enhance its current process for receiving notification of planned outage information and implement a mandatory WECC Interconnection-wide outage coordination policy and procedure that would provide BPA and other TOPs planned outage information in a timely manner for use in developing SOLs.

## Section F: Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

(a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and

(b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and

(c) Acknowledges:

- 1. I am VP, Planning & Asset Management, Transmission Services of Bonneville Power Administration
- 2. I am qualified to sign this Mitigation Plan on behalf of Bonneville Power Administration
- 3. I have read and understand Bonneville Power Administration's obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
- 4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
- 5. Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authorities in Canada.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Hardev S. Juj

Title: VP, Planning & Asset Management, Transmission Services

Authorized On: August 03, 2012

# Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name:Bonneville Power AdministrationNERC Registry ID:NCR05032NERC Violation ID(s):WECC2012009960Mitigated Standard Requirement(s):TOP-004-2 R6,Scheduled Completion as per Accepted Mitigation Plan:May 15, 2014Date Mitigation Plan completed:May 15, 2014

WECC Notified of Completion on Date: May 15, 2014

Entity Comment: BPA has completed the Mitigation Plan as specified. See supporting evidence provided.

		Additional Documents	
From	Document Name	Description	Size in Bytes
Entity	120803 TOP-004-2 R6 Signed Mitigation Plan.pdf	Signed Mitigation Plan	57,497
Entity	130515 TOP-004 R6 Revised Signed Mitigation Plan.pdf		140,113
Entity	TOP-004-2 R6 Mitigation Plan.pdf	Certification of Mitigation Plan Completion TOP-004, R6	20,999,960

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Hardev S. Juj

Title: VP, Planning & Asset Management, Transmission Services

Email: hsjuj@bpa.gov

Phone: 1 (360) 418-8981

Authorized Signature

Date

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

#### Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2012009960 Standard/Requirement: TOP-004-2 R6 Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 05/15/2014 for the violation of TOP-004-2 R6. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

If you have any questions or concerns, please contact Keshav Sarin at ksarin@wecc.biz.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

CONFIDENTIAL INFORMATION: This email and any attachment(s) contain confidential and/or proprietary information of Open Access Technology International, Inc. Do not copy or distribute without the prior written consent of OATI. If you are not a named recipient to the message, please notify the sender immediately and do not retain the message in any form, printed or electronic.

[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment R**

# **Record documents for the violation of TOP-007-WECC-1 R2 (WECC2012009961)**

**R-1. BPA's Mitigation Plan designated as WECCMIT008174 submitted January 31,** 2013;

**R-2. BPA's Certification of Mitigation Completion dated August 2, 2013;** 

**R-3. WECC's Verification of Mitigation Completion dated September 24, 2013** 

# Mitigation Plan

# Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
WECC2012009961 TOP-007-WECC-1 R2		03/31/2012	2	
	Mitigation Plan Sub	mitted On: January 31, 2013		
Mitigation Plan Accepted On:				
Mitigation	Plan Proposed Comple	etion Date: August 01, 2013		
Actual C	ompletion Date of Mitiga	ation Plan:		
Mitigation Pla	an Certified Complete by	y BPA On:		
Mitigation Plan Completion Verified by WECC On:				
Mitig	gation Plan Completed?	(Yes/No): No		

# Section A: Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

### Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: Bonneville Power Administration

NERC Compliance Registry ID: NCR05032

Address: 905 NE 11 Avenue Portland OR 97232

B.2 Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Tanner Brier Title: Compliance Specialist Email: thbrier@bpa.gov Phone: 503-230-3649 apply.

### Section C: Identification of Reliability Standard Violation(s) Associated with this Mitigation Plan

C.1 This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement
	Requirement Description	
WECC2012009961	03/01/2012	TOP-007-WECC-1 R2
The Transmission Operator shall not have the Net Scheduled Interchange for power flow over an interconnection or Transmission path above the path's SOL when the Transmission Operator implements its real-time schedules for the next hour. For paths internal to a Transmission Operator Area that are not scheduled, this requirement does not		

C.2 Brief summary including the cause of the violation(s) and mechanism in which it was identified above:

On March 1, 2012, BPA was operating its interconnection with BC Hydro (WECC Path 3) based on outages it was aware of for that day that affect the System Operating Limit (SOL) of that path. Those were outages for BPAâ€<sup>TM</sup>s Chief Joseph – Snohomish #4 345 kV transmission line and Seattle City Lightâ€<sup>TM</sup>s (SCL) Massachusetts – Union St #2 115 kV transmission line. As described in the WECC Path Rating Catalog, WECC Path 3 is divided into westside and eastside Interties. The SOLs which appear to be violated on March 1 were the SOLs produced for the westside Intertie (Custer - Ingledow #1&2 500kV transmission lines). (During this time of year, the predominant flow on WECC Path 3 is in the south-to-north direction. It is the fact that BPA exceeded SOLs for heavy load conditions in the south-to-north direction that were the cause of this potential violation.)

SCL entered outage 1-116199 into the WECC Coordinated Outage System (COS) on January 9, 2012 and revised the outage in COS on February 6, 2012. Both versions included an outage of the Massachusetts – Union St. - Broad 115 kV cable.

BPA developed SOLs for WECC Path 3 on February 22, 2012, including an outage for the Massachusetts – Union St #2 115 kV transmission line rather than the Massachusetts – Union St. - Broad 115 kV cable. Those SOLs were provided to BPA's Dispatchers via a study report called "Official BPA Study Limits Information Memo (SLIM) NI\_22FEB12\_420â€, also referred to as Nomogram 420. The SOLs were implemented by BPA's Dispatchers at 0708 on March 1.

BPA and other utilities participated in numerous regional planned outage coordination activities, including publishing outage plans and participating in coordination calls, through March 1, 2012. During those activities, it was not recognized that BPA believed there was an outage on the Massachusetts â€" Union St #2 115 kV transmission line rather than the Massachusetts â€" Union St. - Broad 115 kV cable.

At approximately 1430 on March 1, during a phone call from BPAâ€<sup>™</sup>s technical operations engineer to a SCL operations engineer to discuss proper outage configurations for future planned studies, BPAâ€<sup>™</sup>s technical operations engineer was made aware that the SCL transmission line that was presently out of service was not Massachusetts â€<sup>™</sup> Union St. #2 115 kV transmission line, but was Massachusetts â€<sup>™</sup> Union â€<sup>™</sup> Broad St 115 kV cable instead. That outage would likely have a different effect on the WECC Path 3 SOLs.

BPAâ€<sup>™</sup>s technical operations engineer verified the outage with BPAâ€<sup>™</sup>s Dispatch organization to determine what SCL outage had been input into the WECC Coordinated Outage System (COS) for March 1. The Massachusetts â€<sup>"</sup> Union St. - Broad 115 kV cable outage was confirmed by BPAâ€<sup>™</sup>s Outage Office at approximately 1440. SCLâ€<sup>™</sup>s Massachusetts â€<sup>"</sup> Union St. - Broad 115 kV cable had been switched out of service at 0819 the morning of March 1 with an estimated return to service on March 4 at 2000.

BPA determined that it needed to perform a new study to determine appropriate SOLs given the new information. A new study with BPA's Chief Joseph – Snohomish #4 345kV transmission line and SCL's Massachusetts – Union St. - Broad 115 kV cable out of service was performed beginning at approximately 1525. The study was completed at approximately 1812 and study results were provided to BPA Dispatch at 1815. The new results were provided in Nomogram 423. This new nomogram resulted in a significant reduction in the south-to-north SOLs.

If BPA had operated to the SOLs provided in SLIM 423 starting at 0819 when SCL switched the Massachusetts  $\hat{a} \in$  "Union St.  $\hat{a} \in$  "Broad St. 115 kV cable out of service with Puget Sound area generation and load patterns as they were on March 1, the south to north flows on the westside Intertie portion of WECC Path 3 would have exceeded that SOL from 0819 to 1844 (a total of 10hrs and 25 minutes). Based on these assumptions the actual westside Intertie flow would have exceeded the SOL by range of 246  $\hat{a} \in$  "966 MW depending upon the specific hour.

BPA Dispatch implemented Nomogram 423 at 1828. BPAâ€<sup>™</sup>s Transmission Scheduling organization began implementing curtailments on WECC Path 3 following notification from BPA Dispatch at 1831. BPAâ€<sup>™</sup>s Dispatch organization called the WECC RC advising it of the new nomogram, of the fact that SOLs had been exceeded, and of BPAâ€<sup>™</sup>s intent to curtail transmission schedules in order to bring actual flows below the new SOL. Actual flows on the Westside of WECC Path 3 in the south-to-north direction had been exceeded from 0819 to1844 on March 1 (10 hours and 25 minutes).

After implementing Nomogram 423 at 1828, BPA sent the required WECCNet advising of the new nomogram at 1835 to all WECCNet subscribers.

WECC Path 3 west side flows and total actual flows of WECC Path 3 were brought below the SOL at 1844.

A second study was run to refine and confirm the earlier results from Nomogram 423. There was no change in the SOL results for the south-to-north conditions that were experienced on March 1; that is, heavy load conditions. These results were once again provided to BPAâ€<sup>™</sup>s Dispatch organization and implemented at 1955. After implementing Nomogram 423R1, BPA sent the required WECCNet advising of the new nomogram at 2001.

BPA uses its SOLs as its TTCs. Since BPA was not operating within the correct SOLs on March 1 from 0819 to 1844, its TTC calculations for those hours had not been calculated correctly even though TTC calculations for March 1 had been determined using BPA's established process.

Since BPAâ€<sup>™</sup>s SOLs for WECC Path 3 for March 1 had been developed assuming an outage that was different than the actual outage on SCLâ€<sup>™</sup>s transmission system for that day, TTCs for the period between 0819 and 1844 were incorrect, based on the incorrect model.

C.3 Provide any relevant information regarding the identification of the violation(s) associated with this Mitigation Plan: See above.

### Section D: Details of Proposed Mitigation Plan

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

BPA will take actions in the four areas identified below between now and August 1, 2013.

Outage planning and coordination

1. Prepare and send a letter to outage process participants indicating the need for accurate and timely outage information (via COS), participation in the monthly NWPP outage coordination reviews, and review of the coordinated outage plan for accuracy.

#### Validation of Outages

1. Implement alarming (on SCADA Intertie Protection Scheme (IPS)) for a change in status to SCL lines and equipment that are identified in the relevant Dispatcher Standing Order(s) (DSO) as having an affect on SOLs for WECC Path 3.

2. Implement alarming (on SCADA IPS) for a change in status to remaining utilities lines and equipment that are identified in the relevant Dispatcher Standing Order(s) (DSO) as having an affect on SOLs for BPA defined flowgates or WECC-identified paths for which BPA is the path operator.

3. Develop and implement a process to ensure SCADA IPS alarming is kept up-to-date with lines and equipment added to new and existing DSOs.

#### Establish SOLs for Unanticipated Events

1. Develop a plan to do the following: (a) complete studies to establish the most conservative limits to account for unplanned conditions for all WECC-identified Paths for which BPA is the path operator and for BPA internal flowgates and (b) update all relevant DSOs with SOLs for BPA's Dispatchers' use for unplanned conditions.

2. Update all relevant DSOs with default SOLs that have been developed through studies to account for unplanned conditions (i.e., unanticipated events). These default SOLs apply to all WECC-identified Paths for which BPA is the path operator and to BPA internal flowgates and will be used by BPA's Dispatchers during unplanned conditions.

#### State Estimator

1. Develop a project plan to expand BPA's State Estimation and Contingency Analysis capabilities to fully meet study needs. The plan will address:

• 24x7 availability of solved SE cases for use in the study process,

• a process to ensure continued data visibility from external entities needed to support the SE model quality, and

• a process to ensure correct non-telemetered equipment status.

- 2. Report on status of project showing on-time delivery of key project milestones.
- 3. Report on status of project showing on-time delivery of key project milestones.
- 4. Complete implementation of expanded SE/CA capabilities.
- D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: August 01, 2013

D.3 Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

		*Proposed Completion Date	Actual Completion
Milestone Activity	Description	(Shall not be greater than 3 months apart)	Date
120815 Milestone	<ol> <li>Implement alarming (on SCADA Intertie Protection Scheme (IPS)) for a change in status to SCL lines and equipment that are identified in the relevant Dispatcher Standing Order(s) (DSO) as having an affect on SOLs for WECC Path 3</li> <li>Develop a plan to do the following:         <ul> <li>(a) complete studies to establish the most conservative limits to account for unplanned conditions for all WECC- identified Paths for which BPA is the path operator and for BPA internal flowgates and (b) update all relevant DSOs with SOLs for BPA's Dispatchers' use for unplanned conditions.</li> <li>Develop a project plan to expand BPA's State Estimation and Contingency Analysis capabilities to fully meet study needs. The plan will address:</li> <li>• 24x7 availability of solved SE cases for use in the study process,</li> <li>• a process to ensure continued data visibility from external entities needed to support the SE model quality, and • a process to ensure correct non- telemetered equipment status.</li> </ul> </li> </ol>	08/15/2012	08/15/2012
121115 Milestone	<ol> <li>Prepare and send a letter to outage process participants indicating the need for accurate and timely outage information (via COS), participation in the monthly NWPP outage coordination reviews, and review of the coordinated outage plan for accuracy.</li> <li>Update all relevant DSOs with default SOLs that have been developed through studies to account for unplanned conditions (i.e., unanticipated events). These default SOLs apply to all WECC-identified Paths for which BPA is the path operator and to BPA internal flowgates and will be used by BPA's Dispatchers during unplanned conditions.</li> <li>Report on status of state estimator</li> </ol>	11/15/2012	11/15/2012

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
	project milestones.		
130215 Milestone	<ul> <li>7. Implement alarming (on SCADA IPS) for a change in status to remaining utilities lines and equipment that are identified in the relevant Dispatcher Standing Order(s) (DSO) as having an affect on SOLs for BPA defined flowgates or WECC-identified paths for which BPA is the path operator.</li> <li>8. Report on status of state estimator project showing on-time delivery of key project milestones.</li> </ul>	02/15/2013	
130515 Milestone	9. Develop and implement a process to ensure SCADA IPS alarming is kept up-to-date with lines and equipment added to new and existing DSOs.	05/15/2013	
130801 Milestone	10. Complete implementation of expanded SE/CA capabilities.	08/01/2013	

D.4 Additional Relevant Information (Optional) BPA ID P#160

## Section E: Interim and Future Reliability Risk

#### E.1 Abatement of Interim BPS Reliability Risk

While your organization is implementing the Mitigation Plan proposed in Section D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

Beginning March 19, 2012, BPAâ€<sup>™</sup>s two Control Centers (Munro Control Center and Dittmer Control Center) instituted a new procedure for night-shift Dispatchers wherein night-shift Dispatchers confirm next-day outages with foreign utilities. This is done during every night shift. Any discrepancies from the planned outages that BPA has are communicated to the Senior Dispatcher on shift for a determination of next steps.

#### E.2 Prevention of Future BPS Reliability Risk

Describe how successful completion of the Mitigation Plan as laid out in Section D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

Upon completion of this mitigation plan, BPA will have addressed several areas needing improvement regarding outage planning and coordination, the ability to validate outages on facilities that can affect SOLs, and system studies and tools used to determine SOLs. The improvements will achieve the dual goals of preventing recurrence of NERC standards violations and ensuring reliable operation of the BES. In addition to the issues that led to this mitigation plan, BPA will consider lessons learned from recent industry events in planning of the improvements. BPA will work both internally and externally with appropriate parties on many of these initiatives.

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Section D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Section C.1, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

## Section F: Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

(a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and

(b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and

(c) Acknowledges:

- 1. I am VP, Planning & Asset Management, Transmission Services of Bonneville Power Administration
- 2. I am qualified to sign this Mitigation Plan on behalf of Bonneville Power Administration
- 3. I have read and understand Bonneville Power Administration's obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
- 4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
- 5. Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authorities in Canada.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Hardev Juj

Title: VP, Planning & Asset Management, Transmission Services

Authorized On: January 31, 2013

# Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name:	Bonneville Power Administration
NERC Registry ID:	NCR05032
NERC Violation ID(s):	WECC2012009961
Mitigated Standard Requirement(s):	TOP-007-WECC-1 R2,
Scheduled Completion as per Accepted Mitigation Plan:	August 01, 2013
Date Mitigation Plan completed:	August 01, 2013
WECC Notified of Completion on Date:	August 01, 2013
Entity Comment:	Evidence of completion is contained in the signed completion form attached. The document is a PDF Portfolio and the attachments can be accessed by dicking on the paperclip in

attachments can be accessed by clicking on the paperclip in the lower-left-hand corner.

	Additional Comments	
From	Comment	User Name
Entity	This mitigation plan is being uploaded 9-28-12. The Milestone for 9-28-12 covers the steps that have been completed already.	Tanner Brier
Entity	This plan was originally submitted September 28, 2012, as pertaining to the two (2) expansion of scope letters submitted in June and August of 2012. Those letters dealt with 1 MW on Path 14. The original self-report dealt with SOL issues on Path 3. WECC determined that the mitigation plan herein (BPA P160), needs to address Path 3, and new self-reports need to be issued for the Path 14 incident. The Path 3 SOL mitigation plans were submitted in August 2012.	Tanner Brier

		Additional Documents	
From	Document Name	Description	Size in Bytes
Entity	120928 TOP-007 WECC-1 R2 Signed Mitigation Plan.pdf	Signed copy of the Mitigation Plan	68,461
Entity	130131 TOP-007-WECC-1 R2 Revised Signed Mitigation Plan P160.pdf	Revised signed mitigation plan P160, dated January 31, 2013	58,285
Entity	130801 SOL Mitigation Plan Completion signed without iCRS.pdf	Signed completion form	19,663,504

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name:	Hardev Juj		
Title:	VP, Planning & Asset Management		
Email:	hsjuj@bpa.gov		
Phone:	1 (360) 418-8981		
Authoriz	ed Signature	Date	
(Electro	nic signature was received by the Regional Office via C	DMS. For Electronic Signature Policy see CME	P.)

#### **E-Mail Notification Detail**

From:	noreply@oati.net
Sent:	09/24/2013 18:25:23
То:	reliabilitycompliance@bpa.gov
Subject:	WECC Notice - Completed Mitigation Plan Acceptance - TOP-007-WECC-1 R2 - Bonneville Power Administration

#### Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2012009961 Standard/Requirement: TOP-007-WECC-1 R2 Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/01/2013 for the violation of TOP-007-WECC-1 R2. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

If you have any questions or concerns, please contact Keshav Sarin at ksarin@wecc.biz.

**Note:** Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

CONFIDENTIAL INFORMATION: This email and any attachment(s) contain confidential and/or proprietary information of Open Access Technology International, Inc. Do not copy or distribute without the prior written consent of OATI. If you are not a named recipient to the message, please notify the sender immediately and do not retain the message in any form, printed or electronic.

[OATI Information - Email Template: MitPlan\_Completed]


# **Attachment S**

# Record documents for the violation of VAR-001-2 R4 (WECC2012010112)

S-1. BPA's Certification of Mitigation Completion dated February 15, 2013;

S-2. WECC's Verification of Mitigation Completion dated March 22, 2013.

## Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name:	Bonneville Power Administration
NERC Registry ID:	NCR05032
NERC Violation ID(s):	WECC2012010112
Mitigated Standard Requirement(s):	VAR-001-2 R4,
Scheduled Completion as per Accepted Mitigation Plan:	February 15, 2013
Date Mitigation Plan completed:	February 06, 2013
WECC Notified of Completion on Date:	February 14, 2013
Entity Comment:	Description of the information provided to WECC for their evaluation:
	1. Packwood Voltage Schedule Conclusion Email – email stating that after review, BPA has determined there were no additional generators, for which BPA is the TOP, that would be required to receive a voltage schedule.
	2. Transmission Services Standard, Operations Requirements for Generation Interconnection, STD-N-000002
	Please provide the specific location (i.e. paragraph numbers, page numbers) in the documentation/evidence submitted to verify compliance:
	Transmission Services Standard, Operations Requirements for Generation Interconnection, STD-N-000002, Section 4.2.2.3, 30 Day Requirements, bullet 4 on pp 6-7

From         Comment         Us           Entity         Description of the information provided to WECC for their evaluation:         Deanna Ph	
Entity Description of the information provided to WECC for their evaluation: Deanna Ph	er Name
<ol> <li>Packwood Voltage Schedule Conclusion Email – email stating that after review, BPA has determined there were no additional generators, for which BPA is the TOP, that would be required to receive a voltage schedule.</li> <li>Transmission Services Standard, Operations Requirements for Generation Interconnection, STD-N-000002</li> <li>Please provide the specific location (i.e. paragraph numbers, page numbers) in the documentation/evidence submitted to verify compliance:</li> </ol>	illips

	Additional Comments	
From	Comment	User Name
Entity	Transmission Services Standard, Operations Requirements for Generation Interconnection, STD-N-000002, Section 4.2.2.3, 30 Day Requirements, bullet 4 on pp 6-7	Deanna Phillips

	Additional Documents						
From	Document Name	Description	Size in Bytes				
Entity	130214_P167_VAR_001_2_R 4 Mitigation Plan Completion_signed.pdf	Signed copy of the Mitigation Plan Completion form.	76,291				
Entity	Packwood Voltage Schedule Conclusion.pdf	Packwood Voltage Schedule Conclusion Email – email stating that after review, BPA has determined there were no additional generators, for which BPA is the TOP, that would be required to receive a voltage schedule.	14,248				
Entity	STD-N-000002-00-01.pdf	STD-N-000002: Transmission Services Standard, Operations Requirements for Generation Interconnection, Section 4.2.2.3, 30 Day Requirements, bullet 4 on pp 6-7	637,267				

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Hardev Juj

Title: Vice President, Planning & Asset Management

Email: hsjuj@bpa.gov

Phone: 1 (369) 418-8981

Authorized Signature

Date \_\_\_\_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)



Chris Luras Director of Enforcement

> (801) 883-6887 cluras@wecc.biz

## VIA WECC ENHANCED FILE TRANSFER SERVER

March 22, 2013

Jenifur Rancourt Compliance Specialist Bonneville Power Administration 905 NE 11 Avenue Portland, OR 97232

NERC Registration ID: NCR05032 NERC Violation ID: WECC2012010112

Subject: Notice of Completed Mitigation Plan Acceptance Reliability Standard VAR-001-2 Requirement 4

Jenifur,

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration (BPA) on February 14, 2013 for the violation of Reliability Standard VAR-001-2 Requirement 4. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

If you have any questions or concerns, please contact Keshav Sarin at ksarin@wecc.biz.

Sincerely,

Chris Luras Director of Enforcement

CL:dlc

cc: Mark Thompson, BPA FERC Compliance Supervisor Keshav Sarin, WECC Manager, O&P and CIP



# **Attachment T**

# Record documents for the violation of TOP-004-1 R4 (WECC2012011098)

T-1. BPA's Mitigation Plan designated as WECCMIT011556 submitted April 9, 2015;

T-2. BPA's Certification of Mitigation Completion dated August 11, 2015;

T-3. WECC's Verification of Mitigation Completion dated August 11, 2015.

## Mitigation Plan

## Mitigation Plan Summary

## Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version	
WECCMIT011556	WECC2012011098	TOP-004-1 R4.	03/04/2013	1	
	Mitigation Plan Submitted	On: April 09, 2015			
Mitigation Plan Accepted On: August 11, 2015					
Mitigation Plan Proposed Completion Date: October 02, 2014					
Actual Completion Date of Mitigation Plan: October 02, 2014					
Mitigation Plan Certified Complete by BPA On: April 09, 2015					
Mitigation Plan Completion Verified by WECC On: August 11, 2015					
Mitig	ation Plan Completed? (Yes/	No): Yes			

## Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

## **Entity Information**

Identify your organization:

Entity Name: Bonneville Power Administration NERC Compliance Registry ID: NCR05032

> Address: 905 NE 11 Avenue Portland OR 97232

Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Jenifur L Rancourt Title: FERC Compliance Manager (Acting) Email: jlrancourt@bpa.gov Phone: 503-230-3672

## Violation(s)

This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID Date of Violation		Requirement		
Requirement Description				
WECC2012011098	06/18/2007	TOP-004-1 R4.		

If a Transmission Operator enters an unknown operating state (i.e., any state for which valid operating limits have not been determined), it will be considered to be in an emergency and shall restore operations to respect proven reliable power system limits within 30 minutes.

Brief summary including the cause of the violation(s) and mechanism in which it was identified:

During BPA's FERC on-site audit in April 2012, FERC auditors asked BPA if there were any instances in which BPA disabled non-redundant relay protection on equipment that was still energized. BPA indicated that it sometimes disabled non-redundant 115kV bus protection systems for maintenance or testing while the protected facility remained energized. BPA explained that the energized facility still had protection from the remote terminals. FERC also submitted written data requests in July and August 2012 asking for additional information.

This was only done under conditions that the BPA Dispatcher believed were appropriate. The BPA Dispatcher would ensure that system conditions, including other outages, local weather, etc., were appropriate for the circumstance to determine if the maintenance would be allowed. This assessment of current conditions determined the risk of disabling the 115kV or 230kV bus differential relay while the 115kV or 230kV bus remained energized.

BPA Dispatchers are aware that if a 115kV or 230kV bus fault were to occur during the time that 115kV or 230kV bus differential relays are disabled, the zone 2 relays at the remote end of each line connected to the 115kV or 230kV bus would clear the fault with a time delay of typically 0.25 seconds.

BPA made every effort possible to perform 115kV or 230kV bus differential relay maintenance in conjunction with 115kV or 230kV bus outages when the 115kV or 230kV bus was de-energized for other work. Performing the work during an outage for other maintenance is the preferred practice, but was not always possible.

There was also an additional instance when the bus differential relays were disabled. As part of 115/230/500kV power circuit breaker maintenance during a millivolt drop test (MVDT), some bus differential relays were disabled. The bus differential relays were disabled if the current transformers (CT) were in the MVDT circuit (i.e., bushing CTs). Not all bus differential relays needed to be disabled for the MVDT. The time that the bus differential relay was disabled was minimized by the maintenance or other crew performing the test. The crew installed all the necessary test equipment prior to requesting the bus differential relays be removed from service.

By not performing studies prior to disabling the bus differential relays for either maintenance or MVDTs, BPA was operating in an unknown state.

Relevant information regarding the identification of the violation(s):

Because of the post 2012 FERC inquiries, BPA believed that a violation was suspected and in the best interest of reliability and out of an abundance of caution, BPA filed a self-report (document, "120906\_TOP-004-1\_R4\_CDMS\_SelfReport.pdf) on September 26, 2012. In filing the self-report, BPA pursued to strengthen its own internal policy of identifying bus differential relays as Significant Equipment and subject to outage coordination prior to being taken out of service. BPA was awaiting feedback from WECC before filing a formal mitigation plan, and recently received such feedback while discussing past violation settlement options.

## Plan Details

Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

• On September 5, 2012, BPA posted a memorandum updating its Operating Bulletin 19 (document, "120905 OB19 & Memo") to include all non-redundant bus differential relays 115kV and above. OB-19, Attachment A: OB-19 Significant Equipment, now includes all non-redundant bus differential relays 115kV and above. Outages involving significant equipment are included in the Northwest Power Pool (NWPP) 45-day outage process. (See OB 19 section 19-2, p3.) As part of NWPP 45-day outage process, studied System Operating Limits for planned outages will be posted at approximately day 15 prior to the outage week. On September 6, 2012, the BPA Substation Operations (TOZ) organization distributed OB-19 to appropriate personnel (document, "120906 OB19 Distribution").

• As of September 6, 2012, BPA ceased the practice of disabling non-redundant relay protection on equipment that was still energized. BPA implemented a new guideline (document, "121219 Bus Diff Outage Guidelines") for outages of non-redundant bus differential relays where non-redundant bus differential relays are to be considered Significant Equipment and, therefore, included in the Northwest Power Pool (NWPP) Outage Coordination Process before they are taken out of service on a planned basis.

• On February 6, 2013, BPA posted a Memorandum rescinding Alert No. 14 (document, "130206 Alert-14 Rescission Memo") and posted Alert No: 15 (document, 130206 Alert-15") – Modification to BPA Work Standard IV, Protective Relaying" identifying the following:

o Electronic and microprocessor based bus protection relays do not need to be disabled when performing a microohm test on a PCB.

o All electro-mechanical relays can be left in service when performing micro-ohm testing on a PCB except: o GE SBD-11 bus protection relays connected to a 600:5 CT will need to be removed from service before performing a micro-ohm test. In this case OB-19 and the 45 day outage process will need to be followed.

• On October 2, 2014, BPA posted Alert #31 (document, 141002 Alert #31) - Micro-Ohm Tests (MVDT) and Modification to BPA Work Standard IV.A, Protective Relaying. BPA Alert #31 rescinded Alerts #14 and #15. With the publishing of this Alert, all protective relays shall remain in service when micro-ohm tests (MVDT) are being performed on power circuit breakers (PCBs) with current transformers (CTs) included in the protection scheme.

• Note: It is BPA procedure to post Substation Alerts to an internal Substation Operations SharePoint library, where they are accessed by substation operations staff. A screen shot of that library is provided (document, 150408\_TOZ\_Alert\_Library.jpg).

Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: October 02, 2014

Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
120905 Milestone	Update Operating Bulletin (OB-19) to	09/05/2012	09/05/2012	120905 OB19 & Memo.pdf	No

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
	include all non- redundant bus differential relays 115kV and above.				
120906 Milestone	<ol> <li>Distribution of OB- 19 electronically to all TF, TE, TO and TP Supervisors.</li> <li>Implement Dispatch Guideline; Outages of Non- Redundant Bus Differential Relays whereby non- redundant bus differential relays are to be considered Significant Equipment and, therefore, included in the Northwest Power Pool (NWPP) Outage Coordination Process before they are taken out of service on a planned basis.</li> </ol>	09/06/2012	09/06/2012	1. 120906 OB19 Distribution.pdf 2. 121219 Bus Diff Outage Guidelines.pdf	No
121201 Placeholder milestone	BPA had to create this placeholder milestone in order to make the mitigation plan accept the fact that historical mitigating activities were completed greater than 92 days apart.	12/01/2012	12/01/2012	BPA had to create this placeholder milestone in order to make the mitigation plan accept the fact that historical mitigating activities were completed greater than 92 days apart.	No
130206 Milestone	<ol> <li>Rescind         Operations Alert #14;         When to Disconnect         Bus Protection             Relays for Micro-ohm             (Milli-volt drop) tests.         </li> <li>Alert #15 upon             recension of Alert             #14 regarding BPA             Work Standard IV,</li> </ol>	02/06/2013	02/06/2013	1. 130206 Alert-14 Rescission Memo.pdf 2. 130206 Alert-15.pdf	No

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater	Actual Completion Entity Comment on Date Milestone Completion		Extension Request Pending
	Protective Relaying. Removing Differential Relays From Service for a Milli-volt Drop Test (micro-ohm test).	than 3 months apart)			
130506 Placeholder Milestone	BPA had to create this placeholder milestone in order to make the mitigation plan accept the fact that historical mitigating activities were completed greater than 92 days apart.	05/06/2013	05/06/2013	BPA had to create this placeholder milestone in order to make the mitigation plan accept the fact that historical mitigating activities were completed greater than 92 days apart.	No
030806 Placeholder Milestone	BPA had to create this placeholder milestone in order to make the mitigation plan accept the fact that historical mitigating activities were completed greater than 92 days apart.	08/06/2013	08/06/2013	BPA had to create this placeholder milestone in order to make the mitigation plan accept the fact that historical mitigating activities were completed greater than 92 days apart.	No
131101 Placeholder Milestone	BPA had to create this placeholder milestone in order to make the mitigation plan accept the fact that historical mitigating activities were completed greater than 92 days apart.	11/01/2013	11/01/2013 BPA had to create this placeholder milestone in order to make the mitigation plan accept the fact that historical mitigating activities were completed greater than 92 days apart.		No
140201 Placeholder Milestone	BPA had to create this placeholder milestone in order to make the mitigation plan accept the fact that historical mitigating activities were completed greater than 92 days apart.	02/01/2014	02/01/2014	BPA had to create this placeholder milestone in order to make the mitigation plan accept the fact that historical mitigating activities were completed greater than 92 days apart.	No

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
140501 Placeholder Milestone	BPA had to create this placeholder milestone in order to make the mitigation plan accept the fact that historical mitigating activities were completed greater than 92 days apart.	05/01/2014	05/01/2014	BPA had to create this placeholder milestone in order to make the mitigation plan accept the fact that historical mitigating activities were completed greater than 92 days apart.	No
140801 Placeholder Milestone	BPA had to create this placeholder milestone in order to make the mitigation plan accept the fact that historical mitigating activities were completed greater than 92 days apart.	08/01/2014	08/01/2014	BPA had to create this placeholder milestone in order to make the mitigation plan accept the fact that historical mitigating activities were completed greater than 92 days apart.	No
141002 Milestone	Alert #31 upon rescission of Alerts #14 & #15 - Micro- Ohm Tests (MVDT) and Modification to BPA Work Standard IV.A, Protective Relaying	10/02/2014	10/02/2014	141002 Alert-31.pdf	No

Additional Relevant Information

P173

## **Reliability Risk**

## Reliability Risk

While the Mitigation Plan is being implemented, the reliability of the bulk Power System may remain at higher Risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

The reliability risk(s) while the mitigation plan was being implemented was minimal:

• The bus differential relays were only disabled at the discretion of a BPA Dispatcher. Disabling was only granted if conditions permitted. Thus, the Dispatcher, who is charged with ensuring the reliability of the transmission system, would not allow the bus differential relays to be disabled if it was unsafe to do so. o To remedy, a BPA guideline (document, "121219 Bus Diff Outage Guidelines.pdf") for outages of non-redundant bus differential relays was created whereby non-redundant bus differential relays are to be considered Significant Equipment and, therefore, included in the Northwest Power Pool (NWPP) outage coordination process before such relays are taken out of service on a planned basis. BPA Operating Bulletin (OB-19) (document, "120905 OB19 & Memo.pdf") has been revised to include all non-redundant bus differential relays 115kV and above, thus discontinuing the practice of disabling non-redundant bus differential relays for maintenance/testing.

• While performing a Milli-volt drop test (MVDT) or maintenance on a power circuit breaker, bus differential relay(s) could be disabled without being studied, placing BPA in jeopardy of operating in an unknown state. Because of the extensive nature of BPA's 500kV transmission system, delayed cleared faults on lower voltage transmission facilities are not likely to cause significant problems outside the local area. Most transient stability issues associated with bus differential relay outages on the 115kV and 230kV transmission system would be unlikely to cascade.

o To remedy, BPA Operations Alert-14 was rescinded (document, "130206 Alert-14 Rescission) and replaced by BPA Operations Alert-15 (document, "130206 Alert-15.pdf) modifying BPA Work Standard IV. – Protective Relaying. Subsequently, BPA Alert-31 superseded BPA Alerts 14 & 15 (document, "141002 Alert-31.pdf). BPA Alert-31 addressed Micro-Ohm Tests (MVDT) and Modification to BPA Work Standard IV.A, Protective Relaying.

## Prevention

Describe how successful completion of this plan will prevent or minimize the probability further violations of the same or similar reliability standards requirements will occur

Upon completion of this mitigation plan, BPA discontinued the practice of disabling non-redundant bus differential relays on transmission facilities 115kV and above for maintenance and/or testing as well as discontinuing the practice of disabling bus differential relays for MVDT without de-energizing the protected bus.

Describe any action that may be taken or planned beyond that listed in the mitigation plan, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements

n/a

## Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

\* Submits the Mitigation Plan, as presented, to the regional entity for acceptance and approval by NERC, and

\* if applicable, certifies that the Mitigation Plan, as presented, was completed as specified.

Acknowledges:

- 1. I am qualified to sign this mitigation plan on behalf of my organization.
- 2. I have read and understand the obligations to comply with the mitigation plan requirements and ERO remedial action directives as well as ERO documents, including but not limited to, the NERC rules of procedure and the application NERC CMEP.
- 3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Randi Thomas

Title: Manager, System Operations

Authorized On: April 08, 2015

## Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name:Bonneville Power AdministrationNERC Registry ID:NCR05032NERC Violation ID(s):WECC2012011098Mitigated Standard Requirement(s):TOP-004-1 R4.Scheduled Completion as per Accepted Mitigation Plan:October 02, 2014Date Mitigation Plan completed:October 02, 2014WECC Notified of Completion on Date:April 09, 2015

Entity Comment:

Additional Documents						
From	Document Name	Description	Size in Bytes			
Entity	150408 TOP_004 R4 P173 MP Completion_Signed.pdf	PDF portfolio of BPA completion documents for 173, and internal control signatures	2,334,305			

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Randi Thomas

Title: Maager, System Operations

Email: rrthomas@bpa.gov

Phone: 1 (360) 418-2010

Authorized Signature

Date -

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2012011098 Standard/Requirement: TOP-004-1 R4. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 04/08/2015 for the violation of TOP-004-1 R4.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

## Thank you, OATI

CONFIDENTIAL INFORMATION: This email and any attachment(s) contain confidential and/or proprietary information of Open Access Technology International, Inc. Do not copy or distribute without the prior written consent of OATI. If you are not a named recipient to the message, please notify the sender immediately and do not retain the message in any form, printed or electronic.

[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment U**

# Record documents for the violation of MOD-030-2 R3 (WECC2012011142)

**U-1. BPA's Self-Report dated November** 26, 2012;

U-2. BPA's Mitigation Plan designated as WECCMIT008365-2 submitted May 13, 2014;

U-3. BPA's Certification of Mitigation Completion dated August 25, 2015;

U-4. WECC's Verification of Mitigation Completion dated August 21, 2015.

## Self Report - 2012

Entity Name: Bonneville Power Administration Address: 905 NE 11 Avenue Portland OR 97232

NERC Registry ID: NCR05032

Standard Requirement: MOD-030-2 R3

The Transmission Operator shall make available to the Transmission Service Provider a Transmission model to determine Available Flowgate Capability (AFC) that meets the following criteria: [Violation Risk Factor: To Be Determined] [Time Horizon: Operations Planning]

Date of Alleged Violation: April 01, 2011 Date Submitted: September 28, 2012 Self Report Status: Self Report has been submitted

Description and Cause: MOD-030-02 R3. The Transmission Operator shall make available to the Transmission Service Provider a Transmission model to determine Available Flowgate Capability (AFC) that meets the following criteria:

R3.1. Contains generation Facility Ratings, such as generation maximum and minimum output levels, specified by the Generator Owners of the Facilities within the model.

R3.2. Updated at least once per day for AFC calculations for intra-day, next day, and days two through 30.

R3.3. Updated at least once per month for AFC calculations for months two through 13.

R3.4. Contains modeling data and system topology for the Facilities within its Reliability Coordinatorâ€<sup>™</sup>s Area. Equivalent representation of radial lines and Facilities161kV or below is allowed.

R3.5. Contains modeling data and system topology (or equivalent representation) for immediately adjacent and beyond Reliability Coordination Areas.

### 

BPA Transmission Services (BPAT) has an organization in Operations that passes Power Transfer Distribution Factors (PTDFs) to the Transmission Service Provider. These PTDFs incorporate transmission outages into the transmission model. Note, these PTDFs are used in other parts of the country to calculate curtailments when necessary.

The PTDFs are uploaded into BPAâ€<sup>™</sup>s commercial system, webTrans, and are used to recalculate a portion of BPAâ€<sup>™</sup>s Existing Transmission Commitments (ETC). That portion of the ETC therefore includes transmission outages. However, the base ETC calculation that BPA derives from its power flow is not updated to reflect these transmission outages. Thus, BPAâ€<sup>™</sup>s transmission model is not uniformly updated for system topology at least once per day, and BPA now believes that calling PTDFs a model is not the complete way for BPA to interpret this requirement.

## Self Report - 2012

BPAT has gained more experience with the MOD standards and has increased its understanding of the complexity of the requirements. This issue was realized as BPAT was looking at the solutions for its current MOD-030-2 R5 mitigation plan. Technically, this is an expansion of the scope of the earlier MOD-030-2 R3 mitigation plan that BPA filed.

Potential Impact to the Bulk Potential Impact to the Bulk Electric System is Minimal.

Power System:

BPA considered the Power Transfer Distribution Factors (PTDFs, which are technically the result of using the model described in MOD-030-2 R3) as the model. Among entities that use MOD-030-2, it is believed by BPA that those entities calculate their curtailments using PTDFs. So, perhaps, while not technically being a model made available to the TSP to satisfy MOD-030-2 R3, the practice is good enough and reliable enough to calculate curtailments so the impact to the BES is minimal.

Note, MOD-030 is based on forecasts, so to a large extent, the projected value is likely never 100% accurate to minute-by-minute flow. BPAT does not believe the PTDFs have introduced significantly more variability than already exists in the forecasts necessary for MOD-030 in general.

	Additional Comments						
From	Comment	User Name					
Entity	There is no BPA ID# currently associated with this self-report. BPA is submitting a draft mitigation plan for WECC's review prior to finalizing that plan. Once agreed upon, it is BPA's intent to submit a mitigation plan that covers this self-report (and the two (2) others submitted today), but BPA will be working with WECC to determine how to do that, or if BPA's currently existing mitigation plans will be used for the new self-reports.	Tanner Brier					

## Mitigation Plan

## Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
null	WECC2012011142	MOD-030-2 R3	11/26/2012	3
Mitigation Plan Submitted On: May 13, 2014				
Mitigation Plan Accepted On:				
Mitigation Plan Proposed Completion Date: August 17, 2015				
Actual Completion Date of Mitigation Plan:				
Mitigation Plan Certified Complete by BPA On:				
Mitigation Plan Completion Verified by WECC On:				
Mitigation Plan Completed? (Yes/No): No				

## Section A: Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

## Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: Bonneville Power Administration

NERC Compliance Registry ID: NCR05032

Address: 905 NE 11 Avenue Portland OR 97232

B.2 Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Tanner Brier Title: Compliance Specialist Email: thbrier@bpa.gov Phone: 503-230-3649

## Section C: Identification of Reliability Standard Violation(s) Associated with this Mitigation Plan

C.1 This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement	
Requirement Description			
WECC2012011142	04/01/2011	MOD-030-2 R3	
The Transmission Operator shall make available to the Transmission Service Provider a Transmission model to determine Available Flowgate Capability (AFC) that meets the following criteria: [Violation Risk Factor: To Be			
Determined] [Time Horizon: Operations Planning]			

C.2 Brief summary including the cause of the violation(s) and mechanism in which it was identified above:

BPA Transmission Services (BPAT) recently identified compliance gaps in its implementation of MOD-030-02. These gaps were realized as BPAT was looking at the solutions for its current NERC MOD mitigation plans. BPAT has gained more experience with the MOD standards and has increased its understanding of the complexity of the requirements.

BPAT implemented MOD-030-02 on April 1, 2011, based on its understanding and interpretation of the requirements at the time. Since April 1, 2011, BPAT has self-reported on several violations with MOD-030-02. In looking at solutions for its current NERC MOD mitigation plans, BPAT visited PJM Interconnection, Southwest Power Pool, and Tennessee Valley Authority. These benchmarking trips broadened BPAT's understanding of the complexity of the requirements in MOD-030-02, and informed BPAT's knowledge of the processes and automation necessary to sustainably comply with them.

The current compliance gaps identified are in BPATâ€<sup>™</sup>s implementation of Requirements 3, 5 and 6 of MOD-030-02. BPAT believes that it has a gap in implementation of Requirements 3 and 5 because BPAT does not use expected generation or Transmission outages, additions, or retirements to update the Existing Transmission Commitments (ETC) derived from its power flow studies. BPAT has been updating Transmission outages into the transmission model through Power Distribution Factors (PTDFs). These PTDFs are uploaded into BPATâ€<sup>™</sup>s commercial system and used to re-calculate a portion of BPATâ€<sup>™</sup>s ETC.

Because the transmission outages are not incorporated into the ETC determined in the power flow study, BPATâ€<sup>™</sup>s model is not uniformly updated for system topology at least once per day. Although this process is in line with BPATâ€<sup>™</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>™</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirements 3 and 5.

Additionally, BPAT believes it has a compliance gap on Requirement 6 of MOD-030-02 due to a gap in its calculation of ETC for Network Integration Transmission Service. BPATâ€<sup>TM</sup>s ETC calculation does not always include load forecasts for the time period being calculated. BPATâ€<sup>TM</sup>s ETC calculation from the power flow study includes a seasonal load forecast, although BPAT has monthly load forecasts available. BPAT needs automated tools in order to run more frequent power flow studies to reflect the load forecasts for the time period being calculated. BPAT also cannot ensure that it captures all designated network resources that are committed or have the legal obligation to run during the time period being calculated in its power flow ETC studies. Although this process is in line with BPATâ€<sup>TM</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>TM</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirement 6.

In some cases, the above gaps represent work that BPAT is not currently doing and that is not presently assigned to any organization or individual across the organization. These gaps were realized as BPAT was working on solutions for its current NERC MOD mitigation plans and with the benefit of BPAT's expanded experience with MOD-030-02 requirements. BPAT now recognizes that, in order to perform the calculations using consistent models and with the frequency and data granularity required by the MODs, BPAT will need dedicated staff, a process re-design and automated tools. The goal of this mitigation plan is to holistically solve the organizational, process and automation gaps that are at the root cause of

BPAT's compliance violations on MOD-030-02. Addressing these items will allow BPAT to close the gaps with Requirements 3, 5 and 6, as well to ensure sustainable compliance with MOD-030-02.

BPAT believes that, while it has not presently identified specific violations with the other requirements in MOD-030-02, filing a blanket mitigation plan on MOD-030-02 is prudent. The MOD-030-02 gaps prevent BPAT from ensuring compliance with the other requirements in MOD-030-02. BPAT will remain at risk of recurring violations on the other requirements until the organizational, process, and automated tool gaps can be addressed. This blanket plan allows BPAT and WECC to reduce their administrative burden of managing individual self-reports each time a new compliance gap is identified, and allows BPAT to focus on holistically rebuilding our approach to MOD-030-02 compliance.

Update on 5/12/2014

BPA has concluded that complying with MOD-029 rather than MOD-030 is a more appropriate choice given our transmission network, regional data sharing or availability, and certain aspects of the MOD-030 standard. Additionally, BPA understands that its current process for uploading its Existing Transmission Commitments to its commercial systems is not in violation of MOD-001, R7. As a result, the remaining 18 months of milestones for BPA's 36 month mitigation plan on MOD-030 focus on tasks required to transition BPA's current MOD-030 network flowgates to MOD-029 paths.

For this transition, BPA has identified tasks in two focus areas:

1. Addition of new ATC Paths

2. Process controls and documentation

## Addition of new ATC Paths

BPA identifies all of its control area to control area interconnections as ATC Paths and has chosen either MOD-029 or MOD-030 as the methodology for each interconnection. BPA has not established Flowgates for the control area to control area interconnections for which BPA has chosen MOD-030 due to language in MOD-030 R2.1.1.3 and R2.1.2.3 that states "lf any limiting element is kept within its limit for its associated worst Contingency by operating within the limits of another Flowgate, then no new Flowgate needs to be established for such limiting elements or Contingencies.†BPA's current MOD-030 network flowgates and MOD-029 paths protect for the control area to control area interconnections for which BPA is using MOD-030. Therefore, BPA concluded that additional Flowgates for these interconnections were not required under MOD-030.

BPA will be transitioning its MOD-030 network flowgates to MOD-029 paths. Since MOD-029 does not contain language similar to MOD-030 R2.1.1.3 and R2.1.2.3, BPA needs to analyze whether additional ATC Paths are required to account for the control area to control area interconnections for which MOD-030 is currently used. If new ATC Paths are needed, BPA will complete the studies and post the new ATC Paths and calculations in its OASIS.

### Process controls and documentation

BPA will assess current process controls and enhance these controls if needed. The documentation in the ATCID will be updated to reflect the transition from MOD-030 to MOD-029.

C.3 Provide any relevant information regarding the identification of the violation(s) associated with this Mitigation Plan:

BPA ID P174r

## Section D: Details of Proposed Mitigation Plan

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

In order to close the gaps identified above, BPAT has determined that changes to its organizational structure and Available Flowgate Capability calculation processes are needed, in addition to automated tools. This mitigation plan outlines the milestones needed to accomplish these changes so that the identified gaps can be closed.

BPAT believes that it will need 36 months to make the appropriate organizational changes, to close calculation and data gaps, and to automate the resulting processes. Since this mitigation plan covers a significant process redesign, BPAT feels that the early milestone results will drive the details of the later milestones and therefore is submitting high level actions for the latter half of this mitigation plan at this time. BPAT will submit final milestones no later than 2/15/2014. This work will result in sustainable compliance with MOD-001-1 and MOD-030-02.

1. Gain Transmission Executive approval to form an Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

2. Staff Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

3. Identify roles and responsibilities of Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

4. Identify and select data sources for base cases, including information on system topology, load and generation information

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 5, 6, 7

5. Design the process for collecting data necessary to produce monthly power flow studies

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 5, 6, 7

6. Design a process for keeping the assumptions on system topology aligned between the Total Flowgate Capability (TFC), ETC and PTDF calculations in the power flow studies

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 4, 5, 6, 7

7. Design the process for creating more frequent power flow cases Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R2, 5, 6, 7 8. Design a process for aligning the webTrans ETC with more frequent updates of the power flow ETC Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R3, 4, 5, 6, 7, 8, 9, 10, 11 9. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in webTrans Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R3, 4, 5, 6, 7, 8, 9, 10, 11 10. Receive Agency Prioritization Steering Committee funding approval for automation initiatives needed to build more frequent power flow cases, based on the above process re-design Facilitates compliance with all requirements of MOD-030-02, but especially: MOD-001-01, R7 MOD-030-02, R3, 5, 6, 7 11. Deliver final milestones for remaining 18 months of this mitigation plan. 12. Develop preliminary list of ATC Paths that may need to be added under MOD-29 13. Finalize list of ATC Paths, if any, that need to be added under MOD-29 14. If new ATC Paths need to be added, design the process for ETC calculations for the new ATC Paths 15. If new ATC Paths need to be added, design the process for TTC calculations for the new ATC Paths 16. Analyze to determine whether new or further developed processes and internal process controls are required 17. If new ATC Paths need to be added, implement new ATC Paths in OASIS 18. Implement new or further developed processes and internal process controls 19. Update the ATCID, send updated ATCID to entities specified in MOD-001 R4 and post the updated ATCID on BPAâ€<sup>™</sup>s ATC Methodology webpage

D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: August 17, 2015

D.3 Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
121115 Milestone	1. Gain Transmission Executive approval to form an Energy Delivery Modeling group	11/15/2012	11/15/2012
130215 Milestone	<ol> <li>Staff Energy Delivery Modeling group</li> <li>Identify roles and responsibilities of Energy Delivery Modeling group</li> </ol>	02/15/2013	02/15/2013
130515 Milestone	4. Identify and select data sources for seed cases, including information on system topology, load and generation	05/15/2013	05/15/2013

Milestone Astivity	Description	*Proposed Completion Date (Shall not be greater	Actual Completion
Milestone Activity	Description	than 3 months apart)	Date
	information		
	5. Design the process for collecting data necessary to produce monthly power flow cases		
130815 Milestone	<ul> <li>6. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in the power flow studies</li> <li>7 Design the process for creating more</li> </ul>	08/15/2013	08/15/2013
	frequent power flow cases		
131115 Milestone	8. Design a process for aligning the webTrans ETC with more frequent updates of the power flow ETC	11/15/2013	11/15/2013
	9. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in webTrans		
140215 Milestone	10. Receive Agency Prioritization Steering Committee funding approval for automation initiatives needed to build more frequent power flow cases, based on the above process re-design	02/14/2014	02/14/2014
140328 Milestone	11. Deliver milestones for remaining 18 months of this mitigation plan	03/28/2014	03/28/2014
140515 Milestone	12. Develop preliminary list of ATC Paths that may need to be added under MOD-29	05/15/2014	
140815 Milestone	13. Finalize list of ATC Paths, if any, that need to be added under MOD-29	08/15/2014	
141115 Milestone	14. If new ATC Paths need to be added, design the process for ETC calculations for the new ATC Paths	11/15/2014	

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
150215 Milestone	15. If new ATC Paths need to be added, design the process for TTC calculations for the new ATC Paths	02/15/2015	
150515 Milestone	16. Analyze to determine whether new or further developed processes and internal process controls are required	05/15/2015	
150815 Milestone	<ul> <li>17. If new ATC Paths need to be added, implement new ATC Paths in OASIS</li> <li>18. Implement new or further developed processes and internal process controls</li> <li>19. Update the ATCID, send updated ATCID to entities specified in MOD-001 R4 and post the updated ATCID on BPA's ATC Methodology webpage</li> </ul>	08/15/2015	

## D.4 Additional Relevant Information (Optional)

## Section E: Interim and Future Reliability Risk

## E.1 Abatement of Interim BPS Reliability Risk

While your organization is implementing the Mitigation Plan proposed in Section D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

The impact to the BPS is minimal.

BPAT does not believe that the above violations have introduced significantly more variability than already exists in the load and generation forecasts that are used to perform calculations for BPA's internal paths.

## E.2 Prevention of Future BPS Reliability Risk

Describe how successful completion of the Mitigation Plan as laid out in Section D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

Upon project completion, BPAT will transition its MOD-030 network flowgates to MOD-029 paths. BPA believes that this transition will provide for sustainable compliance with the NERC ATC MODs.

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Section D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Section C.1, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

## Section F: Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

(a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and

(b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and

(c) Acknowledges:

- 1. I am VP, Planning & Asset Management, Transmission Services of Bonneville Power Administration
- 2. I am qualified to sign this Mitigation Plan on behalf of Bonneville Power Administration
- 3. I have read and understand Bonneville Power Administration's obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
- 4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
- 5. Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authorities in Canada.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Hardev Juj

Title: VP, Planning & Asset Management, Transmission Services

Authorized On: May 13, 2014

## Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: Bonneville Power Administration NERC Registry ID: NCR05032 NERC Violation ID(s): WECC2012011142 Mitigated Standard Requirement(s): MOD-030-2 R3. Scheduled Completion as per Accepted Mitigation Plan: August 17, 2015 Date Mitigation Plan completed: August 10, 2015 WECC Notified of Completion on Date: August 10, 2015

Entity Comment: None.

Additional Comments			
From	Comment	User Name	
Entity	This is part of BPA's holistic MOD-030 mitigation plan. BPA ID P174	Brent Read	

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	121108 MOD-030-02 ALL Signed Mitigation Plan P174.pdf	Signed mitigation plan document.	779,103
Entity	140328 MOD-020-02 ALL Signed Mitigation Plan P174r.pdf	Signed revised mitigation plan.	13,748,934
Entity	140513 MOD-030 to MOD-029 revised mitigation plan signed.pdf		215,508
Entity	150810 BPA P174 MOD-030- 02 R1-R10 Mitigation Plan Completion Package.pdf	BPA's Mitigation Completion Packet. All supporting evidence is attached to this PDF. This packet also contains the approval signature of BPA's Acting Reliability Officer: Jeff Cook.	14,750,719

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Jeff Cook

Title: Acting - Vice President, Planning & Asset Management

Email: jwcook@bpa.gov

Authorized Signature

Date \_\_\_\_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2012011142 Standard/Requirement: MOD-030-2 R3. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/09/2015 for the violation of MOD-030-2 R3.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

## Thank you, OATI

CONFIDENTIAL INFORMATION: This email and any attachment(s) contain confidential and/or proprietary information of Open Access Technology International, Inc. Do not copy or distribute without the prior written consent of OATI. If you are not a named recipient to the message, please notify the sender immediately and do not retain the message in any form, printed or electronic.

[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment V**

# Record documents for the violation of MOD-030-2 R6 (WECC2012011144)

V-1. BPA's Self-Report dated September 28, 2012;

V-2. BPA's Mitigation Plan designated as WECCMIT008368-1 submitted July 21, 2014;

V-3. BPA's Certification of Mitigation Completion dated August 25, 2015;

V-4. WECC's Verification of Mitigation Completion dated August 21, 2015.

## Self Report - 2012

Entity Name: Bonneville Power Administration Address: 905 NE 11 Avenue

Portland OR 97232

NERC Registry ID: NCR05032

Standard Requirement: MOD-030-2 R6

When calculating the impact of ETC for firm commitments (ETCFi) for all time periods for a Flowgate, the Transmission Service Provider shall sum the following: [Violation Risk Factor: To Be Determined] [Time Horizon: Operations Planning]

Date of Alleged Violation: April 01, 2011 Date Submitted: September 28, 2012 Self Report Status: Self Report has been submitted

## Description and Cause: MOD-030-02 R6. When calculating the impact of ETC for firm commitments (ETCFi) for all time periods for a Flowgate, the Transmission Service Provider shall sum the following:

R6.1. The impact of firm Network Integration Transmission Service, including the impacts of generation to load, in the model referenced in R5.2 for the Transmission Service Providerâ€<sup>™</sup>s area, based on:

R6.1.1. Load forecast for the time period being calculated, including Native Load and Network Service load

R6.1.2. Unit commitment and Dispatch Order, to include all designated network resources and other resources that are committed or have the legal obligation to run as specified in the Transmission Service Provider's ATCID.

### 

BPA Transmission Services (BPAT) sums the impacts of firm Network Integration Transmission Service, including the impacts of generation to load, in the calculation of ETC for firm commitments. However, this summation does not always include load forecasts for the time period being calculated, and BPAT cannot ensure that it captures all designated network resources that are committed or have the legal obligation to run during the time period being calculated in its powerflow ETC studies.

BPAT has gained more experience with the MOD standards and has increased its understanding of the complexity of the requirements. This issue was realized as BPAT was looking at the solutions for its current MOD-030-2 R6 mitigation plan, of which this is an expansion of scope.

Potential Impact to the Bulk Potential Impact to the Bulk Electric System is Minimal.

#### Power System:

Even though the correct timeframe loads are not used and all designated network resources are not included in the powerflow ETC studies, BPAT does use load values that exist (currently 1-in-2 non-coincident seasonal peak loads). So, BPA's calculation is almost always more conservative than what actually exists (unless the day being calculated is a 1in-20 or 1-in-10 day) and underestimates the AFC available. The potential impact would be
#### Self Report - 2012

to calculate either more or less ATC than what is available (mostly less). Note, MOD-030 is based on forecasts, so to a large extent, the projected value is likely never 100% accurate to minute-by-minute flow. BPAT does not believe the load and designated network resource issue has introduced significantly more variability than already exists in the forecasts necessary for MOD-030 in general.

Additional Comments			
From	Comment	User Name	
Entity	There is no BPA ID# currently associated with this self-report. BPA is submitting a draft mitigation plan for WECC's review prior to finalizing that plan. Once agreed upon, it is BPA's intent to submit a mitigation plan that covers this self-report (and the two (2) others submitted today), but BPA will be working with WECC to determine how to do that, or if BPA's currently existing mitigation plans will be used for the new self-reports.	Tanner Brier	

# Mitigation Plan

## Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version	
null	WECC2012011144	MOD-030-2 R6	11/27/2012	2	
	Mitigation Plan Subm	itted On: July 21, 2014			
	Mitigation Plan Accepted On:				
Mitigation Plan Proposed Completion Date: August 17, 2015					
Actual Completion Date of Mitigation Plan:					
Mitigation Plan Certified Complete by BPA On:					
Mitigation Plan Completion Verified by WECC On:					
Mitigation Plan Completed? (Yes/No): No					

### Section A: Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

#### Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: Bonneville Power Administration

NERC Compliance Registry ID: NCR05032

Address: 905 NE 11 Avenue Portland OR 97232

B.2 Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Tanner Brier Title: Compliance Specialist Email: thbrier@bpa.gov Phone: 503-230-3649

#### Section C: Identification of Reliability Standard Violation(s) Associated with this Mitigation Plan

C.1 This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement	
Requirement Description			
WECC2012011144	04/01/2011	MOD-030-2 R6	
When calculating the impact of ETC for firm commitments (ETCFi) for all time periods for a Flowgate, the Transmission Service Provider shall sum the following: [Violation Risk Factor: To Be Determined] [Time Horizon: Operations Planning]			

C.2 Brief summary including the cause of the violation(s) and mechanism in which it was identified above:

BPA Transmission Services (BPAT) recently identified compliance gaps in its implementation of MOD-030-02. These gaps were realized as BPAT was looking at the solutions for its current NERC MOD mitigation plans. BPAT has gained more experience with the MOD standards and has increased its understanding of the complexity of the requirements.

BPAT implemented MOD-030-02 on April 1, 2011, based on its understanding and interpretation of the requirements at the time. Since April 1, 2011, BPAT has self-reported on several violations with MOD-030-02. In looking at solutions for its current NERC MOD mitigation plans, BPAT visited PJM Interconnection, Southwest Power Pool, and Tennessee Valley Authority. These benchmarking trips broadened BPAT's understanding of the complexity of the requirements in MOD-030-02, and informed BPAT's knowledge of the processes and automation necessary to sustainably comply with them.

The current compliance gaps identified are in BPATâ€<sup>™</sup>s implementation of Requirements 3, 5 and 6 of MOD-030-02. BPAT believes that it has a gap in implementation of Requirements 3 and 5 because BPAT does not use expected generation or Transmission outages, additions, or retirements to update the Existing Transmission Commitments (ETC) derived from its power flow studies. BPAT has been updating Transmission outages into the transmission model through Power Distribution Factors (PTDFs). These PTDFs are uploaded into BPATâ€<sup>™</sup>s commercial system and used to re-calculate a portion of BPATâ€<sup>™</sup>s ETC.

Because the transmission outages are not incorporated into the ETC determined in the power flow study, BPATâ€<sup>™</sup>s model is not uniformly updated for system topology at least once per day. Although this process is in line with BPATâ€<sup>™</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>™</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirements 3 and 5.

Additionally, BPAT believes it has a compliance gap on Requirement 6 of MOD-030-02 due to a gap in its calculation of ETC for Network Integration Transmission Service. BPATâ€<sup>TM</sup>s ETC calculation does not always include load forecasts for the time period being calculated. BPATâ€<sup>TM</sup>s ETC calculation from the power flow study includes a seasonal load forecast, although BPAT has monthly load forecasts available. BPAT needs automated tools in order to run more frequent power flow studies to reflect the load forecasts for the time period being calculated. BPAT also cannot ensure that it captures all designated network resources that are committed or have the legal obligation to run during the time period being calculated in its power flow ETC studies. Although this process is in line with BPATâ€<sup>TM</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>TM</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirement 6.

In some cases, the above gaps represent work that BPAT is not currently doing and that is not presently assigned to any organization or individual across the organization. These gaps were realized as BPAT was working on solutions for its current NERC MOD mitigation plans and with the benefit of BPAT's expanded experience with MOD-030-02 requirements. BPAT now recognizes that, in order to perform the calculations using consistent models and with the frequency and data granularity required by the MODs, BPAT will need dedicated staff, a process re-design and automated tools. The goal of this mitigation plan is to holistically solve the organizational, process and automation gaps that are at the root cause of

BPAT's compliance violations on MOD-030-02. Addressing these items will allow BPAT to close the gaps with Requirements 3, 5 and 6, as well to ensure sustainable compliance with MOD-030-02.

BPAT believes that, while it has not presently identified specific violations with the other requirements in MOD-030-02, filing a blanket mitigation plan on MOD-030-02 is prudent. The MOD-030-02 gaps prevent BPAT from ensuring compliance with the other requirements in MOD-030-02. BPAT will remain at risk of recurring violations on the other requirements until the organizational, process, and automated tool gaps can be addressed. This blanket plan allows BPAT and WECC to reduce their administrative burden of managing individual self-reports each time a new compliance gap is identified, and allows BPAT to focus on holistically rebuilding our approach to MOD-030-02 compliance.

#### Update on 5/12/2014

BPA has concluded that complying with MOD-029 rather than MOD-030 is a more appropriate choice given our transmission network, regional data sharing or availability, and certain aspects of the MOD-030 standard. Additionally, BPA understands that its current process for uploading its Existing Transmission Commitments to its commercial systems is not in violation of MOD-001, R7. As a result, the remaining 18 months of milestones for BPA's 36 month mitigation plan on MOD-030 focus on tasks required to transition BPA's current MOD-030 network flowgates to MOD-029 paths.

For this transition, BPA has identified tasks in two focus areas:

- 1. Addition of new ATC Paths
- 2. Process controls and documentation

#### Addition of new ATC Paths

BPA identifies all of its control area to control area interconnections as ATC Paths and has chosen either MOD-029 or MOD-030 as the methodology for each interconnection. BPA has not established Flowgates for the control area to control area interconnections for which BPA has chosen MOD-030 due to language in MOD-030 R2.1.1.3 and R2.1.2.3 that states "lf any limiting element is kept within its limit for its associated worst Contingency by operating within the limits of another Flowgate, then no new Flowgate needs to be established for such limiting elements or Contingencies.†BPA's current MOD-030 network flowgates and MOD-029 paths protect for the control area to control area interconnections for which BPA is using MOD-030. Therefore, BPA concluded that additional Flowgates for these interconnections were not required under MOD-030.

BPA will be transitioning its MOD-030 network flowgates to MOD-029 paths. Since MOD-029 does not contain language similar to MOD-030 R2.1.1.3 and R2.1.2.3, BPA needs to analyze whether additional ATC Paths are required to account for the control area to control area interconnections for which MOD-030 is currently used. If new ATC Paths are needed, BPA will complete the studies and post the new ATC Paths and calculations in its OASIS.

#### Process controls and documentation

BPA will assess current process controls and enhance these controls if needed. The documentation in the ATCID will be updated to reflect the transition from MOD-030 to MOD-029.

C.3 Provide any relevant information regarding the identification of the violation(s) associated with this Mitigation Plan:

BPA ID P174

#### Section D: Details of Proposed Mitigation Plan

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

In order to close the gaps identified above, BPAT has determined that changes to its organizational structure and Available Flowgate Capability calculation processes are needed, in addition to automated tools. This mitigation plan outlines the milestones needed to accomplish these changes so that the identified gaps can be closed.

BPAT believes that it will need 36 months to make the appropriate organizational changes, to close calculation and data gaps, and to automate the resulting processes. Since this mitigation plan covers a significant process redesign, BPAT feels that the early milestone results will drive the details of the later milestones and therefore is submitting high level actions for the latter half of this mitigation plan at this time. BPAT will submit final milestones no later than 2/15/2014. This work will result in sustainable compliance with MOD-001-1 and MOD-030-02.

1. Gain Transmission Executive approval to form an Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

2. Staff Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

3. Identify roles and responsibilities of Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

4. Identify and select data sources for base cases, including information on system topology, load and generation information

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 5, 6, 7

5. Design the process for collecting data necessary to produce monthly power flow studies

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 5, 6, 7

6. Design a process for keeping the assumptions on system topology aligned between the Total Flowgate Capability (TFC), ETC and PTDF calculations in the power flow studies

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 4, 5, 6, 7

7. Design the process for creating more frequent power flow cases Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R2, 5, 6, 7 8. Design a process for aligning the webTrans ETC with more frequent updates of the power flow ETC Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R3, 4, 5, 6, 7, 8, 9, 10, 11 9. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in webTrans Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R3, 4, 5, 6, 7, 8, 9, 10, 11 10. Receive Agency Prioritization Steering Committee funding approval for automation initiatives needed to build more frequent power flow cases, based on the above process re-design Facilitates compliance with all requirements of MOD-030-02, but especially: MOD-001-01, R7 MOD-030-02, R3, 5, 6, 7 11. Deliver final milestones for remaining 18 months of this mitigation plan. 12. Develop preliminary list of ATC Paths that may need to be added under MOD-29 13. Finalize list of ATC Paths, if any, that need to be added under MOD-29 14. If new ATC Paths need to be added, design the process for ETC calculations for the new ATC Paths 15. If new ATC Paths need to be added, design the process for TTC calculations for the new ATC Paths 16. Analyze to determine whether new or further developed processes and internal process controls are required 17. If new ATC Paths need to be added, implement new ATC Paths in OASIS 18. Implement new or further developed processes and internal process controls 19. Update the ATCID, send updated ATCID to entities specified in MOD-001 R4 and post the updated ATCID on BPA's ATC Methodology webpage

D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: August 17, 2015

D.3 Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
121115 Milestone	1. Gain Transmission Executive approval to form an Energy Delivery Modeling group	11/15/2012	11/15/2012
130215 Milestone	<ol> <li>Staff Energy Delivery Modeling group</li> <li>Identify roles and responsibilities of Energy Delivery Modeling group</li> </ol>	02/15/2013	02/15/2013
130515 Milestone	4. Identify and select data sources for seed cases, including information on system topology, load and generation information	05/15/2013	05/15/2013

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
	5. Design the process for collecting data necessary to produce monthly power flow cases		
130815 Milestone	6. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in the power flow studies	08/15/2013	08/15/2013
	7. Design the process for creating more frequent power flow cases		
131115 Milestone	<ul> <li>8. Design a process for aligning the webTrans ETC with more frequent updates of the power flow ETC</li> <li>9. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and</li> </ul>	11/15/2013	11/15/2013
	PTDF calculations in webTrans		
140215 Milestone	10. Receive Agency Prioritization Steering Committee funding approval for automation initiatives needed to build more frequent power flow cases, based on the above process re-design	02/15/2014	02/15/2014
140328 Milestone	11. Deliver final milestones for remaining 18 months of this mitigation plan.	03/28/2014	03/28/2014
140515 Milestone	12. Progress update to WECC on bullets a and b under Step 11	05/15/2014	05/15/2014
140815 Milestone	13. Finalize list of ATC Paths, if any, that need to be added under MOD-29	08/15/2014	
141115 Milestone	14. If new ATC Paths need to be added, design the process for ETC calculations for the new ATC Paths	11/15/2014	
150215 Milestone	15. If new ATC Paths need to be added, design the process for TTC calculations for the new ATC Paths	02/15/2015	
150515 Milestone	16. Analyze to determine whether new or further developed processes and internal process controls are required	05/15/2015	

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
150815 Milestone	<ul> <li>17. If new ATC Paths need to be added, implement new ATC Paths in OASIS</li> <li>18. Implement new or further developed processes and internal process controls</li> <li>19. Update the ATCID, send updated ATCID to entities specified in MOD-001 R4 and post the updated ATCID on BPA's ATC Methodology webpage</li> </ul>	08/15/2015	

#### D.4 Additional Relevant Information (Optional)

#### Section E: Interim and Future Reliability Risk

E.1 Abatement of Interim BPS Reliability Risk

While your organization is implementing the Mitigation Plan proposed in Section D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

The impact to the BPS is minimal.

MOD-030-02 is based on load and generation forecasts, so to a large extent, the projected values across the network flowgates are likely never 100% accurate compared to minute-by-minute flow. BPAT does not believe that the above violations have introduced significantly more variability than already exists in the load and generation forecasts necessary for MOD-030-02 in general.

E.2 Prevention of Future BPS Reliability Risk

Describe how successful completion of the Mitigation Plan as laid out in Section D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

Upon project completion, BPAT will transition its MOD-030 network flowgates to MOD-029 paths. BPA believes that this transition will provide for sustainable compliance with the NERC ATC MODs.

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Section D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Section C.1, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

#### Section F: Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

(a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and

(b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and

(c) Acknowledges:

- 1. I am Vice President, Planning & Asset Management, Transmission of Bonneville Power Administration
- 2. I am qualified to sign this Mitigation Plan on behalf of Bonneville Power Administration
- 3. I have read and understand Bonneville Power Administration's obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
- 4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
- 5. Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authorities in Canada.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Hardev Juj

Title: Vice President, Planning & Asset Management, Transmission

Authorized On: May 13, 2014

## Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: Bonneville Power Administration NERC Registry ID: NCR05032 NERC Violation ID(s): WECC2012011144 Mitigated Standard Requirement(s): MOD-030-2 R6. Scheduled Completion as per Accepted Mitigation Plan: August 17, 2015 Date Mitigation Plan completed: August 10, 2015 WECC Notified of Completion on Date: August 10, 2015

Entity Comment: Please see attached completion packet for supporting evidence

	Additional Comments			
From	Comment	User Name		
Entity	This is part of BPA's holistic MOD-030 mitigation plan. BPA ID P174	Rachael Ferrin		
Entity	Lindsay Wickizer at BPA and Brent Read at WECC were working on this in the spring of 2014. At that time, BPA decided to switch from MOD-030 to MOD-029. Instead of updating all cases at once, and WECC having to reject them if they were unsatisfactory, Lindsay and Brent decided to update MOD-030 R3 only, and the remainder if WECC accepted the plan. While WECC was reviewing the plan, WECC rejected BPA's self-report on MOD-001 R7. BPA then needed to revise the mitigation plan to remove steps that addressed the MOD-001 R7 mitigation plan. As such, the revised steps were submitted to WECC prior to March 28, 2014, and then revised and re-submitted (in the same test-case manner on MOD-030 R3) in May. WECC accepted the plan in June 2014. BPA completed the milestones as required by its plan, but was unable to upload them in CDMS, because the plans had not been updated yet. This plan was originally uploaded to MOD-030 R3, as the sample requirement for WECC's review on 5-13-14.	Tanner Brier		

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	121108 MOD-030-02 ALL Signed Mitigation Plan P174.pdf	Signed mitigation plan document.	779,103
Entity	140513 MOD-030 r1, r2, r3, r4, r6, r7, r8, r9, r10 revised	revised mitigation plan	215,508

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	revised mitigation plan signed.pdf	revised mitigation plan	215,508
Entity	150810 BPA P174 MOD-030- 02 R1-R10 Mitigation Plan Completion Package.pdf	BPA's Mitigation Completion Packet. All supporting evidence is attached to this PDF. This packet also contains the approval signature of BPA's Acting Reliability Officer: Jeff Cook.	14,750,719

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Jeff Cook

Title: Acting - Vice President, Planning & Asset Management

Email: jwcook@bpa.gov

Phone: 1 (360) 418-8981

Authorized Signature

Date \_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2012011144 Standard/Requirement: MOD-030-2 R6. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/09/2015 for the violation of MOD-030-2 R6.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

#### Thank you, OATI

CONFIDENTIAL INFORMATION: This email and any attachment(s) contain confidential and/or proprietary information of Open Access Technology International, Inc. Do not copy or distribute without the prior written consent of OATI. If you are not a named recipient to the message, please notify the sender immediately and do not retain the message in any form, printed or electronic.

[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment W**

# Record documents for the violation of MOD-030-2 R1 (WECC2012011386)

W-1. BPA's Self-Report dated November 12, 2012;

W-2. BPA's Mitigation Plan designated as WECCMIT008363-1 submitted July 21, 2014;

W-3. BPA's Certification of Mitigation Completion dated August 25, 2015;

W-4. WECC's Verification of Mitigation Completion dated August 21, 2015.

#### Self Report - 2012

Entity Name: Bonneville Power Administration Address: 905 NE 11 Avenue

Portland OR 97232

NERC Registry ID: NCR05032

Standard Requirement: MOD-030-2 R1

The Transmission Service Provider shall include in its "Available Transfer Capability Implementation Document" (ATCID): [Violation Risk Factor: To Be Determined] [Time Horizon: Operations Planning]

Date of Alleged Violation: April 01, 2011 Date Submitted: November 12, 2012 Self Report Status: Self Report has been submitted

Description and Cause: BPA Transmission Services (BPAT) recently identified compliance gaps in its implementation of MOD-030-02. These gaps were realized as BPAT was looking at the solutions for its current NERC MOD mitigation plans. BPAT has gained more experience with the MOD standards and has increased its understanding of the complexity of the requirements.

BPAT implemented MOD-030-02 on April 1, 2011, based on its understanding and interpretation of the requirements at the time. Since April 1, 2011, BPAT has self-reported on several violations with MOD-030-02. In looking at solutions for its current NERC MOD mitigation plans, BPAT visited PJM Interconnection, Southwest Power Pool, and Tennessee Valley Authority. These benchmarking trips broadened BPAT's understanding of the complexity of the requirements in MOD-030-02, and informed BPAT's knowledge of the processes and automation necessary to sustainably comply with them.

The current compliance gaps identified are in BPATâ€<sup>™</sup>s implementation of Requirements 3, 5 and 6 of MOD-030-02. BPAT believes that it has a gap in implementation of Requirements 3 and 5 because BPAT does not use expected generation or Transmission outages, additions, or retirements to update the Existing Transmission Commitments (ETC) derived from its power flow studies. BPAT has been updating Transmission outages into the transmission model through Power Distribution Factors (PTDFs). These PTDFs are uploaded into BPATâ€<sup>™</sup>s commercial system and used to re-calculate a portion of BPATâ€<sup>™</sup>s ETC.

Because the transmission outages are not incorporated into the ETC determined in the power flow study, BPATâ€<sup>™</sup>s model is not uniformly updated for system topology at least once per day. Although this process is in line with BPATâ€<sup>™</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>™</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirements 3 and 5.

Additionally, BPAT believes it has a compliance gap on Requirement 6 of MOD-030-02 due to a gap in its calculation of ETC for Network Integration Transmission Service. BPAT's ETC calculation does not always include load forecasts for the time period being calculated. BPAT's ETC calculation from the power flow study includes a seasonal load forecast, although BPAT has monthly load forecasts available. BPAT needs automated tools in order to run more frequent power flow studies to reflect the load forecasts for the time period being calculated. BPAT also cannot ensure that it captures all designated network resources that

#### Self Report - 2012

are committed or have the legal obligation to run during the time period being calculated in its power flow ETC studies. Although this process is in line with BPAT's initial interpretation of MOD-030-02, BPAT's expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirement 6.

In some cases, the above gaps represent work that BPAT is not currently doing and that is not presently assigned to any organization or individual across the organization. These gaps were realized as BPAT was working on solutions for its current NERC MOD mitigation plans and with the benefit of BPATâ€<sup>™</sup>s expanded experience with MOD-030-02 requirements. BPAT now recognizes that, in order to perform the calculations using consistent models and with the frequency and data granularity required by the MODs, BPAT will need dedicated staff, a process re-design and automated tools. The goal of this mitigation plan is to holistically solve the organizational, process and automation gaps that are at the root cause of BPATâ€<sup>™</sup>s compliance violations on MOD-030-02. Addressing these items will allow BPAT to close the gaps with Requirements 3, 5 and 6, as well to ensure sustainable compliance with MOD-030-02.

BPAT believes that, while it has not presently identified specific violations with the other requirements in MOD-030-02, filing a blanket mitigation plan on MOD-030-02 is prudent. The MOD-030-02 gaps prevent BPAT from ensuring compliance with the other requirements in MOD-030-02. BPAT will remain at risk of recurring violations on the other requirements until the organizational, process, and automated tool gaps can be addressed. This blanket plan allows BPAT and WECC to reduce their administrative burden of managing individual self-reports each time a new compliance gap is identified, and allows BPAT to focus on holistically rebuilding our approach to MOD-030-02 compliance.

Potential Impact to the Bulk Potential Impact to the Bulk Electric System is Minimal. Power System:

> BPAT is working on improving its implementation of MOD-030. Note, MOD-030 is based on forecasts, so to a large extent, the projected value is likely never 100% accurate to minuteby-minute flow. BPAT does not believe the issue with this requirement has introduced significantly more variability than already exists in the forecasts necessary for MOD-030 in general.

Additional Comments		
From	Comment	User Name
Entity	This is part of BPA's mitigation plan for MOD-030-02.	Tanner Brier

# Mitigation Plan

## Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version	
null	WECC2012011386	MOD-030-2 R1	01/02/2013	2	
	Mitigation Plan Submi	itted On: July 21, 2014			
	Mitigation Plan Accepted On:				
Mitigation Plan Proposed Completion Date: August 17, 2015					
Actual Completion Date of Mitigation Plan:					
Mitigation Plan Certified Complete by BPA On:					
Mitigation Plan Completion Verified by WECC On:					
Mitigation Plan Completed? (Yes/No): No					

### Section A: Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

#### Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: Bonneville Power Administration

NERC Compliance Registry ID: NCR05032

Address: 905 NE 11 Avenue Portland OR 97232

B.2 Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Tanner Brier Title: Compliance Specialist Email: thbrier@bpa.gov Phone: 503-230-3649

#### Section C: Identification of Reliability Standard Violation(s) Associated with this Mitigation Plan

#### C.1 This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement	
Requirement Description			
WECC2012011386	04/01/2011	MOD-030-2 R1	
The Transmission Service Provider shall include in its "Available Transfer Capability Implementation Document" (ATCID): [Violation Risk Factor: To Be Determined] [Time Horizon: Operations Planning]			

C.2 Brief summary including the cause of the violation(s) and mechanism in which it was identified above:

BPA Transmission Services (BPAT) recently identified compliance gaps in its implementation of MOD-030-02. These gaps were realized as BPAT was looking at the solutions for its current NERC MOD mitigation plans. BPAT has gained more experience with the MOD standards and has increased its understanding of the complexity of the requirements.

BPAT implemented MOD-030-02 on April 1, 2011, based on its understanding and interpretation of the requirements at the time. Since April 1, 2011, BPAT has self-reported on several violations with MOD-030-02. In looking at solutions for its current NERC MOD mitigation plans, BPAT visited PJM Interconnection, Southwest Power Pool, and Tennessee Valley Authority. These benchmarking trips broadened BPAT's understanding of the complexity of the requirements in MOD-030-02, and informed BPAT's knowledge of the processes and automation necessary to sustainably comply with them.

The current compliance gaps identified are in BPATâ€<sup>™</sup>s implementation of Requirements 3, 5 and 6 of MOD-030-02. BPAT believes that it has a gap in implementation of Requirements 3 and 5 because BPAT does not use expected generation or Transmission outages, additions, or retirements to update the Existing Transmission Commitments (ETC) derived from its power flow studies. BPAT has been updating Transmission outages into the transmission model through Power Distribution Factors (PTDFs). These PTDFs are uploaded into BPATâ€<sup>™</sup>s commercial system and used to re-calculate a portion of BPATâ€<sup>™</sup>s ETC.

Because the transmission outages are not incorporated into the ETC determined in the power flow study, BPATâ€<sup>™</sup>s model is not uniformly updated for system topology at least once per day. Although this process is in line with BPATâ€<sup>™</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>™</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirements 3 and 5.

Additionally, BPAT believes it has a compliance gap on Requirement 6 of MOD-030-02 due to a gap in its calculation of ETC for Network Integration Transmission Service. BPATâ€<sup>™</sup>s ETC calculation does not always include load forecasts for the time period being calculated. BPATâ€<sup>™</sup>s ETC calculation from the power flow study includes a seasonal load forecast, although BPAT has monthly load forecasts available. BPAT needs automated tools in order to run more frequent power flow studies to reflect the load forecasts for the time period being calculated. BPAT also cannot ensure that it captures all designated network resources that are committed or have the legal obligation to run during the time period being calculated in its power flow ETC studies. Although this process is in line with BPATâ€<sup>™</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>™</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirement 6.

In some cases, the above gaps represent work that BPAT is not currently doing and that is not presently assigned to any organization or individual across the organization. These gaps were realized as BPAT was working on solutions for its current NERC MOD mitigation plans and with the benefit of BPATâ€<sup>TM</sup>s expanded experience with MOD-030-02 requirements. BPAT now recognizes that, in order to perform the calculations using consistent models and with the frequency and data granularity required by the MODs, BPAT will need dedicated staff, a process re-design and automated tools. The goal of this mitigation plan is to holistically solve the organizational, process and automation gaps that are at the root cause of BPATâ€<sup>TM</sup>s compliance violations on MOD-030-02. Addressing these items will allow BPAT to close the gaps with Requirements 3, 5 and 6, as well to ensure sustainable compliance with MOD-030-02.

BPAT believes that, while it has not presently identified specific violations with the other requirements in MOD-030-02, filing a blanket mitigation plan on MOD-030-02 is prudent. The MOD-030-02 gaps prevent BPAT from ensuring compliance with the other requirements in MOD-030-02. BPAT will remain at risk of recurring violations on the other requirements until the organizational, process, and automated tool gaps can be addressed. This blanket plan allows BPAT and WECC to reduce their administrative burden of managing individual self-reports each time a new compliance gap is identified, and allows BPAT to focus on holistically rebuilding our approach to MOD-030-02 compliance.

#### Update on 5/12/2014

BPA has concluded that complying with MOD-029 rather than MOD-030 is a more appropriate choice given our transmission network, regional data sharing or availability, and certain aspects of the MOD-030 standard. Additionally, BPA understands that its current process for uploading its Existing Transmission Commitments to its commercial systems is not in violation of MOD-001, R7. As a result, the remaining 18 months of milestones for BPA's 36 month mitigation plan on MOD-030 focus on tasks required to transition BPA's current MOD-030 network flowgates to MOD-029 paths.

For this transition, BPA has identified tasks in two focus areas:

- 1. Addition of new ATC Paths
- 2. Process controls and documentation

#### Addition of new ATC Paths

BPA identifies all of its control area to control area interconnections as ATC Paths and has chosen either MOD-029 or MOD-030 as the methodology for each interconnection. BPA has not established Flowgates for the control area to control area interconnections for which BPA has chosen MOD-030 due to language in MOD-030 R2.1.1.3 and R2.1.2.3 that states "lf any limiting element is kept within its limit for its associated worst Contingency by operating within the limits of another Flowgate, then no new Flowgate needs to be established for such limiting elements or Contingencies.†BPA's current MOD-030 network flowgates and MOD-029 paths protect for the control area to control area interconnections for which BPA is using MOD-030. Therefore, BPA concluded that additional Flowgates for these interconnections were not required under MOD-030.

BPA will be transitioning its MOD-030 network flowgates to MOD-029 paths. Since MOD-029 does not contain language similar to MOD-030 R2.1.1.3 and R2.1.2.3, BPA needs to analyze whether additional ATC Paths are required to account for the control area to control area interconnections for which MOD-030 is currently used. If new ATC Paths are needed, BPA will complete the studies and post the new ATC Paths and calculations in its OASIS.

#### Process controls and documentation

BPA will assess current process controls and enhance these controls if needed. The documentation in the ATCID will be updated to reflect the transition from MOD-030 to MOD-029.

C.3 Provide any relevant information regarding the identification of the violation(s) associated with this Mitigation Plan: BPA ID P174

#### Section D: Details of Proposed Mitigation Plan

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

In order to close the gaps identified above, BPAT has determined that changes to its organizational structure and Available Flowgate Capability calculation processes are needed, in addition to automated tools. This mitigation plan outlines the milestones needed to accomplish these changes so that the identified gaps can be closed.

BPAT believes that it will need 36 months to make the appropriate organizational changes, to close calculation and data gaps, and to automate the resulting processes. Since this mitigation plan covers a significant process redesign, BPAT feels that the early milestone results will drive the details of the later milestones and therefore is submitting high level actions for the latter half of this mitigation plan at this time. BPAT will submit final milestones no later than 2/15/2014. This work will result in sustainable compliance with MOD-001-1 and MOD-030-02.

1. Gain Transmission Executive approval to form an Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

2. Staff Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

3. Identify roles and responsibilities of Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

4. Identify and select data sources for base cases, including information on system topology, load and generation information

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 5, 6, 7

5. Design the process for collecting data necessary to produce monthly power flow studies

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 5, 6, 7

6. Design a process for keeping the assumptions on system topology aligned between the Total Flowgate Capability (TFC), ETC and PTDF calculations in the power flow studies

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 4, 5, 6, 7

7. Design the process for creating more frequent power flow cases Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R2, 5, 6, 7 8. Design a process for aligning the webTrans ETC with more frequent updates of the power flow ETC Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R3, 4, 5, 6, 7, 8, 9, 10, 11 9. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in webTrans Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R3, 4, 5, 6, 7, 8, 9, 10, 11 10. Receive Agency Prioritization Steering Committee funding approval for automation initiatives needed to build more frequent power flow cases, based on the above process re-design Facilitates compliance with all requirements of MOD-030-02, but especially: MOD-001-01, R7 MOD-030-02, R3, 5, 6, 7 11. Deliver final milestones for remaining 18 months of this mitigation plan. 12. Develop preliminary list of ATC Paths that may need to be added under MOD-29 13. Finalize list of ATC Paths, if any, that need to be added under MOD-29 14. If new ATC Paths need to be added, design the process for ETC calculations for the new ATC Paths 15. If new ATC Paths need to be added, design the process for TTC calculations for the new ATC Paths 16. Analyze to determine whether new or further developed processes and internal process controls are required 17. If new ATC Paths need to be added, implement new ATC Paths in OASIS 18. Implement new or further developed processes and internal process controls 19. Update the ATCID, send updated ATCID to entities specified in MOD-001 R4 and post the updated ATCID on BPA's ATC Methodology webpage

D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: August 17, 2015

D.3 Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
121115 Milestone	1. Gain Transmission Executive approval to form an Energy Delivery Modeling group	11/15/2012	11/15/2012
130215 Milestone	<ol> <li>Staff Energy Delivery Modeling group</li> <li>Identify roles and responsibilities of Energy Delivery Modeling group</li> </ol>	02/15/2013	02/15/2013
130515 Milestone	4. Identify and select data sources for seed cases, including information on system topology, load and generation information	05/15/2013	05/15/2013

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater	Actual Completion Date
	5. Design the process for collecting data necessary to produce monthly power flow cases	than 3 months apart)	
130815 Milestone	<ul> <li>6. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in the power flow studies</li> <li>7. Design the process for creating more for an an</li></ul>	08/15/2013	08/15/2013
	frequent power flow cases		
131115 Milestone	8. Design a process for aligning the webTrans ETC with more frequent updates of the power flow ETC	11/15/2013	11/15/2013
	9. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in webTrans		
140215 Milestone	10. Receive Agency Prioritization Steering Committee funding approval for automation initiatives needed to build more frequent power flow cases, based on the above process re-design	02/15/2014	02/15/2014
140328 Milestone	11. Deliver final milestones for remaining 18 months of this mitigation plan.	03/28/2014	03/28/2014
140515 Milestone	12. Develop preliminary list of ATC Paths that may need to be added under MOD-29	05/15/2014	05/15/2014
140815 Milestone	13. Finalize list of ATC Paths, if any, that need to be added under MOD-29	08/15/2014	
141115 Milestone	14. If new ATC Paths need to be added, design the process for ETC calculations for the new ATC Paths	11/15/2014	
150215 Milestone	15. If new ATC Paths need to be added, design the process for TTC calculations for the new ATC Paths	02/15/2015	
150515 Milestone	16. Analyze to determine whether new or further developed processes and internal process controls are required	05/15/2015	

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
150815 Milestone	<ul> <li>17. If new ATC Paths need to be added, implement new ATC Paths in OASIS</li> <li>18. Implement new or further developed processes and internal process controls</li> <li>19. Update the ATCID, send updated ATCID to entities specified in MOD-001 R4 and post the updated ATCID on BPA's ATC Methodology webpage</li> </ul>	08/15/2015	

#### D.4 Additional Relevant Information (Optional)

#### Section E: Interim and Future Reliability Risk

#### E.1 Abatement of Interim BPS Reliability Risk

While your organization is implementing the Mitigation Plan proposed in Section D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

The impact to the BPS is minimal.

MOD-030-02 is based on load and generation forecasts, so to a large extent, the projected values across the network flowgates are likely never 100% accurate compared to minute-by-minute flow. BPAT does not believe that the above violations have introduced significantly more variability than already exists in the load and generation forecasts necessary for MOD-030-02 in general.

#### E.2 Prevention of Future BPS Reliability Risk

Describe how successful completion of the Mitigation Plan as laid out in Section D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

Upon project completion, BPAT will transition its MOD-030 network flowgates to MOD-029 paths. BPA believes that this transition will provide for sustainable compliance with the NERC ATC MODs.

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Section D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Section C.1, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

#### Section F: Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

(a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and

(b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and

(c) Acknowledges:

- 1. I am Vice President, Planning & Asset Management, Transmission of Bonneville Power Administration
- 2. I am qualified to sign this Mitigation Plan on behalf of Bonneville Power Administration
- 3. I have read and understand Bonneville Power Administration's obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
- 4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
- 5. Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authorities in Canada.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Hardev Juj

Title: Vice President, Planning & Asset Management, Transmission

Authorized On: May 13, 2014

## Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: Bonneville Power Administration NERC Registry ID: NCR05032 NERC Violation ID(s): WECC2012011386 Mitigated Standard Requirement(s): MOD-030-2 R1. Scheduled Completion as per Accepted Mitigation Plan: August 17, 2015 Date Mitigation Plan completed: August 10, 2015 WECC Notified of Completion on Date: August 10, 2015

Entity Comment: None.

Additional Comments			
From	Comment	User Name	
Entity	This is part of BPA's holistic mitigation plan for MOD-030-02. BPA ID P174.	Rachael Ferrin	
Entity	Lindsay Wickizer at BPA and Brent Read at WECC were working on this in the spring of 2014. At that time, BPA decided to switch from MOD-030 to MOD-029. Instead of updating all cases at once, and WECC having to reject them if they were unsatisfactory, Lindsay and Brent decided to update MOD-030 R3 only, and the remainder if WECC accepted the plan. While WECC was reviewing the plan, WECC rejected BPA's self-report on MOD-001 R7. BPA then needed to revise the mitigation plan to remove steps that addressed the MOD-001 R7 mitigation plan. As such, the revised steps were submitted to WECC prior to March 28, 2014, and then revised and re-submitted (in the same test-case manner on MOD-030 R3) in May. WECC accepted the plan in June 2014.	Tanner Brier	
	BPA completed the milestones as required by its plan, but was unable to upload them in CDMS, because the plans had not been updated yet. This plan was originally uploaded to MOD-030 R3, as the sample requirement for WECC's review on 5-13-14.		

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	121108 MOD-030-02 ALL Signed Mitigation Plan P174.pdf	Signed copy of the mitigation plan.	779,103
Entity	140513 MOD-030 r1, r2, r3, r4, r6, r7, r8, r9, r10 revised revised mitigation plan signed.	Transition MOD-030 to MOD-029 revised signed mitigation plan	215,508

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	pdf	Transition MOD-030 to MOD-029 revised signed mitigation plan	215,508
Entity	150810 BPA P174 MOD-030- 02 R1-R10 Mitigation Plan Completion Package.pdf	BPA's Mitigation Completion Packet. All supporting evidence is attached to this PDF. This packet also contains the approval signature of BPA's Acting Reliability Officer: Jeff Cook.	14,750,719
Region	20140721 - MP - MOD-030-2 R1 - BPA.pdf		28,318

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Jeff Cook

Title: Acting - Vice President, Planning & Asset Management

Email: jwcook@bpa.gov

Phone: 1 (360) 418-8981

Authorized Signature

Date

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2012011386 Standard/Requirement: MOD-030-2 R1. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/09/2015 for the violation of MOD-030-2 R1.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

#### Thank you, OATI

CONFIDENTIAL INFORMATION: This email and any attachment(s) contain confidential and/or proprietary information of Open Access Technology International, Inc. Do not copy or distribute without the prior written consent of OATI. If you are not a named recipient to the message, please notify the sender immediately and do not retain the message in any form, printed or electronic.

[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment X**

# Record documents for the violation of MOD-030-2 R2 (WECC2012011390)

X-1. BPA's Self-Report dated November 12, 2012;

X-2. BPA's Mitigation Plan designated as WECCMIT008364-1 submitted July 21, 2014;

X-3. BPA's Certification of Mitigation Completion dated August 25, 2015;

X-4. WECC's Verification of Mitigation Completion dated August 21, 2015.

#### Self Report - 2012

Entity Name: Bonneville Power Administration Address: 905 NE 11 Avenue Portland OR 97232

NERC Registry ID: NCR05032

Standard Requirement: MOD-030-2 R2

The Transmission Operator shall perform the following: [Violation Risk Factor: To Be Determined] [Time Horizon: Operations Planning]

Date of Alleged Violation: April 01, 2011 Date Submitted: November 12, 2012 Self Report Status: Self Report has been submitted

Description and Cause: BPA Transmission Services (BPAT) recently identified compliance gaps in its implementation of MOD-030-02. These gaps were realized as BPAT was looking at the solutions for its current NERC MOD mitigation plans. BPAT has gained more experience with the MOD standards and has increased its understanding of the complexity of the requirements.

BPAT implemented MOD-030-02 on April 1, 2011, based on its understanding and interpretation of the requirements at the time. Since April 1, 2011, BPAT has self-reported on several violations with MOD-030-02. In looking at solutions for its current NERC MOD mitigation plans, BPAT visited PJM Interconnection, Southwest Power Pool, and Tennessee Valley Authority. These benchmarking trips broadened BPAT's understanding of the complexity of the requirements in MOD-030-02, and informed BPAT's knowledge of the processes and automation necessary to sustainably comply with them.

The current compliance gaps identified are in BPATâ€<sup>™</sup>s implementation of Requirements 3, 5 and 6 of MOD-030-02. BPAT believes that it has a gap in implementation of Requirements 3 and 5 because BPAT does not use expected generation or Transmission outages, additions, or retirements to update the Existing Transmission Commitments (ETC) derived from its power flow studies. BPAT has been updating Transmission outages into the transmission model through Power Distribution Factors (PTDFs). These PTDFs are uploaded into BPATâ€<sup>™</sup>s commercial system and used to re-calculate a portion of BPATâ€<sup>™</sup>s ETC.

Because the transmission outages are not incorporated into the ETC determined in the power flow study, BPATâ€<sup>™</sup>s model is not uniformly updated for system topology at least once per day. Although this process is in line with BPATâ€<sup>™</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>™</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirements 3 and 5.

Additionally, BPAT believes it has a compliance gap on Requirement 6 of MOD-030-02 due to a gap in its calculation of ETC for Network Integration Transmission Service. BPATâ€<sup>™</sup>s ETC calculation does not always include load forecasts for the time period being calculated. BPATâ€<sup>™</sup>s ETC calculation from the power flow study includes a seasonal load forecast, although BPAT has monthly load forecasts available. BPAT needs automated tools in order to run more frequent power flow studies to reflect the load forecasts for the time period being calculated. BPAT also cannot ensure that it captures all designated network resources that are committed or have the legal obligation to run during the time period being calculated in its power flow ETC studies. Although this process is in line with BPATâ€<sup>™</sup>s initial interpretation

#### Self Report - 2012

of MOD-030-02, BPAT's expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirement 6.

In some cases, the above gaps represent work that BPAT is not currently doing and that is not presently assigned to any organization or individual across the organization. These gaps were realized as BPAT was working on solutions for its current NERC MOD mitigation plans and with the benefit of BPATâ€<sup>TM</sup>s expanded experience with MOD-030-02 requirements. BPAT now recognizes that, in order to perform the calculations using consistent models and with the frequency and data granularity required by the MODs, BPAT will need dedicated staff, a process re-design and automated tools. The goal of this mitigation plan is to holistically solve the organizational, process and automation gaps that are at the root cause of BPATâ€<sup>TM</sup>s compliance violations on MOD-030-02. Addressing these items will allow BPAT to close the gaps with Requirements 3, 5 and 6, as well to ensure sustainable compliance with MOD-030-02.

BPAT believes that, while it has not presently identified specific violations with the other requirements in MOD-030-02, filing a blanket mitigation plan on MOD-030-02 is prudent. The MOD-030-02 gaps prevent BPAT from ensuring compliance with the other requirements in MOD-030-02. BPAT will remain at risk of recurring violations on the other requirements until the organizational, process, and automated tool gaps can be addressed. This blanket plan allows BPAT and WECC to reduce their administrative burden of managing individual self-reports each time a new compliance gap is identified, and allows BPAT to focus on holistically rebuilding our approach to MOD-030-02 compliance.

Potential Impact to the Bulk Potential Impact to the Bulk Electric System is Minimal.

Power System:

BPAT is working on improving its implementation of MOD-030. Note, MOD-030 is based on forecasts, so to a large extent, the projected value is likely never 100% accurate to minuteby-minute flow. BPAT does not believe the issue with this requirement has introduced significantly more variability than already exists in the forecasts necessary for MOD-030 in general.

Additional Comments			
From	Comment	User Name	
Entity	This is part of BPA's MOD-030-02 mitigation plan.	Tanner Brier	
Entity	BPA ID P174	Tanner Brier	

# Mitigation Plan

## Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version	
null	WECC2012011390	MOD-030-2 R2	01/02/2013	2	
	Mitigation Plan Submi	itted On: July 21, 2014			
Mitigation Plan Accepted On:					
Mitigatio	n Plan Proposed Completi	on Date: August 17, 2015			
Actual C	Completion Date of Mitigati	on Plan:			
Mitigation Plan Certified Complete by BPA On:					
Mitigation Plan Completion Verified by WECC On:					
Miti	Mitigation Plan Completed? (Yes/No): No				
# Section A: Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

### Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: Bonneville Power Administration

NERC Compliance Registry ID: NCR05032

Address: 905 NE 11 Avenue Portland OR 97232

B.2 Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Tanner Brier Title: Compliance Specialist Email: thbrier@bpa.gov Phone: 503-230-3649

### Section C: Identification of Reliability Standard Violation(s) Associated with this Mitigation Plan

#### C.1 This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement
	Requirement Description	
WECC2012011390	04/01/2011	MOD-030-2 R2
The Transmission Operator shall perform the following: [Violation Risk Factor: To Be Determined] [Time Horizon:		

. Operations Planning]

C.2 Brief summary including the cause of the violation(s) and mechanism in which it was identified above:

BPA Transmission Services (BPAT) recently identified compliance gaps in its implementation of MOD-030-02. These gaps were realized as BPAT was looking at the solutions for its current NERC MOD mitigation plans. BPAT has gained more experience with the MOD standards and has increased its understanding of the complexity of the requirements.

BPAT implemented MOD-030-02 on April 1, 2011, based on its understanding and interpretation of the requirements at the time. Since April 1, 2011, BPAT has self-reported on several violations with MOD-030-02. In looking at solutions for its current NERC MOD mitigation plans, BPAT visited PJM Interconnection, Southwest Power Pool, and Tennessee Valley Authority. These benchmarking trips broadened BPAT's understanding of the complexity of the requirements in MOD-030-02, and informed BPAT's knowledge of the processes and automation necessary to sustainably comply with them.

The current compliance gaps identified are in BPATâ€<sup>™</sup>s implementation of Requirements 3, 5 and 6 of MOD-030-02. BPAT believes that it has a gap in implementation of Requirements 3 and 5 because BPAT does not use expected generation or Transmission outages, additions, or retirements to update the Existing Transmission Commitments (ETC) derived from its power flow studies. BPAT has been updating Transmission outages into the transmission model through Power Distribution Factors (PTDFs). These PTDFs are uploaded into BPATâ€<sup>™</sup>s commercial system and used to re-calculate a portion of BPATâ€<sup>™</sup>s ETC.

Because the transmission outages are not incorporated into the ETC determined in the power flow study, BPATâ€<sup>™</sup>s model is not uniformly updated for system topology at least once per day. Although this process is in line with BPATâ€<sup>™</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>™</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirements 3 and 5.

Additionally, BPAT believes it has a compliance gap on Requirement 6 of MOD-030-02 due to a gap in its calculation of ETC for Network Integration Transmission Service. BPATâ€<sup>TM</sup>s ETC calculation does not always include load forecasts for the time period being calculated. BPATâ€<sup>TM</sup>s ETC calculation from the power flow study includes a seasonal load forecast, although BPAT has monthly load forecasts available. BPAT needs automated tools in order to run more frequent power flow studies to reflect the load forecasts for the time period being calculated. BPAT also cannot ensure that it captures all designated network resources that are committed or have the legal obligation to run during the time period being calculated in its power flow ETC studies. Although this process is in line with BPATâ€<sup>TM</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>TM</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirement 6.

In some cases, the above gaps represent work that BPAT is not currently doing and that is not presently assigned to any organization or individual across the organization. These gaps were realized as BPAT was working on solutions for its current NERC MOD mitigation plans and with the benefit of BPAT's expanded experience with MOD-030-02 requirements. BPAT now recognizes that, in order to perform the calculations using consistent models and with the frequency and data granularity required by the MODs, BPAT will need dedicated staff, a process re-design and automated tools. The goal of this mitigation plan is to holistically solve the organizational, process and automation gaps that are at the root cause of BPAT's compliance violations on MOD-030-02. Addressing these items will allow BPAT to close the

gaps with Requirements 3, 5 and 6, as well to ensure sustainable compliance with MOD-030-02.

BPAT believes that, while it has not presently identified specific violations with the other requirements in MOD-030-02, filing a blanket mitigation plan on MOD-030-02 is prudent. The MOD-030-02 gaps prevent BPAT from ensuring compliance with the other requirements in MOD-030-02. BPAT will remain at risk of recurring violations on the other requirements until the organizational, process, and automated tool gaps can be addressed. This blanket plan allows BPAT and WECC to reduce their administrative burden of managing individual self-reports each time a new compliance gap is identified, and allows BPAT to focus on holistically rebuilding our approach to MOD-030-02 compliance.

Update on 5/12/2014

BPA has concluded that complying with MOD-029 rather than MOD-030 is a more appropriate choice given our transmission network, regional data sharing or availability, and certain aspects of the MOD-030 standard. Additionally, BPA understands that its current process for uploading its Existing Transmission Commitments to its commercial systems is not in violation of MOD-001, R7. As a result, the remaining 18 months of milestones for BPA's 36 month mitigation plan on MOD-030 focus on tasks required to transition BPA's current MOD-030 network flowgates to MOD-029 paths.

For this transition, BPA has identified tasks in two focus areas:

- 1. Addition of new ATC Paths
- 2. Process controls and documentation

#### Addition of new ATC Paths

BPA identifies all of its control area to control area interconnections as ATC Paths and has chosen either MOD-029 or MOD-030 as the methodology for each interconnection. BPA has not established Flowgates for the control area to control area interconnections for which BPA has chosen MOD-030 due to language in MOD-030 R2.1.1.3 and R2.1.2.3 that states "lf any limiting element is kept within its limit for its associated worst Contingency by operating within the limits of another Flowgate, then no new Flowgate needs to be established for such limiting elements or Contingencies.†BPA's current MOD-030 network flowgates and MOD-029 paths protect for the control area to control area interconnections for which BPA is using MOD-030. Therefore, BPA concluded that additional Flowgates for these interconnections were not required under MOD-030.

BPA will be transitioning its MOD-030 network flowgates to MOD-029 paths. Since MOD-029 does not contain language similar to MOD-030 R2.1.1.3 and R2.1.2.3, BPA needs to analyze whether additional ATC Paths are required to account for the control area to control area interconnections for which MOD-030 is currently used. If new ATC Paths are needed, BPA will complete the studies and post the new ATC Paths and calculations in its OASIS.

#### Process controls and documentation

BPA will assess current process controls and enhance these controls if needed. The documentation in the ATCID will be updated to reflect the transition from MOD-030 to MOD-029.

C.3 Provide any relevant information regarding the identification of the violation(s) associated with this Mitigation Plan:

BPA ID P174

# Section D: Details of Proposed Mitigation Plan

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

In order to close the gaps identified above, BPAT has determined that changes to its organizational structure and Available Flowgate Capability calculation processes are needed, in addition to automated tools. This mitigation plan outlines the milestones needed to accomplish these changes so that the identified gaps can be closed.

BPAT believes that it will need 36 months to make the appropriate organizational changes, to close calculation and data gaps, and to automate the resulting processes. Since this mitigation plan covers a significant process redesign, BPAT feels that the early milestone results will drive the details of the later milestones and therefore is submitting high level actions for the latter half of this mitigation plan at this time. BPAT will submit final milestones no later than 2/15/2014. This work will result in sustainable compliance with MOD-001-1 and MOD-030-02.

1. Gain Transmission Executive approval to form an Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

2. Staff Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

3. Identify roles and responsibilities of Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

4. Identify and select data sources for base cases, including information on system topology, load and generation information

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 5, 6, 7

5. Design the process for collecting data necessary to produce monthly power flow studies

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 5, 6, 7

6. Design a process for keeping the assumptions on system topology aligned between the Total Flowgate Capability (TFC), ETC and PTDF calculations in the power flow studies

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 4, 5, 6, 7

7. Design the process for creating more frequent power flow cases Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R2, 5, 6, 7 8. Design a process for aligning the webTrans ETC with more frequent updates of the power flow ETC Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R3, 4, 5, 6, 7, 8, 9, 10, 11 9. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in webTrans Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R3, 4, 5, 6, 7, 8, 9, 10, 11 10. Receive Agency Prioritization Steering Committee funding approval for automation initiatives needed to build more frequent power flow cases, based on the above process re-design Facilitates compliance with all requirements of MOD-030-02, but especially: MOD-001-01, R7 MOD-030-02, R3, 5, 6, 7 11. Deliver final milestones for remaining 18 months of this mitigation plan. 12. Develop preliminary list of ATC Paths that may need to be added under MOD-29 13. Finalize list of ATC Paths, if any, that need to be added under MOD-29 14. If new ATC Paths need to be added, design the process for ETC calculations for the new ATC Paths 15. If new ATC Paths need to be added, design the process for TTC calculations for the new ATC Paths 16. Analyze to determine whether new or further developed processes and internal process controls are required 17. If new ATC Paths need to be added, implement new ATC Paths in OASIS 18. Implement new or further developed processes and internal process controls 19. Update the ATCID, send updated ATCID to entities specified in MOD-001 R4 and post the updated ATCID on BPA's ATC Methodology webpage

D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: August 17, 2015

D.3 Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
121115 Milestone	1. Gain Transmission Executive approval to form an Energy Delivery Modeling group	11/15/2012	11/15/2012
130215 Milestone	<ol> <li>Staff Energy Delivery Modeling group</li> <li>Identify roles and responsibilities of Energy Delivery Modeling group</li> </ol>	02/15/2013	02/15/2013
130515 Milestone	4. Identify and select data sources for seed cases, including information on system topology, load and generation information	05/15/2013	05/15/2013

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater	Actual Completion Date
	5. Design the process for collecting data necessary to produce monthly power flow cases	than 3 months apart)	
130815 Milestone	6. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in the power flow studies	08/15/2013	08/15/2013
	7. Design the process for creating more frequent power flow cases		
131115 Milestone	<ul> <li>8. Design a process for aligning the webTrans ETC with more frequent updates of the power flow ETC</li> <li>9. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in webTrans</li> </ul>	11/15/2013	11/15/2013
140215 Milestone	10. Receive Agency Prioritization Steering Committee funding approval for automation initiatives needed to build more frequent power flow cases, based on the above process re-design	02/15/2014	02/15/2014
140328 Milestone	11. Deliver final milestones for remaining 18 months of this mitigation plan.	03/28/2014	03/28/2014
140515 Milestone	12. Develop preliminary list of ATC Paths that may need to be added under MOD-29	05/15/2014	05/15/2014
140815 Milestone	13. Finalize list of ATC Paths, if any, that need to be added under MOD-29	08/15/2014	
141115 Milestone	14. If new ATC Paths need to be added, design the process for ETC calculations for the new ATC Paths	11/15/2014	
150215 Milestone	15. If new ATC Paths need to be added, design the process for TTC calculations for the new ATC Paths	02/15/2015	

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
150515 Milestone	16. Analyze to determine whether new or further developed processes and internal process controls are required	05/15/2015	
150815 Milestone	<ul> <li>17. If new ATC Paths need to be added, implement new ATC Paths in OASIS</li> <li>18. Implement new or further developed processes and internal process controls</li> <li>19. Update the ATCID, send updated ATCID to entities specified in MOD-001 R4 and post the updated ATCID on BPA's ATC Methodology webpage</li> </ul>	08/15/2015	

D.4 Additional Relevant Information (Optional)

# Section E: Interim and Future Reliability Risk

E.1 Abatement of Interim BPS Reliability Risk

While your organization is implementing the Mitigation Plan proposed in Section D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

The impact to the BPS is minimal.

MOD-030-02 is based on load and generation forecasts, so to a large extent, the projected values across the network flowgates are likely never 100% accurate compared to minute-by-minute flow. BPAT does not believe that the above violations have introduced significantly more variability than already exists in the load and generation forecasts necessary for MOD-030-02 in general.

E.2 Prevention of Future BPS Reliability Risk

Describe how successful completion of the Mitigation Plan as laid out in Section D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

Upon project completion, BPAT will transition its MOD-030 network flowgates to MOD-029 paths. BPA believes that this transition will provide for sustainable compliance with the NERC ATC MODs.

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Section D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Section C.1, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

# Section F: Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

(a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and

(b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and

(c) Acknowledges:

- 1. I am Vice President, Planning & Asset Management, Transmission of Bonneville Power Administration
- 2. I am qualified to sign this Mitigation Plan on behalf of Bonneville Power Administration
- 3. I have read and understand Bonneville Power Administration's obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
- 4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
- 5. Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authorities in Canada.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Hardev Juj

Title: Vice President, Planning & Asset Management, Transmission

Authorized On: May 13, 2014

# Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: Bonneville Power Administration NERC Registry ID: NCR05032 NERC Violation ID(s): WECC2012011390 Mitigated Standard Requirement(s): MOD-030-2 R2. Scheduled Completion as per Accepted Mitigation Plan: August 17, 2015 Date Mitigation Plan completed: August 10, 2015 WECC Notified of Completion on Date: August 10, 2015

olined of Completion on Date. August 10, 2

Entity Comment: None.

Additional Comments			
From	Comment	User Name	
Entity	This is part of BPA's holistic MOD-030 mitigation plan. BPA ID P174	Rachael Ferrin	
Entity	Lindsay Wickizer at BPA and Brent Read at WECC were working on this in the spring of 2014. At that time, BPA decided to switch from MOD-030 to MOD-029. Instead of updating all cases at once, and WECC having to reject them if they were unsatisfactory, Lindsay and Brent decided to update MOD-030 R3 only, and the remainder if WECC accepted the plan. While WECC was reviewing the plan, WECC rejected BPA's self-report on MOD-001 R7. BPA then needed to revise the mitigation plan to remove steps that addressed the MOD-001 R7 mitigation plan. As such, the revised steps were submitted to WECC prior to March 28, 2014, and then revised and re-submitted (in the same test-case manner on MOD-030 R3) in May. WECC accepted the plan in June 2014. BPA completed the milestones as required by its plan, but was unable to upload them in CDMS, because the plans had not been updated yet. This plan was originally uploaded to MOD-030 R3, as the sample requirement for WECC's review on 5-13-14.	Tanner Brier	

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	121108 MOD-030-02 ALL Signed Mitigation Plan P174.pdf	Signed mitigation plan document	779,103
Entity	140513 MOD-030 r1, r2, r3, r4, r6, r7, r8, r9, r10 revised		215,508

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	revised mitigation plan signed.pdf		215,508
Entity	150810 BPA P174 MOD-030- 02 R1-R10 Mitigation Plan Completion Package.pdf	BPA's Mitigation Completion Packet. All supporting evidence is attached to this PDF. This packet also contains the approval signature of BPA's Acting Reliability Officer: Jeff Cook.	14,750,719

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Jeff Cook

Title: Acting - Vice President, Planning & Asset Management

Email: jwcook@bpa.gov

Phone: 1 (360) 418-8981

Authorized Signature

Date \_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2012011390 Standard/Requirement: MOD-030-2 R2. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/09/2015 for the violation of MOD-030-2 R2.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

#### Thank you, OATI

CONFIDENTIAL INFORMATION: This email and any attachment(s) contain confidential and/or proprietary information of Open Access Technology International, Inc. Do not copy or distribute without the prior written consent of OATI. If you are not a named recipient to the message, please notify the sender immediately and do not retain the message in any form, printed or electronic.

[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment Y**

# Record documents for the violation of MOD-030-2 R4 (WECC2012011391)

Y-1. BPA's Self-Report dated November 12, 2012;

Y-2. BPA's Mitigation Plan designated as WECCMIT008366-1 submitted July 21, 2014;

Y-3. BPA's Certification of Mitigation Completion dated August 25, 2015;

Y-4. WECC's Verification of Mitigation Completion dated August 21, 2015.

Entity Name: Bonneville Power Administration

Address: 905 NE 11 Avenue Portland OR 97232

NERC Registry ID: NCR05032

#### Standard Requirement: MOD-030-2 R4

When calculating AFCs, the Transmission Service Provider shall represent the impact of Transmission Service as follows: [Violation Risk Factor: To Be Determined] [Time Horizon: Operations Planning]

- If the source, as specified in the ATCID, has been identified in the reservation and it is discretely modeled in the Transmission Service Provider's Transmission model, use the discretely modeled point as the source.

- If the source, as specified in the ATCID, has been identified in the reservation and the point can be mapped to an "equivalence" or "aggregate" representation in the Transmission Service Provider's Transmission model, use the modeled equivalence or aggregate as the source.

- If the source, as specified in the ATCID, has been identified in the reservation and the point cannot be mapped to a discretely modeled point or an "equivalence" representation in the Transmission Service Provider's Transmission model, use the immediately adjacent Balancing Authority associated with the Transmission Service Provider from which the power is to be received as the source.

- If the source, as specified in the ATCID, has not been identified in the reservation use the immediately adjacent Balancing Authority associated with the Transmission Service Provider from which the power is to be received as the source.

- If the sink, as specified in the ATCID, has been identified in the reservation and it is discretely modeled in the Transmission Service Provider's Transmission model, use the discretely modeled point as the sink.

- If the sink, as specified in the ATCID, has been identified in the reservation and the point can be mapped to an "equivalence" or "aggregate" representation in the Transmission Service Provider's Transmission model, use the modeled equivalence or aggregate as the sink.

- If the sink, as specified in the ATCID, has been identified in the reservation and the point cannot be mapped to a discretely modeled point or an "equivalence" representation in the Transmission Service Provider's Transmission model, use the immediately adjacent Balancing Authority associated with the Transmission Service Provider receiving the power as the sink.

- If the sink, as specified in the ATCID, has not been identified in the reservation use the immediately adjacent Balancing Authority associated with the Transmission Service Provider receiving the power as the sink.

Date of Alleged Violation: April 01, 2011

Date Submitted: November 12, 2012

Self Report Status: Self Report has been submitted

Description and Cause: BPA Transmission Services (BPAT) recently identified compliance gaps in its implementation of MOD-030-02. These gaps were realized as BPAT was looking at the solutions for its current NERC MOD mitigation plans. BPAT has gained more experience with the MOD standards and has increased its understanding of the complexity of the requirements.

BPAT implemented MOD-030-02 on April 1, 2011, based on its understanding and interpretation of the requirements at the time. Since April 1, 2011, BPAT has self-reported on several violations with MOD-030-02. In looking at solutions for its current NERC MOD mitigation plans, BPAT visited PJM Interconnection, Southwest Power Pool, and Tennessee Valley Authority. These benchmarking trips broadened BPAT's understanding of the complexity of the requirements in MOD-030-02, and informed BPAT's knowledge of the processes and automation necessary to sustainably comply with them.

The current compliance gaps identified are in BPATâ€<sup>™</sup>s implementation of Requirements 3, 5 and 6 of MOD-030-02. BPAT believes that it has a gap in implementation of Requirements 3 and 5 because BPAT does not use expected generation or Transmission outages, additions, or retirements to update the Existing Transmission Commitments (ETC) derived from its power flow studies. BPAT has been updating Transmission outages into the transmission model through Power Distribution Factors (PTDFs). These PTDFs are uploaded into BPATâ€<sup>™</sup>s commercial system and used to re-calculate a portion of BPATâ€<sup>™</sup>s ETC.

Because the transmission outages are not incorporated into the ETC determined in the power flow study, BPATâ€<sup>™</sup>s model is not uniformly updated for system topology at least once per day. Although this process is in line with BPATâ€<sup>™</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>™</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirements 3 and 5.

Additionally, BPAT believes it has a compliance gap on Requirement 6 of MOD-030-02 due to a gap in its calculation of ETC for Network Integration Transmission Service. BPATâ€<sup>™</sup>s ETC calculation does not always include load forecasts for the time period being calculated. BPATâ€<sup>™</sup>s ETC calculation from the power flow study includes a seasonal load forecast, although BPAT has monthly load forecasts available. BPAT needs automated tools in order to run more frequent power flow studies to reflect the load forecasts for the time period being calculated. BPAT also cannot ensure that it captures all designated network resources that are committed or have the legal obligation to run during the time period being calculated in its power flow ETC studies. Although this process is in line with BPATâ€<sup>™</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>™</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirement 6.

In some cases, the above gaps represent work that BPAT is not currently doing and that is not presently assigned to any organization or individual across the organization. These gaps were realized as BPAT was working on solutions for its current NERC MOD mitigation plans and with the benefit of BPATâ€<sup>TM</sup>s expanded experience with MOD-030-02 requirements. BPAT now recognizes that, in order to perform the calculations using consistent models and with the frequency and data granularity required by the MODs, BPAT will need dedicated staff, a process re-design and automated tools. The goal of this mitigation plan is to holistically solve the organizational, process and automation gaps that are at the root cause of BPATâ€<sup>TM</sup>s compliance violations on MOD-030-02. Addressing these items will allow

BPAT to close the gaps with Requirements 3, 5 and 6, as well to ensure sustainable compliance with MOD-030-02.

BPAT believes that, while it has not presently identified specific violations with the other requirements in MOD-030-02, filing a blanket mitigation plan on MOD-030-02 is prudent. The MOD-030-02 gaps prevent BPAT from ensuring compliance with the other requirements in MOD-030-02. BPAT will remain at risk of recurring violations on the other requirements until the organizational, process, and automated tool gaps can be addressed. This blanket plan allows BPAT and WECC to reduce their administrative burden of managing individual self-reports each time a new compliance gap is identified, and allows BPAT to focus on holistically rebuilding our approach to MOD-030-02 compliance.

Potential Impact to the Bulk Potential Impact to the Bulk Electric System is Minimal.

Power System:

BPAT is working on improving its implementation of MOD-030. Note, MOD-030 is based on forecasts, so to a large extent, the projected value is likely never 100% accurate to minuteby-minute flow. BPAT does not believe the issue with this requirement has introduced significantly more variability than already exists in the forecasts necessary for MOD-030 in general.

Additional Comments			
From	Comment	User Name	
Entity	This is part of BPA's MOD-030-02 mitigation plan.	Tanner Brier	
Entity	BPA ID P174	Tanner Brier	

# Mitigation Plan

# Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
null	WECC2012011391	MOD-030-2 R4	12/05/2012	2
	Mitigation Plan Subm	itted On: July 21, 2014		
	Mitigation Plan Acce			
Mitigatio	n Plan Proposed Completi	on Date: August 17, 2015		
Actual C	Completion Date of Mitigati	on Plan:		
Mitigation Pl	an Certified Complete by I	BPA On:		
Mitigation Plan	Completion Verified by WE	ECC On:		
Miti	gation Plan Completed? (	Yes/No): No		

# Section A: Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

### Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: Bonneville Power Administration

NERC Compliance Registry ID: NCR05032

Address: 905 NE 11 Avenue Portland OR 97232

B.2 Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Tanner Brier Title: Compliance Specialist Email: thbrier@bpa.gov Phone: 503-230-3649

# Section C: Identification of Reliability Standard Violation(s) Associated with this Mitigation Plan

#### C.1 This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

	Violation ID	Data of Violation	Poquiromont
			Requirement
		Requirement Description	
	WECC2012011391	04/01/2011	MOD-030-2 R4
Wher follov	n calculating AFCs, the Transmission vs: [Violation Risk Factor: To Be Deter	Service Provider shall represermined] [Time Horizon: Opera	ent the impact of Transmission Service as tions Planning]
- If th Trans	e source, as specified in the ATCID, h smission Service Provider's Transmiss	has been identified in the rese sion model, use the discretely	rvation and it is discretely modeled in the modeled point as the source.
- If th "equi mode	e source, as specified in the ATCID, h valence" or "aggregate" representatio eled equivalence or aggregate as the s	has been identified in the rese n in the Transmission Service source.	rvation and the point can be mapped to an Provider's Transmission model, use the
- If th discre mode which	e source, as specified in the ATCID, h etely modeled point or an "equivalence el, use the immediately adjacent Balar n the power is to be received as the so	has been identified in the rese e" representation in the Trans noing Authority associated wit purce.	rvation and the point cannot be mapped to a mission Service Provider's Transmission h the Transmission Service Provider from
- If th Balar sourc	e source, as specified in the ATCID, h ncing Authority associated with the Tra ce.	nas not been identified in the n ansmission Service Provider f	eservation use the immediately adjacent rom which the power is to be received as the
- If th Trans	e sink, as specified in the ATCID, has smission Service Provider's Transmiss	been identified in the reserva sion model, use the discretely	ation and it is discretely modeled in the modeled point as the sink.
- If th "equi mode	e sink, as specified in the ATCID, has valence" or "aggregate" representatio eled equivalence or aggregate as the s	been identified in the reservant in the Transmission Service sink.	ation and the point can be mapped to an Provider's Transmission model, use the
- If th discre mode the p	e sink, as specified in the ATCID, has etely modeled point or an "equivalence el, use the immediately adjacent Balar ower as the sink.	been identified in the reserva e" representation in the Trans noing Authority associated wit	ation and the point cannot be mapped to a mission Service Provider's Transmission h the Transmission Service Provider receiving
- If th Balar	e sink, as specified in the ATCID, has not	not been identified in the res ansmission Service Provider r	ervation use the immediately adjacent receiving the power as the sink.
0.2	Brief summary including the cause	of the violation(s) and mecha	nism in which it was identified above:
	BPA Transmission Services (BPAT) These gaps were realized as BPAT BPAT has gained more experience complexity of the requirements.	) recently identified compliand was looking at the solutions with the MOD standards and	e gaps in its implementation of MOD-030-02. for its current NERC MOD mitigation plans. has increased its understanding of the
	BPAT implemented MOD-030-02 or requirements at the time. Since Ap looking at solutions for its current N Power Pool, and Tennessee Valley the complexity of the requirements is	n April 1, 2011, based on its u ril 1, 2011, BPAT has self-rep ERC MOD mitigation plans, E Authority. These benchmark in MOD-030-02, and informed	Inderstanding and interpretation of the Ported on several violations with MOD-030-02. PAT visited PJM Interconnection, Southwest Ing trips broadened BPAT's understandir BPAT's knowledge of the processes and

automation necessary to sustainably comply with them.

The current compliance gaps identified are in BPATâ€<sup>™</sup>s implementation of Requirements 3, 5 and 6 of MOD-030-02. BPAT believes that it has a gap in implementation of Requirements 3 and 5 because BPAT does not use expected generation or Transmission outages, additions, or retirements to update the Existing Transmission Commitments (ETC) derived from its power flow studies. BPAT has been updating Transmission outages into the transmission model through Power Distribution Factors (PTDFs). These PTDFs are uploaded into BPATâ€<sup>™</sup>s commercial system and used to re-calculate a portion of BPATâ€<sup>™</sup>s ETC.

Because the transmission outages are not incorporated into the ETC determined in the power flow study, BPATâ€<sup>™</sup>s model is not uniformly updated for system topology at least once per day. Although this process is in line with BPATâ€<sup>™</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>™</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirements 3 and 5.

Additionally, BPAT believes it has a compliance gap on Requirement 6 of MOD-030-02 due to a gap in its calculation of ETC for Network Integration Transmission Service. BPATâ€<sup>TM</sup>s ETC calculation does not always include load forecasts for the time period being calculated. BPATâ€<sup>TM</sup>s ETC calculation from the power flow study includes a seasonal load forecast, although BPAT has monthly load forecasts available. BPAT needs automated tools in order to run more frequent power flow studies to reflect the load forecasts for the time period being calculated. BPAT also cannot ensure that it captures all designated network resources that are committed or have the legal obligation to run during the time period being calculated in its power flow ETC studies. Although this process is in line with BPATâ€<sup>TM</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>TM</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirement 6.

In some cases, the above gaps represent work that BPAT is not currently doing and that is not presently assigned to any organization or individual across the organization. These gaps were realized as BPAT was working on solutions for its current NERC MOD mitigation plans and with the benefit of BPAT's expanded experience with MOD-030-02 requirements. BPAT now recognizes that, in order to perform the calculations using consistent models and with the frequency and data granularity required by the MODs, BPAT will need dedicated staff, a process re-design and automated tools. The goal of this mitigation plan is to holistically solve the organizational, process and automation gaps that are at the root cause of BPAT's compliance violations on MOD-030-02. Addressing these items will allow BPAT to close the gaps with Requirements 3, 5 and 6, as well to ensure sustainable compliance with MOD-030-02.

BPAT believes that, while it has not presently identified specific violations with the other requirements in MOD-030-02, filing a blanket mitigation plan on MOD-030-02 is prudent. The MOD-030-02 gaps prevent BPAT from ensuring compliance with the other requirements in MOD-030-02. BPAT will remain at risk of recurring violations on the other requirements until the organizational, process, and automated tool gaps can be addressed. This blanket plan allows BPAT and WECC to reduce their administrative burden of managing individual self-reports each time a new compliance gap is identified, and allows BPAT to focus on holistically rebuilding our approach to MOD-030-02 compliance.

#### Update on 5/12/2014

BPA has concluded that complying with MOD-029 rather than MOD-030 is a more appropriate choice given our transmission network, regional data sharing or availability, and certain aspects of the MOD-030 standard. Additionally, BPA understands that its current process for uploading its Existing Transmission Commitments to its commercial systems is not in violation of MOD-001, R7. As a result, the remaining 18 months of milestones for BPA's 36 month mitigation plan on MOD-030 focus on tasks required to transition BPA's current MOD-030 network flowgates to MOD-029 paths.

For this transition, BPA has identified tasks in two focus areas:

1. Addition of new ATC Paths

2. Process controls and documentation

#### Addition of new ATC Paths

BPA identifies all of its control area to control area interconnections as ATC Paths and has chosen either MOD-029 or MOD-030 as the methodology for each interconnection. BPA has not established Flowgates for the control area to control area interconnections for which BPA has chosen MOD-030 due to language in MOD-030 R2.1.1.3 and R2.1.2.3 that states "lf any limiting element is kept within its limit for its associated worst Contingency by operating within the limits of another Flowgate, then no new Flowgate needs to be established for such limiting elements or Contingencies.†BPA's current MOD-030 network flowgates and MOD-029 paths protect for the control area to control area interconnections for which BPA is using MOD-030. Therefore, BPA concluded that additional Flowgates for these interconnections were not required under MOD-030.

BPA will be transitioning its MOD-030 network flowgates to MOD-029 paths. Since MOD-029 does not contain language similar to MOD-030 R2.1.1.3 and R2.1.2.3, BPA needs to analyze whether additional ATC Paths are required to account for the control area to control area interconnections for which MOD-030 is currently used. If new ATC Paths are needed, BPA will complete the studies and post the new ATC Paths and calculations in its OASIS.

Process controls and documentation

BPA will assess current process controls and enhance these controls if needed. The documentation in the ATCID will be updated to reflect the transition from MOD-030 to MOD-029.

C.3 Provide any relevant information regarding the identification of the violation(s) associated with this Mitigation Plan:

BPA ID P174

# Section D: Details of Proposed Mitigation Plan

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

In order to close the gaps identified above, BPAT has determined that changes to its organizational structure and Available Flowgate Capability calculation processes are needed, in addition to automated tools. This mitigation plan outlines the milestones needed to accomplish these changes so that the identified gaps can be closed.

BPAT believes that it will need 36 months to make the appropriate organizational changes, to close calculation and data gaps, and to automate the resulting processes. Since this mitigation plan covers a significant process redesign, BPAT feels that the early milestone results will drive the details of the later milestones and therefore is submitting high level actions for the latter half of this mitigation plan at this time. BPAT will submit final milestones no later than 2/15/2014. This work will result in sustainable compliance with MOD-001-1 and MOD-030-02.

1. Gain Transmission Executive approval to form an Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

2. Staff Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

3. Identify roles and responsibilities of Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

4. Identify and select data sources for base cases, including information on system topology, load and generation information

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 5, 6, 7

5. Design the process for collecting data necessary to produce monthly power flow studies

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 5, 6, 7

6. Design a process for keeping the assumptions on system topology aligned between the Total Flowgate Capability (TFC), ETC and PTDF calculations in the power flow studies

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 4, 5, 6, 7

7. Design the process for creating more frequent power flow cases Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R2, 5, 6, 7 8. Design a process for aligning the webTrans ETC with more frequent updates of the power flow ETC Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R3, 4, 5, 6, 7, 8, 9, 10, 11 9. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in webTrans Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R3, 4, 5, 6, 7, 8, 9, 10, 11 10. Receive Agency Prioritization Steering Committee funding approval for automation initiatives needed to build more frequent power flow cases, based on the above process re-design Facilitates compliance with all requirements of MOD-030-02, but especially: MOD-001-01, R7 MOD-030-02, R3, 5, 6, 7 11. Deliver final milestones for remaining 18 months of this mitigation plan. 12. Develop preliminary list of ATC Paths that may need to be added under MOD-29 13. Finalize list of ATC Paths, if any, that need to be added under MOD-29 14. If new ATC Paths need to be added, design the process for ETC calculations for the new ATC Paths 15. If new ATC Paths need to be added, design the process for TTC calculations for the new ATC Paths 16. Analyze to determine whether new or further developed processes and internal process controls are required 17. If new ATC Paths need to be added, implement new ATC Paths in OASIS 18. Implement new or further developed processes and internal process controls 19. Update the ATCID, send updated ATCID to entities specified in MOD-001 R4 and post the updated ATCID on BPA's ATC Methodology webpage

D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: August 17, 2015

D.3 Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
121115 Milestone	1. Gain Transmission Executive approval to form an Energy Delivery Modeling group	11/15/2012	11/15/2012
130215 Milestone	<ol> <li>Staff Energy Delivery Modeling group</li> <li>Identify roles and responsibilities of Energy Delivery Modeling group</li> </ol>	02/15/2013	02/15/2013
130515 Milestone	4. Identify and select data sources for seed cases, including information on system topology, load and generation information	05/15/2013	05/15/2013

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater	Actual Completion Date
	5. Design the process for collecting data necessary to produce monthly power flow cases	than 3 months apart)	
130815 Milestone	6. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in the power flow studies	08/15/2013	08/15/2013
	7. Design the process for creating more frequent power flow cases		
131115 Milestone	8. Design a process for aligning the webTrans ETC with more frequent updates of the power flow ETC	11/15/2013	11/15/2013
	9. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in webTrans		
140215 Milestone	10. Receive Agency Prioritization Steering Committee funding approval for automation initiatives needed to build more frequent power flow cases, based on the above process re-design	02/15/2014	02/15/2014
140328 Milestone	11. Deliver final milestones for remaining 18 months of this mitigation plan.	03/28/2014	03/28/2014
140515 Milestone	12. Develop preliminary list of ATC Paths that may need to be added under MOD-29	05/15/2014	05/15/2014
140815 Milestone	13. Finalize list of ATC Paths, if any, that need to be added under MOD-29	08/15/2014	
141115 Milestone	14. If new ATC Paths need to be added, design the process for ETC calculations for the new ATC Paths	11/15/2014	
150215 Milestone	15. If new ATC Paths need to be added, design the process for TTC calculations for the new ATC Paths	02/15/2015	
150515 Milestone	16. Analyze to determine whether new or further developed processes and	05/15/2015	

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
	internal process controls are required		
150815 Milestone	<ul><li>17. If new ATC Paths need to be added, implement new ATC Paths in OASIS</li><li>18. Implement new or further developed</li></ul>	08/15/2015	
	processes and internal process controls		
	19. Update the ATCID, send updated ATCID to entities specified in MOD-001 R4 and post the updated ATCID on BPA's ATC Methodology webpage		

D.4 Additional Relevant Information (Optional)

# Section E: Interim and Future Reliability Risk

E.1 Abatement of Interim BPS Reliability Risk

While your organization is implementing the Mitigation Plan proposed in Section D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

The impact to the BPS is minimal.

MOD-030-02 is based on load and generation forecasts, so to a large extent, the projected values across the network flowgates are likely never 100% accurate compared to minute-by-minute flow. BPAT does not believe that the above violations have introduced significantly more variability than already exists in the load and generation forecasts necessary for MOD-030-02 in general.

E.2 Prevention of Future BPS Reliability Risk

Describe how successful completion of the Mitigation Plan as laid out in Section D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

Upon project completion, BPAT will transition its MOD-030 network flowgates to MOD-029 paths. BPA believes that this transition will provide for sustainable compliance with the NERC ATC MODs.

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Section D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Section C.1, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

# Section F: Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

(a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and

(b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and

(c) Acknowledges:

- 1. I am Vice President, Planning & Asset Management, Transmission of Bonneville Power Administration
- 2. I am qualified to sign this Mitigation Plan on behalf of Bonneville Power Administration
- 3. I have read and understand Bonneville Power Administration's obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
- 4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
- 5. Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authorities in Canada.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Hardev Juj

Title: Vice President, Planning & Asset Management, Transmission

Authorized On: May 13, 2014

# Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: Bonneville Power Administration NERC Registry ID: NCR05032 NERC Violation ID(s): WECC2012011391 Mitigated Standard Requirement(s): MOD-030-2 R4. Scheduled Completion as per Accepted Mitigation Plan: August 17, 2015 Date Mitigation Plan completed: August 10, 2015 WECC Notified of Completion on Date: August 10, 2015

Entity Comment: Please see attached completion packet for supporting evidence

Additional Comments			
From	Comment	User Name	
Entity	This is part of BPA's holistic MOD-030 mitigation plan. BPA ID P174	Rachael Ferrin	
Entity	Lindsay Wickizer at BPA and Brent Read at WECC were working on this in the spring of 2014. At that time, BPA decided to switch from MOD-030 to MOD-029. Instead of updating all cases at once, and WECC having to reject them if they were unsatisfactory, Lindsay and Brent decided to update MOD-030 R3 only, and the remainder if WECC accepted the plan. While WECC was reviewing the plan, WECC rejected BPA's self-report on MOD-001 R7. BPA then needed to revise the mitigation plan to remove steps that addressed the MOD-001 R7 mitigation plan. As such, the revised steps were submitted to WECC prior to March 28, 2014, and then revised and re-submitted (in the same test-case manner on MOD-030 R3) in May. WECC accepted the plan in June 2014. BPA completed the milestones as required by its plan, but was unable to upload them in CDMS, because the plans had not been updated yet. This plan was originally uploaded to MOD-030 R3, as the sample requirement for WECC's review on 5-13-14.	Tanner Brier	

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	121108 MOD-030-02 ALL Signed Mitigation Plan P174.pdf	Signed mitigation plan document.	779,103
Entity	140513 MOD-030 r1, r2, r3, r4, r6, r7, r8, r9, r10 revised		215,508

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	revised mitigation plan signed.pdf		215,508
Entity	150810 BPA P174 MOD-030- 02 R1-R10 Mitigation Plan Completion Package.pdf	BPA's Mitigation Completion Packet. All supporting evidence is attached to this PDF. This packet also contains the approval signature of BPA's Acting Reliability Officer: Jeff Cook.	14,750,719

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Jeff Cook

Title: Acting - Vice President, Planning & Asset Management

Email: jwcook@bpa.gov

Phone: 1 (360) 418-8981

Authorized Signature

Date \_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2012011391 Standard/Requirement: MOD-030-2 R4. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/09/2015 for the violation of MOD-030-2 R4.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

#### Thank you, OATI

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[OATI Information - Email Template: MitPlan\_Completed]



# Attachment Z

# Record documents for the violation of MOD-030-2 R7 (WECC2012011392)

**Z-1. BPA's Self-Report dated November** 12, 2012;

Z-2. BPA's Mitigation Plan designated as WECCMIT008369-1 submitted July 21, 2014;

Z-3. BPA's Certification of Mitigation Completion dated August 25, 2015;

Z-4. WECC's Verification of Mitigation Completion dated August 21, 2015.

Entity Name: Bonneville Power Administration Address: 905 NE 11 Avenue

Portland OR 97232

NERC Registry ID: NCR05032

Standard Requirement: MOD-030-2 R7

When calculating the impact of ETC for non-firm commitments (ETCNFi) for all time periods for a Flowgate the Transmission Service Provider shall sum: [Violation Risk Factor: To Be Determined] [Time Horizon: Operations Planning]

Date of Alleged Violation: April 01, 2011 Date Submitted: November 12, 2012 Self Report Status: Self Report has been submitted

Description and Cause: BPA Transmission Services (BPAT) recently identified compliance gaps in its implementation of MOD-030-02. These gaps were realized as BPAT was looking at the solutions for its current NERC MOD mitigation plans. BPAT has gained more experience with the MOD standards and has increased its understanding of the complexity of the requirements.

BPAT implemented MOD-030-02 on April 1, 2011, based on its understanding and interpretation of the requirements at the time. Since April 1, 2011, BPAT has self-reported on several violations with MOD-030-02. In looking at solutions for its current NERC MOD mitigation plans, BPAT visited PJM Interconnection, Southwest Power Pool, and Tennessee Valley Authority. These benchmarking trips broadened BPAT's understanding of the complexity of the requirements in MOD-030-02, and informed BPAT's knowledge of the processes and automation necessary to sustainably comply with them.

The current compliance gaps identified are in BPATâ€<sup>™</sup>s implementation of Requirements 3, 5 and 6 of MOD-030-02. BPAT believes that it has a gap in implementation of Requirements 3 and 5 because BPAT does not use expected generation or Transmission outages, additions, or retirements to update the Existing Transmission Commitments (ETC) derived from its power flow studies. BPAT has been updating Transmission outages into the transmission model through Power Distribution Factors (PTDFs). These PTDFs are uploaded into BPATâ€<sup>™</sup>s commercial system and used to re-calculate a portion of BPATâ€<sup>™</sup>s ETC.

Because the transmission outages are not incorporated into the ETC determined in the power flow study, BPATâ€<sup>™</sup>s model is not uniformly updated for system topology at least once per day. Although this process is in line with BPATâ€<sup>™</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>™</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirements 3 and 5.

Additionally, BPAT believes it has a compliance gap on Requirement 6 of MOD-030-02 due to a gap in its calculation of ETC for Network Integration Transmission Service. BPAT's ETC calculation does not always include load forecasts for the time period being calculated. BPAT's ETC calculation from the power flow study includes a seasonal load forecast, although BPAT has monthly load forecasts available. BPAT needs automated tools in order to run more frequent power flow studies to reflect the load forecasts for the time period being calculated. BPAT also cannot ensure that it captures all designated network resources that are committed or have the legal obligation to run during the time period being calculated in its

power flow ETC studies. Although this process is in line with BPAT's initial interpretation of MOD-030-02, BPAT's expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirement 6.

In some cases, the above gaps represent work that BPAT is not currently doing and that is not presently assigned to any organization or individual across the organization. These gaps were realized as BPAT was working on solutions for its current NERC MOD mitigation plans and with the benefit of BPATâ€<sup>TM</sup>s expanded experience with MOD-030-02 requirements. BPAT now recognizes that, in order to perform the calculations using consistent models and with the frequency and data granularity required by the MODs, BPAT will need dedicated staff, a process re-design and automated tools. The goal of this mitigation plan is to holistically solve the organizational, process and automation gaps that are at the root cause of BPATâ€<sup>TM</sup>s compliance violations on MOD-030-02. Addressing these items will allow BPAT to close the gaps with Requirements 3, 5 and 6, as well to ensure sustainable compliance with MOD-030-02.

BPAT believes that, while it has not presently identified specific violations with the other requirements in MOD-030-02, filing a blanket mitigation plan on MOD-030-02 is prudent. The MOD-030-02 gaps prevent BPAT from ensuring compliance with the other requirements in MOD-030-02. BPAT will remain at risk of recurring violations on the other requirements until the organizational, process, and automated tool gaps can be addressed. This blanket plan allows BPAT and WECC to reduce their administrative burden of managing individual self-reports each time a new compliance gap is identified, and allows BPAT to focus on holistically rebuilding our approach to MOD-030-02 compliance.

Potential Impact to the Bulk Potential Impact to the Bulk Electric System is Minimal.

Power System:

BPAT is working on improving its implementation of MOD-030. Note, MOD-030 is based on forecasts, so to a large extent, the projected value is likely never 100% accurate to minuteby-minute flow. BPAT does not believe the issue with this requirement has introduced significantly more variability than already exists in the forecasts necessary for MOD-030 in general.

Additional Comments			
From	Comment	User Name	
Entity	This is part of BPA's MOD-030-02 mitigation plan. P174	Tanner Brier	

# Mitigation Plan

# Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
null	WECC2012011392	MOD-030-2 R7	12/06/2012	2
Mitigation Plan Submitted On: July 21, 2014				
Mitigation Plan Accepted On:				
Mitigation Plan Proposed Completion Date: August 17, 2015				
Actual Completion Date of Mitigation Plan:				
Mitigation Plan Certified Complete by BPA On:				
Mitigation Plan Completion Verified by WECC On:				
Mitigation Plan Completed? (Yes/No): No				
#### Section A: Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

#### Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: Bonneville Power Administration

NERC Compliance Registry ID: NCR05032

Address: 905 NE 11 Avenue Portland OR 97232

B.2 Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Tanner Brier Title: Compliance Specialist Email: thbrier@bpa.gov Phone: 503-230-3649

#### Section C: Identification of Reliability Standard Violation(s) Associated with this Mitigation Plan

C.1 This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement	
	Requirement Description		
WECC2012011392	04/01/2011	MOD-030-2 R7	
When calculating the impact of ETC for non-firm commitments (ETCNFi) for all time periods for a Flowgate the Transmission Service Provider shall sum: [Violation Risk Factor: To Be Determined] [Time Horizon: Operations Planning]			

C.2 Brief summary including the cause of the violation(s) and mechanism in which it was identified above:

BPA Transmission Services (BPAT) recently identified compliance gaps in its implementation of MOD-030-02. These gaps were realized as BPAT was looking at the solutions for its current NERC MOD mitigation plans. BPAT has gained more experience with the MOD standards and has increased its understanding of the complexity of the requirements.

BPAT implemented MOD-030-02 on April 1, 2011, based on its understanding and interpretation of the requirements at the time. Since April 1, 2011, BPAT has self-reported on several violations with MOD-030-02. In looking at solutions for its current NERC MOD mitigation plans, BPAT visited PJM Interconnection, Southwest Power Pool, and Tennessee Valley Authority. These benchmarking trips broadened BPAT's understanding of the complexity of the requirements in MOD-030-02, and informed BPAT's knowledge of the processes and automation necessary to sustainably comply with them.

The current compliance gaps identified are in BPATâ€<sup>™</sup>s implementation of Requirements 3, 5 and 6 of MOD-030-02. BPAT believes that it has a gap in implementation of Requirements 3 and 5 because BPAT does not use expected generation or Transmission outages, additions, or retirements to update the Existing Transmission Commitments (ETC) derived from its power flow studies. BPAT has been updating Transmission outages into the transmission model through Power Distribution Factors (PTDFs). These PTDFs are uploaded into BPATâ€<sup>™</sup>s commercial system and used to re-calculate a portion of BPATâ€<sup>™</sup>s ETC.

Because the transmission outages are not incorporated into the ETC determined in the power flow study, BPATâ€<sup>™</sup>s model is not uniformly updated for system topology at least once per day. Although this process is in line with BPATâ€<sup>™</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>™</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirements 3 and 5.

Additionally, BPAT believes it has a compliance gap on Requirement 6 of MOD-030-02 due to a gap in its calculation of ETC for Network Integration Transmission Service. BPATâ€<sup>TM</sup>s ETC calculation does not always include load forecasts for the time period being calculated. BPATâ€<sup>TM</sup>s ETC calculation from the power flow study includes a seasonal load forecast, although BPAT has monthly load forecasts available. BPAT needs automated tools in order to run more frequent power flow studies to reflect the load forecasts for the time period being calculated. BPAT also cannot ensure that it captures all designated network resources that are committed or have the legal obligation to run during the time period being calculated in its power flow ETC studies. Although this process is in line with BPATâ€<sup>TM</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>TM</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirement 6.

In some cases, the above gaps represent work that BPAT is not currently doing and that is not presently assigned to any organization or individual across the organization. These gaps were realized as BPAT was working on solutions for its current NERC MOD mitigation plans and with the benefit of BPAT's expanded experience with MOD-030-02 requirements. BPAT now recognizes that, in order to perform the calculations using consistent models and with the frequency and data granularity required by the MODs, BPAT will need dedicated staff, a process re-design and automated tools. The goal of this mitigation plan is to holistically solve the organizational, process and automation gaps that are at the root cause of

BPAT's compliance violations on MOD-030-02. Addressing these items will allow BPAT to close the gaps with Requirements 3, 5 and 6, as well to ensure sustainable compliance with MOD-030-02.

BPAT believes that, while it has not presently identified specific violations with the other requirements in MOD-030-02, filing a blanket mitigation plan on MOD-030-02 is prudent. The MOD-030-02 gaps prevent BPAT from ensuring compliance with the other requirements in MOD-030-02. BPAT will remain at risk of recurring violations on the other requirements until the organizational, process, and automated tool gaps can be addressed. This blanket plan allows BPAT and WECC to reduce their administrative burden of managing individual self-reports each time a new compliance gap is identified, and allows BPAT to focus on holistically rebuilding our approach to MOD-030-02 compliance.

#### Update on 5/12/2014

BPA has concluded that complying with MOD-029 rather than MOD-030 is a more appropriate choice given our transmission network, regional data sharing or availability, and certain aspects of the MOD-030 standard. Additionally, BPA understands that its current process for uploading its Existing Transmission Commitments to its commercial systems is not in violation of MOD-001, R7. As a result, the remaining 18 months of milestones for BPA's 36 month mitigation plan on MOD-030 focus on tasks required to transition BPA's current MOD-030 network flowgates to MOD-029 paths.

For this transition, BPA has identified tasks in two focus areas:

- 1. Addition of new ATC Paths
- 2. Process controls and documentation

#### Addition of new ATC Paths

BPA identifies all of its control area to control area interconnections as ATC Paths and has chosen either MOD-029 or MOD-030 as the methodology for each interconnection. BPA has not established Flowgates for the control area to control area interconnections for which BPA has chosen MOD-030 due to language in MOD-030 R2.1.1.3 and R2.1.2.3 that states "lf any limiting element is kept within its limit for its associated worst Contingency by operating within the limits of another Flowgate, then no new Flowgate needs to be established for such limiting elements or Contingencies.†BPA's current MOD-030 network flowgates and MOD-029 paths protect for the control area to control area interconnections for which BPA is using MOD-030. Therefore, BPA concluded that additional Flowgates for these interconnections were not required under MOD-030.

BPA will be transitioning its MOD-030 network flowgates to MOD-029 paths. Since MOD-029 does not contain language similar to MOD-030 R2.1.1.3 and R2.1.2.3, BPA needs to analyze whether additional ATC Paths are required to account for the control area to control area interconnections for which MOD-030 is currently used. If new ATC Paths are needed, BPA will complete the studies and post the new ATC Paths and calculations in its OASIS.

#### Process controls and documentation

BPA will assess current process controls and enhance these controls if needed. The documentation in the ATCID will be updated to reflect the transition from MOD-030 to MOD-029.

C.3 Provide any relevant information regarding the identification of the violation(s) associated with this Mitigation Plan:

BPA ID P174

#### Section D: Details of Proposed Mitigation Plan

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

In order to close the gaps identified above, BPAT has determined that changes to its organizational structure and Available Flowgate Capability calculation processes are needed, in addition to automated tools. This mitigation plan outlines the milestones needed to accomplish these changes so that the identified gaps can be closed.

BPAT believes that it will need 36 months to make the appropriate organizational changes, to close calculation and data gaps, and to automate the resulting processes. Since this mitigation plan covers a significant process redesign, BPAT feels that the early milestone results will drive the details of the later milestones and therefore is submitting high level actions for the latter half of this mitigation plan at this time. BPAT will submit final milestones no later than 2/15/2014. This work will result in sustainable compliance with MOD-001-1 and MOD-030-02.

1. Gain Transmission Executive approval to form an Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

2. Staff Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

3. Identify roles and responsibilities of Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

4. Identify and select data sources for base cases, including information on system topology, load and generation information

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 5, 6, 7

5. Design the process for collecting data necessary to produce monthly power flow studies

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 5, 6, 7

6. Design a process for keeping the assumptions on system topology aligned between the Total Flowgate Capability (TFC), ETC and PTDF calculations in the power flow studies

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 4, 5, 6, 7

7. Design the process for creating more frequent power flow cases Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R2, 5, 6, 7 8. Design a process for aligning the webTrans ETC with more frequent updates of the power flow ETC Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R3, 4, 5, 6, 7, 8, 9, 10, 11 9. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in webTrans Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R3, 4, 5, 6, 7, 8, 9, 10, 11 10. Receive Agency Prioritization Steering Committee funding approval for automation initiatives needed to build more frequent power flow cases, based on the above process re-design Facilitates compliance with all requirements of MOD-030-02, but especially: MOD-001-01, R7 MOD-030-02, R3, 5, 6, 7 11. Deliver final milestones for remaining 18 months of this mitigation plan. 12. Develop preliminary list of ATC Paths that may need to be added under MOD-29 13. Finalize list of ATC Paths, if any, that need to be added under MOD-29 14. If new ATC Paths need to be added, design the process for ETC calculations for the new ATC Paths 15. If new ATC Paths need to be added, design the process for TTC calculations for the new ATC Paths 16. Analyze to determine whether new or further developed processes and internal process controls are required 17. If new ATC Paths need to be added, implement new ATC Paths in OASIS 18. Implement new or further developed processes and internal process controls 19. Update the ATCID, send updated ATCID to entities specified in MOD-001 R4 and post the updated ATCID on BPA's ATC Methodology webpage

D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: August 17, 2015

D.3 Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
121115 Milestone	1. Gain Transmission Executive approval to form an Energy Delivery Modeling group	11/15/2012	11/15/2012
130215 Milestone	<ol> <li>Staff Energy Delivery Modeling group</li> <li>Identify roles and responsibilities of Energy Delivery Modeling group</li> </ol>	02/15/2013	02/15/2013
130515 Milestone	4. Identify and select data sources for seed cases, including information on system topology, load and generation information	05/15/2013	05/15/2013

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater	Actual Completion Date
	5. Design the process for collecting data necessary to produce monthly power flow cases	than 3 months apart)	
130815 Milestone	6. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in the power flow studies	08/15/2013	08/15/2013
	7. Design the process for creating more frequent power flow cases		
131115 Milestone	8. Design a process for aligning the webTrans ETC with more frequent updates of the power flow ETC	11/15/2013	11/15/2013
	9. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in webTrans		
140215 Milestone	10. Receive Agency Prioritization Steering Committee funding approval for automation initiatives needed to build more frequent power flow cases, based on the above process re-design	02/15/2014	02/15/2014
140328 Milestone	11. Deliver final milestones for remaining 18 months of this mitigation plan.	03/28/2014	03/28/2014
140515 Milestone	12. Develop preliminary list of ATC Paths that may need to be added under MOD-29	05/15/2014	05/15/2014
140815 Milestone	13. Finalize list of ATC Paths, if any, that need to be added under MOD-29	08/15/2014	
141115 Milestone	14. If new ATC Paths need to be added, design the process for ETC calculations for the new ATC Paths	11/15/2014	
150215 Milestone	15. If new ATC Paths need to be added, design the process for TTC calculations for the new ATC Paths	02/15/2015	
150515 Milestone	16. Analyze to determine whether new or further developed processes and	05/15/2015	

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
	internal process controls are required		
150815 Milestone	17. If new ATC Paths need to be added, implement new ATC Paths in OASIS	08/15/2015	
	18. Implement new or further developed processes and internal process controls		
	19. Update the ATCID, send updated ATCID to entities specified in MOD-001 R4 and post the updated ATCID on BPA's ATC Methodology webpage		

D.4 Additional Relevant Information (Optional)

#### Section E: Interim and Future Reliability Risk

E.1 Abatement of Interim BPS Reliability Risk

While your organization is implementing the Mitigation Plan proposed in Section D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

The impact to the BPS is minimal.

MOD-030-02 is based on load and generation forecasts, so to a large extent, the projected values across the network flowgates are likely never 100% accurate compared to minute-by-minute flow. BPAT does not believe that the above violations have introduced significantly more variability than already exists in the load and generation forecasts necessary for MOD-030-02 in general.

E.2 Prevention of Future BPS Reliability Risk

Describe how successful completion of the Mitigation Plan as laid out in Section D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

Upon project completion, BPAT will transition its MOD-030 network flowgates to MOD-029 paths. BPA believes that this transition will provide for sustainable compliance with the NERC ATC MODs.

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Section D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Section C.1, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

#### Section F: Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

(a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and

(b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and

(c) Acknowledges:

- 1. I am Vice President, Planning & Asset Management, Transmission of Bonneville Power Administration
- 2. I am qualified to sign this Mitigation Plan on behalf of Bonneville Power Administration
- 3. I have read and understand Bonneville Power Administration's obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
- 4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
- 5. Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authorities in Canada.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Hardev Juj

Title: Vice President, Planning & Asset Management, Transmission

Authorized On: May 13, 2014

## Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: Bonneville Power Administration NERC Registry ID: NCR05032 NERC Violation ID(s): WECC2012011392 Mitigated Standard Requirement(s): MOD-030-2 R7. Scheduled Completion as per Accepted Mitigation Plan: August 17, 2015 Date Mitigation Plan completed: August 10, 2015 WECC Notified of Completion on Date: August 10, 2015

Entity Comment: Please see attached completion packet for supporting evidence

	Additional Comments			
From	Comment	User Name		
Entity	This is the holistic mitigation plan for MOD-030. BPA ID P174	Rachael Ferrin		
Entity	Lindsay Wickizer at BPA and Brent Read at WECC were working on this in the spring of 2014. At that time, BPA decided to switch from MOD-030 to MOD-029. Instead of updating all cases at once, and WECC having to reject them if they were unsatisfactory, Lindsay and Brent decided to update MOD-030 R3 only, and the remainder if WECC accepted the plan. While WECC was reviewing the plan, WECC rejected BPA's self-report on MOD-001 R7. BPA then needed to revise the mitigation plan to remove steps that addressed the MOD-001 R7 mitigation plan. As such, the revised steps were submitted to WECC prior to March 28, 2014, and then revised and re-submitted (in the same test-case manner on MOD-030 R3) in May. WECC accepted the plan in June 2014. BPA completed the milestones as required by its plan, but was unable to upload them in CDMS, because the plans had not been updated yet. This plan was originally uploaded to MOD-030 R3, as the sample requirement for WECC's review on 5-13-14.	Tanner Brier		

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	121108 MOD-030-02 ALL Signed Mitigation Plan P174.pdf	Signed mitigation plan document	779,103
Entity	140513 MOD-030 r1, r2, r3, r4, r6, r7, r8, r9, r10 revised	revised mitigation plan document	215,508

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	revised mitigation plan signed.pdf	revised mitigation plan document	215,508
Entity	150810 BPA P174 MOD-030- 02 R1-R10 Mitigation Plan Completion Package.pdf	BPA's Mitigation Completion Packet. All supporting evidence is attached to this PDF. This packet also contains the approval signature of BPA's Acting Reliability Officer: Jeff Cook.	14,750,719

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Jeff Cook

Title: Acting - Vice President, Planning & Asset Management

Email: jwcook@bpa.gov

Phone: 1 (360) 418-8981

Authorized Signature

Date \_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

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NERC Registration ID: NCR05032 NERC Violation ID: WECC2012011392 Standard/Requirement: MOD-030-2 R7. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/09/2015 for the violation of MOD-030-2 R7.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

#### Thank you, OATI

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[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment AA**

# Record documents for the violation of MOD-030-2 R8 (WECC2012011393)

AA-1. BPA's Self-Report dated November 12, 2012;

AA-2. BPA's Mitigation Plan designated as WECCMIT008370-1 submitted July 21, 2014;

AA-3. BPA's Certification of Mitigation Completion dated August 25, 2015;

AA-4. WECC's Verification of Mitigation Completion dated August 21, 2015.

#### Self Report - 2012

Entity Name: Bonneville Power Administration

Address: 905 NE 11 Avenue Portland OR 97232

NERC Registry ID: NCR05032

Standard Requirement: MOD-030-2 R8

When calculating firm AFC for a Flowgate for a specified period, the Transmission Service Provider shall use the following algorithm (subject to allocation processes described in the ATCID): [Violation Risk Factor: To Be Determined] [Time Horizon: Operations Planning]

- Please refer to NERC Standard for algorithm

Date of Alleged Violation: April 01, 2011 Date Submitted: November 12, 2012 Self Report Status: Self Report has been submitted

Description and Cause: BPA Transmission Services (BPAT) recently identified compliance gaps in its implementation of MOD-030-02. These gaps were realized as BPAT was looking at the solutions for its current NERC MOD mitigation plans. BPAT has gained more experience with the MOD standards and has increased its understanding of the complexity of the requirements.

BPAT implemented MOD-030-02 on April 1, 2011, based on its understanding and interpretation of the requirements at the time. Since April 1, 2011, BPAT has self-reported on several violations with MOD-030-02. In looking at solutions for its current NERC MOD mitigation plans, BPAT visited PJM Interconnection, Southwest Power Pool, and Tennessee Valley Authority. These benchmarking trips broadened BPAT's understanding of the complexity of the requirements in MOD-030-02, and informed BPAT's knowledge of the processes and automation necessary to sustainably comply with them.

The current compliance gaps identified are in BPATâ€<sup>™</sup>s implementation of Requirements 3, 5 and 6 of MOD-030-02. BPAT believes that it has a gap in implementation of Requirements 3 and 5 because BPAT does not use expected generation or Transmission outages, additions, or retirements to update the Existing Transmission Commitments (ETC) derived from its power flow studies. BPAT has been updating Transmission outages into the transmission model through Power Distribution Factors (PTDFs). These PTDFs are uploaded into BPATâ€<sup>™</sup>s commercial system and used to re-calculate a portion of BPATâ€<sup>™</sup>s ETC.

Because the transmission outages are not incorporated into the ETC determined in the power flow study, BPATâ€<sup>™</sup>s model is not uniformly updated for system topology at least once per day. Although this process is in line with BPATâ€<sup>™</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>™</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirements 3 and 5.

Additionally, BPAT believes it has a compliance gap on Requirement 6 of MOD-030-02 due to a gap in its calculation of ETC for Network Integration Transmission Service. BPAT's ETC calculation does not always include load forecasts for the time period being calculated. BPAT's ETC calculation from the power flow study includes a seasonal load forecast, although BPAT has monthly load forecasts available. BPAT needs automated tools in order to run more frequent power flow studies to reflect the load forecasts for the time period being

#### Self Report - 2012

calculated. BPAT also cannot ensure that it captures all designated network resources that are committed or have the legal obligation to run during the time period being calculated in its power flow ETC studies. Although this process is in line with BPAT's initial interpretation of MOD-030-02, BPAT's expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirement 6.

In some cases, the above gaps represent work that BPAT is not currently doing and that is not presently assigned to any organization or individual across the organization. These gaps were realized as BPAT was working on solutions for its current NERC MOD mitigation plans and with the benefit of BPATâ€<sup>™</sup>s expanded experience with MOD-030-02 requirements. BPAT now recognizes that, in order to perform the calculations using consistent models and with the frequency and data granularity required by the MODs, BPAT will need dedicated staff, a process re-design and automated tools. The goal of this mitigation plan is to holistically solve the organizational, process and automation gaps that are at the root cause of BPATâ€<sup>™</sup>s compliance violations on MOD-030-02. Addressing these items will allow BPAT to close the gaps with Requirements 3, 5 and 6, as well to ensure sustainable compliance with MOD-030-02.

BPAT believes that, while it has not presently identified specific violations with the other requirements in MOD-030-02, filing a blanket mitigation plan on MOD-030-02 is prudent. The MOD-030-02 gaps prevent BPAT from ensuring compliance with the other requirements in MOD-030-02. BPAT will remain at risk of recurring violations on the other requirements until the organizational, process, and automated tool gaps can be addressed. This blanket plan allows BPAT and WECC to reduce their administrative burden of managing individual self-reports each time a new compliance gap is identified, and allows BPAT to focus on holistically rebuilding our approach to MOD-030-02 compliance.

Potential Impact to the Bulk Potential Impact to the Bulk Electric System is Minimal. Power System:

> BPAT is working on improving its implementation of MOD-030. Note, MOD-030 is based on forecasts, so to a large extent, the projected value is likely never 100% accurate to minuteby-minute flow. BPAT does not believe the issue with this requirement has introduced significantly more variability than already exists in the forecasts necessary for MOD-030 in general.

Additional Comments		
From	Comment	User Name
Entity	This is part of BPA's MOD-030-02 mitigation plan. BPA ID P174	Tanner Brier

# Mitigation Plan

## Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
null	WECC2012011393	MOD-030-2 R8	12/06/2012	2
	Mitigation Plan Submi	itted On: July 21, 2014		
Mitigation Plan Accepted On:				
Mitigatior	n Plan Proposed Completi	on Date: August 17, 2015		
Actual C	Completion Date of Mitigati	on Plan:		
Mitigation PI	an Certified Complete by I	BPA On:		
Mitigation Plan	Completion Verified by WE	ECC On:		
Miti	gation Plan Completed? (	Yes/No): No		

#### Section A: Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

#### Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: Bonneville Power Administration

NERC Compliance Registry ID: NCR05032

Address: 905 NE 11 Avenue Portland OR 97232

B.2 Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Tanner Brier Title: Compliance Specialist Email: thbrier@bpa.gov Phone: 503-230-3649

#### Section C: Identification of Reliability Standard Violation(s) Associated with this Mitigation Plan

#### C.1 This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement	
Requirement Description			
WECC2012011393	04/01/2011	MOD-030-2 R8	
When calculating firm AFC for a Flowgate for a specified period, the Transmission Service Provider shall use the following algorithm (subject to allocation processes described in the ATCID): [Violation Risk Factor: To Be Determined] [Time Horizon: Operations Planning]			
- Please refer to NERC Standard for algorithm			

C.2 Brief summary including the cause of the violation(s) and mechanism in which it was identified above:

BPA Transmission Services (BPAT) recently identified compliance gaps in its implementation of MOD-030-02. These gaps were realized as BPAT was looking at the solutions for its current NERC MOD mitigation plans. BPAT has gained more experience with the MOD standards and has increased its understanding of the complexity of the requirements.

BPAT implemented MOD-030-02 on April 1, 2011, based on its understanding and interpretation of the requirements at the time. Since April 1, 2011, BPAT has self-reported on several violations with MOD-030-02. In looking at solutions for its current NERC MOD mitigation plans, BPAT visited PJM Interconnection, Southwest Power Pool, and Tennessee Valley Authority. These benchmarking trips broadened BPAT's understanding of the complexity of the requirements in MOD-030-02, and informed BPAT's knowledge of the processes and automation necessary to sustainably comply with them.

The current compliance gaps identified are in BPATâ€<sup>™</sup>s implementation of Requirements 3, 5 and 6 of MOD-030-02. BPAT believes that it has a gap in implementation of Requirements 3 and 5 because BPAT does not use expected generation or Transmission outages, additions, or retirements to update the Existing Transmission Commitments (ETC) derived from its power flow studies. BPAT has been updating Transmission outages into the transmission model through Power Distribution Factors (PTDFs). These PTDFs are uploaded into BPATâ€<sup>™</sup>s commercial system and used to re-calculate a portion of BPATâ€<sup>™</sup>s ETC.

Because the transmission outages are not incorporated into the ETC determined in the power flow study, BPATâ€<sup>™</sup>s model is not uniformly updated for system topology at least once per day. Although this process is in line with BPATâ€<sup>™</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>™</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirements 3 and 5.

Additionally, BPAT believes it has a compliance gap on Requirement 6 of MOD-030-02 due to a gap in its calculation of ETC for Network Integration Transmission Service. BPATâ€<sup>TM</sup>s ETC calculation does not always include load forecasts for the time period being calculated. BPATâ€<sup>TM</sup>s ETC calculation from the power flow study includes a seasonal load forecast, although BPAT has monthly load forecasts available. BPAT needs automated tools in order to run more frequent power flow studies to reflect the load forecasts for the time period being calculated. BPAT also cannot ensure that it captures all designated network resources that are committed or have the legal obligation to run during the time period being calculated in its power flow ETC studies. Although this process is in line with BPATâ€<sup>TM</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>TM</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirement 6.

In some cases, the above gaps represent work that BPAT is not currently doing and that is not presently assigned to any organization or individual across the organization. These gaps were realized as BPAT was working on solutions for its current NERC MOD mitigation plans and with the benefit of BPAT's expanded experience with MOD-030-02 requirements. BPAT now recognizes that, in order to perform the calculations using consistent models and with the frequency and data granularity required by the MODs,

BPAT will need dedicated staff, a process re-design and automated tools. The goal of this mitigation plan is to holistically solve the organizational, process and automation gaps that are at the root cause of BPAT's compliance violations on MOD-030-02. Addressing these items will allow BPAT to close the gaps with Requirements 3, 5 and 6, as well to ensure sustainable compliance with MOD-030-02.

BPAT believes that, while it has not presently identified specific violations with the other requirements in MOD-030-02, filing a blanket mitigation plan on MOD-030-02 is prudent. The MOD-030-02 gaps prevent BPAT from ensuring compliance with the other requirements in MOD-030-02. BPAT will remain at risk of recurring violations on the other requirements until the organizational, process, and automated tool gaps can be addressed. This blanket plan allows BPAT and WECC to reduce their administrative burden of managing individual self-reports each time a new compliance gap is identified, and allows BPAT to focus on holistically rebuilding our approach to MOD-030-02 compliance.

#### Update on 5/12/2014

BPA has concluded that complying with MOD-029 rather than MOD-030 is a more appropriate choice given our transmission network, regional data sharing or availability, and certain aspects of the MOD-030 standard. Additionally, BPA understands that its current process for uploading its Existing Transmission Commitments to its commercial systems is not in violation of MOD-001, R7. As a result, the remaining 18 months of milestones for BPA's 36 month mitigation plan on MOD-030 focus on tasks required to transition BPA's current MOD-030 network flowgates to MOD-029 paths.

For this transition, BPA has identified tasks in two focus areas:

- 1. Addition of new ATC Paths
- 2. Process controls and documentation

#### Addition of new ATC Paths

BPA identifies all of its control area to control area interconnections as ATC Paths and has chosen either MOD-029 or MOD-030 as the methodology for each interconnection. BPA has not established Flowgates for the control area to control area interconnections for which BPA has chosen MOD-030 due to language in MOD-030 R2.1.1.3 and R2.1.2.3 that states "lf any limiting element is kept within its limit for its associated worst Contingency by operating within the limits of another Flowgate, then no new Flowgate needs to be established for such limiting elements or Contingencies.†BPAâ€<sup>TM</sup>s current MOD-030 network flowgates and MOD-029 paths protect for the control area to control area interconnections for which BPA is using MOD-030. Therefore, BPA concluded that additional Flowgates for these interconnections were not required under MOD-030.

BPA will be transitioning its MOD-030 network flowgates to MOD-029 paths. Since MOD-029 does not contain language similar to MOD-030 R2.1.1.3 and R2.1.2.3, BPA needs to analyze whether additional ATC Paths are required to account for the control area to control area interconnections for which MOD-030 is currently used. If new ATC Paths are needed, BPA will complete the studies and post the new ATC Paths and calculations in its OASIS.

#### Process controls and documentation

BPA will assess current process controls and enhance these controls if needed. The documentation in the ATCID will be updated to reflect the transition from MOD-030 to MOD-029.

C.3 Provide any relevant information regarding the identification of the violation(s) associated with this Mitigation Plan: BPA ID P174

#### Section D: Details of Proposed Mitigation Plan

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

In order to close the gaps identified above, BPAT has determined that changes to its organizational structure and Available Flowgate Capability calculation processes are needed, in addition to automated tools. This mitigation plan outlines the milestones needed to accomplish these changes so that the identified gaps can be closed.

BPAT believes that it will need 36 months to make the appropriate organizational changes, to close calculation and data gaps, and to automate the resulting processes. Since this mitigation plan covers a significant process redesign, BPAT feels that the early milestone results will drive the details of the later milestones and therefore is submitting high level actions for the latter half of this mitigation plan at this time. BPAT will submit final milestones no later than 2/15/2014. This work will result in sustainable compliance with MOD-001-1 and MOD-030-02.

1. Gain Transmission Executive approval to form an Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

2. Staff Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

3. Identify roles and responsibilities of Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

4. Identify and select data sources for base cases, including information on system topology, load and generation information

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 5, 6, 7

5. Design the process for collecting data necessary to produce monthly power flow studies

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 5, 6, 7

6. Design a process for keeping the assumptions on system topology aligned between the Total Flowgate Capability (TFC), ETC and PTDF calculations in the power flow studies

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 4, 5, 6, 7

7. Design the process for creating more frequent power flow cases Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R2, 5, 6, 7 8. Design a process for aligning the webTrans ETC with more frequent updates of the power flow ETC Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R3, 4, 5, 6, 7, 8, 9, 10, 11 9. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in webTrans Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R3, 4, 5, 6, 7, 8, 9, 10, 11 10. Receive Agency Prioritization Steering Committee funding approval for automation initiatives needed to build more frequent power flow cases, based on the above process re-design Facilitates compliance with all requirements of MOD-030-02, but especially: MOD-001-01, R7 MOD-030-02, R3, 5, 6, 7 11. Deliver final milestones for remaining 18 months of this mitigation plan. 12. Develop preliminary list of ATC Paths that may need to be added under MOD-29 13. Finalize list of ATC Paths, if any, that need to be added under MOD-29 14. If new ATC Paths need to be added, design the process for ETC calculations for the new ATC Paths 15. If new ATC Paths need to be added, design the process for TTC calculations for the new ATC Paths 16. Analyze to determine whether new or further developed processes and internal process controls are required 17. If new ATC Paths need to be added, implement new ATC Paths in OASIS 18. Implement new or further developed processes and internal process controls 19. Update the ATCID, send updated ATCID to entities specified in MOD-001 R4 and post the updated ATCID on BPA's ATC Methodology webpage

D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: August 17, 2015

D.3 Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
121115 Milestone	1. Gain Transmission Executive approval to form an Energy Delivery Modeling group	11/15/2012	11/15/2012
130215 Milestone	<ol> <li>Staff Energy Delivery Modeling group</li> <li>Identify roles and responsibilities of Energy Delivery Modeling group</li> </ol>	02/15/2013	02/15/2013
130515 Milestone	4. Identify and select data sources for seed cases, including information on system topology, load and generation information	05/15/2013	05/15/2013

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater	Actual Completion Date
	5. Design the process for collecting data necessary to produce monthly power flow cases	than 3 months apart)	
130815 Milestone	6. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in the power flow studies	08/15/2013	08/15/2013
	7. Design the process for creating more frequent power flow cases		
131115 Milestone	8. Design a process for aligning the webTrans ETC with more frequent updates of the power flow ETC	11/15/2013	11/15/2013
	9. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in webTrans		
140215 Milestone	10. Receive Agency Prioritization Steering Committee funding approval for automation initiatives needed to build more frequent power flow cases, based on the above process re-design	02/15/2014	02/15/2014
140328 Milestone	11. Deliver final milestones for remaining 18 months of this mitigation plan.	03/28/2014	03/28/2014
140515 Milestone	12. Develop preliminary list of ATC Paths that may need to be added under MOD-29	05/15/2014	05/15/2014
140815 Milestone	13. Finalize list of ATC Paths, if any, that need to be added under MOD-29	08/15/2014	
141115 Milestone	14. If new ATC Paths need to be added, design the process for ETC calculations for the new ATC Paths	11/15/2014	
150215 Milestone	15. If new ATC Paths need to be added, design the process for TTC calculations for the new ATC Paths	02/15/2015	
150515 Milestone	16. Analyze to determine whether new or further developed processes and	05/15/2015	

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
	internal process controls are required		
150815 Milestone	17. If new ATC Paths need to be added, implement new ATC Paths in OASIS	08/15/2015	
	18. Implement new or further developed processes and internal process controls		
	19. Update the ATCID, send updated ATCID to entities specified in MOD-001 R4 and post the updated ATCID on BPA's ATC Methodology webpage		

D.4 Additional Relevant Information (Optional)

#### Section E: Interim and Future Reliability Risk

E.1 Abatement of Interim BPS Reliability Risk

While your organization is implementing the Mitigation Plan proposed in Section D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

The impact to the BPS is minimal.

MOD-030-02 is based on load and generation forecasts, so to a large extent, the projected values across the network flowgates are likely never 100% accurate compared to minute-by-minute flow. BPAT does not believe that the above violations have introduced significantly more variability than already exists in the load and generation forecasts necessary for MOD-030-02 in general.

E.2 Prevention of Future BPS Reliability Risk

Describe how successful completion of the Mitigation Plan as laid out in Section D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

Upon project completion, BPAT will transition its MOD-030 network flowgates to MOD-029 paths. BPA believes that this transition will provide for sustainable compliance with the NERC ATC MODs.

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Section D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Section C.1, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

#### Section F: Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

(a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and

(b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and

(c) Acknowledges:

- 1. I am Vice President, Planning & Asset Management, Transmission of Bonneville Power Administration
- 2. I am qualified to sign this Mitigation Plan on behalf of Bonneville Power Administration
- 3. I have read and understand Bonneville Power Administration's obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
- 4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
- 5. Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authorities in Canada.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Hardev Juj

Title: Vice President, Planning & Asset Management, Transmission

Authorized On: May 13, 2014

## Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: Bonneville Power Administration NERC Registry ID: NCR05032 NERC Violation ID(s): WECC2012011393 Mitigated Standard Requirement(s): MOD-030-2 R8. Scheduled Completion as per Accepted Mitigation Plan: August 17, 2015 Date Mitigation Plan completed: August 10, 2015 WECC Notified of Completion on Date: August 10, 2015

Entity Comment: Please see attached completion packet for supporting evidence

Additional Comments			
From	Comment	User Name	
Entity	This is BPA's holistic mitigation plan for MOD-030. BPA ID P174	Rachael Ferrin	
Entity	Lindsay Wickizer at BPA and Brent Read at WECC were working on this in the spring of 2014. At that time, BPA decided to switch from MOD-030 to MOD-029. Instead of updating all cases at once, and WECC having to reject them if they were unsatisfactory, Lindsay and Brent decided to update MOD-030 R3 only, and the remainder if WECC accepted the plan. While WECC was reviewing the plan, WECC rejected BPA's self-report on MOD-001 R7. BPA then needed to revise the mitigation plan to remove steps that addressed the MOD-001 R7 mitigation plan. As such, the revised steps were submitted to WECC prior to March 28, 2014, and then revised and re-submitted (in the same test-case manner on MOD-030 R3) in May. WECC accepted the plan in June 2014. BPA completed the milestones as required by its plan, but was unable to upload them in CDMS, because the plans had not been updated yet. This plan was originally uploaded to MOD-030 R3, as the sample requirement for WECC's review on 5-13-14.	Tanner Brier	

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	121108 MOD-030-02 ALL Signed Mitigation Plan P174.pdf	Signed mitigation plan document	779,103
Entity	140513 MOD-030 r1, r2, r3, r4, r6, r7, r8, r9, r10 revised	revised mitigation plan	215,508

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	revised mitigation plan signed.pdf	revised mitigation plan	215,508
Entity	150810 BPA P174 MOD-030- 02 R1-R10 Mitigation Plan Completion Package.pdf	BPA's Mitigation Completion Packet. All supporting evidence is attached to this PDF. This packet also contains the approval signature of BPA's Acting Reliability Officer: Jeff Cook.	14,750,719

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Jeff Cook

Title: Acting - Vice President, Planning & Asset Management

Email: jwcook@bpa.gov

Phone: 1 (360) 418-8981

Authorized Signature

Date \_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2012011393 Standard/Requirement: MOD-030-2 R8. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/09/2015 for the violation of MOD-030-2 R8.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

#### Thank you, OATI

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[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment BB**

# Record documents for the violation of MOD-030-2 R10 (WECC2012011394)

**BB-1. BPA's Self-Report dated November** 12, 2012;

BB-2. BPA's Mitigation Plan designated as WECCMIT008371-1 submitted July 21, 2014;

**BB-3. BPA's Certification of Mitigation Completion dated August 25, 2015;** 

**BB-4. WECC's Verification of Mitigation Completion dated August 21, 2015.** 

#### Self Report - 2012

Entity Name: Bonneville Power Administration Address: 905 NE 11 Avenue

Portland OR 97232

NERC Registry ID: NCR05032

Standard Requirement: MOD-030-2 R10

Each Transmission Service Provider shall recalculate AFC, utilizing the updated models described in R3.2, R3.3, and R5, at a minimum on the following frequency, unless none of the calculated values identified in the AFC equation have changed: [Violation Risk Factor: To Be Determined] [Time Horizon: Operations Planning]

Date of Alleged Violation: April 01, 2011 Date Submitted: November 12, 2012 Self Report Status: Self Report has been submitted

Description and Cause: BPA Transmission Services (BPAT) recently identified compliance gaps in its implementation of MOD-030-02. These gaps were realized as BPAT was looking at the solutions for its current NERC MOD mitigation plans. BPAT has gained more experience with the MOD standards and has increased its understanding of the complexity of the requirements.

BPAT implemented MOD-030-02 on April 1, 2011, based on its understanding and interpretation of the requirements at the time. Since April 1, 2011, BPAT has self-reported on several violations with MOD-030-02. In looking at solutions for its current NERC MOD mitigation plans, BPAT visited PJM Interconnection, Southwest Power Pool, and Tennessee Valley Authority. These benchmarking trips broadened BPAT's understanding of the complexity of the requirements in MOD-030-02, and informed BPAT's knowledge of the processes and automation necessary to sustainably comply with them.

The current compliance gaps identified are in BPATâ€<sup>™</sup>s implementation of Requirements 3, 5 and 6 of MOD-030-02. BPAT believes that it has a gap in implementation of Requirements 3 and 5 because BPAT does not use expected generation or Transmission outages, additions, or retirements to update the Existing Transmission Commitments (ETC) derived from its power flow studies. BPAT has been updating Transmission outages into the transmission model through Power Distribution Factors (PTDFs). These PTDFs are uploaded into BPATâ€<sup>™</sup>s commercial system and used to re-calculate a portion of BPATâ€<sup>™</sup>s ETC.

Because the transmission outages are not incorporated into the ETC determined in the power flow study, BPATâ€<sup>™</sup>s model is not uniformly updated for system topology at least once per day. Although this process is in line with BPATâ€<sup>™</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>™</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirements 3 and 5.

Additionally, BPAT believes it has a compliance gap on Requirement 6 of MOD-030-02 due to a gap in its calculation of ETC for Network Integration Transmission Service. BPATâ€<sup>™</sup>s ETC calculation does not always include load forecasts for the time period being calculated. BPATâ€<sup>™</sup>s ETC calculation from the power flow study includes a seasonal load forecast, although BPAT has monthly load forecasts available. BPAT needs automated tools in order to run more frequent power flow studies to reflect the load forecasts for the time period being calculated. BPAT also cannot ensure that it captures all designated network resources that

#### Self Report - 2012

are committed or have the legal obligation to run during the time period being calculated in its power flow ETC studies. Although this process is in line with BPAT's initial interpretation of MOD-030-02, BPAT's expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirement 6.

In some cases, the above gaps represent work that BPAT is not currently doing and that is not presently assigned to any organization or individual across the organization. These gaps were realized as BPAT was working on solutions for its current NERC MOD mitigation plans and with the benefit of BPATâ€<sup>™</sup>s expanded experience with MOD-030-02 requirements. BPAT now recognizes that, in order to perform the calculations using consistent models and with the frequency and data granularity required by the MODs, BPAT will need dedicated staff, a process re-design and automated tools. The goal of this mitigation plan is to holistically solve the organizational, process and automation gaps that are at the root cause of BPATâ€<sup>™</sup>s compliance violations on MOD-030-02. Addressing these items will allow BPAT to close the gaps with Requirements 3, 5 and 6, as well to ensure sustainable compliance with MOD-030-02.

BPAT believes that, while it has not presently identified specific violations with the other requirements in MOD-030-02, filing a blanket mitigation plan on MOD-030-02 is prudent. The MOD-030-02 gaps prevent BPAT from ensuring compliance with the other requirements in MOD-030-02. BPAT will remain at risk of recurring violations on the other requirements until the organizational, process, and automated tool gaps can be addressed. This blanket plan allows BPAT and WECC to reduce their administrative burden of managing individual self-reports each time a new compliance gap is identified, and allows BPAT to focus on holistically rebuilding our approach to MOD-030-02 compliance.

Potential Impact to the Bulk Potential Impact to the Bulk Electric System is Minimal.

Power System:

BPAT is working on improving its implementation of MOD-030. Note, MOD-030 is based on forecasts, so to a large extent, the projected value is likely never 100% accurate to minuteby-minute flow. BPAT does not believe the issue with this requirement has introduced significantly more variability than already exists in the forecasts necessary for MOD-030 in general.

Additional Comments			
From	Comment	User Name	
Entity	This is part of BPA's MOD-030-02 mitigation plan. BPA ID P174.	Tanner Brier	

# Mitigation Plan

## Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
null	WECC2012011394	MOD-030-2 R10	12/11/2012	2
Mitigation Plan Submitted On: July 21, 2014				
Mitigation Plan Accepted On:				
Mitigation Plan Proposed Completion Date: August 17, 2015				
Actual Completion Date of Mitigation Plan:				
Mitigation Plan Certified Complete by BPA On:				
Mitigation Plan Completion Verified by WECC On:				
Mitigation Plan Completed? (Yes/No): No				

#### Section A: Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

#### Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: Bonneville Power Administration

NERC Compliance Registry ID: NCR05032

Address: 905 NE 11 Avenue Portland OR 97232

B.2 Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Tanner Brier Title: Compliance Specialist Email: thbrier@bpa.gov Phone: 503-230-3649
#### Section C: Identification of Reliability Standard Violation(s) Associated with this Mitigation Plan

C.1 This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement	
Requirement Description			
WECC2012011394 04/01/2011 MOD-030-2 R10			
Each Transmission Service Provider shall recalculate AFC utilizing the undated models described in R3.2 R3.3 and			

Each Transmission Service Provider shall recalculate AFC, utilizing the updated models described in R3.2, R3.3, and R5, at a minimum on the following frequency, unless none of the calculated values identified in the AFC equation have changed: [Violation Risk Factor: To Be Determined] [Time Horizon: Operations Planning]

C.2 Brief summary including the cause of the violation(s) and mechanism in which it was identified above:

BPA Transmission Services (BPAT) recently identified compliance gaps in its implementation of MOD-030-02. These gaps were realized as BPAT was looking at the solutions for its current NERC MOD mitigation plans. BPAT has gained more experience with the MOD standards and has increased its understanding of the complexity of the requirements.

BPAT implemented MOD-030-02 on April 1, 2011, based on its understanding and interpretation of the requirements at the time. Since April 1, 2011, BPAT has self-reported on several violations with MOD-030-02. In looking at solutions for its current NERC MOD mitigation plans, BPAT visited PJM Interconnection, Southwest Power Pool, and Tennessee Valley Authority. These benchmarking trips broadened BPAT's understanding of the complexity of the requirements in MOD-030-02, and informed BPAT's knowledge of the processes and automation necessary to sustainably comply with them.

The current compliance gaps identified are in BPATâ€<sup>™</sup>s implementation of Requirements 3, 5 and 6 of MOD-030-02. BPAT believes that it has a gap in implementation of Requirements 3 and 5 because BPAT does not use expected generation or Transmission outages, additions, or retirements to update the Existing Transmission Commitments (ETC) derived from its power flow studies. BPAT has been updating Transmission outages into the transmission model through Power Distribution Factors (PTDFs). These PTDFs are uploaded into BPATâ€<sup>™</sup>s commercial system and used to re-calculate a portion of BPATâ€<sup>™</sup>s ETC.

Because the transmission outages are not incorporated into the ETC determined in the power flow study, BPATâ€<sup>™</sup>s model is not uniformly updated for system topology at least once per day. Although this process is in line with BPATâ€<sup>™</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>™</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirements 3 and 5.

Additionally, BPAT believes it has a compliance gap on Requirement 6 of MOD-030-02 due to a gap in its calculation of ETC for Network Integration Transmission Service. BPATâ€<sup>TM</sup>s ETC calculation does not always include load forecasts for the time period being calculated. BPATâ€<sup>TM</sup>s ETC calculation from the power flow study includes a seasonal load forecast, although BPAT has monthly load forecasts available. BPAT needs automated tools in order to run more frequent power flow studies to reflect the load forecasts for the time period being calculated. BPAT also cannot ensure that it captures all designated network resources that are committed or have the legal obligation to run during the time period being calculated in its power flow ETC studies. Although this process is in line with BPATâ€<sup>TM</sup>s initial interpretation of MOD-030-02, BPATâ€<sup>TM</sup>s expanded understanding of MOD-030-02 now leads us to believe that this is not the ideal way for BPAT to interpret Requirement 6.

In some cases, the above gaps represent work that BPAT is not currently doing and that is not presently assigned to any organization or individual across the organization. These gaps were realized as BPAT was working on solutions for its current NERC MOD mitigation plans and with the benefit of BPAT's expanded experience with MOD-030-02 requirements. BPAT now recognizes that, in order to perform the calculations using consistent models and with the frequency and data granularity required by the MODs, BPAT will need dedicated staff, a process re-design and automated tools. The goal of this mitigation plan is to holistically solve the organizational, process and automation gaps that are at the root cause of

BPAT's compliance violations on MOD-030-02. Addressing these items will allow BPAT to close the gaps with Requirements 3, 5 and 6, as well to ensure sustainable compliance with MOD-030-02.

BPAT believes that, while it has not presently identified specific violations with the other requirements in MOD-030-02, filing a blanket mitigation plan on MOD-030-02 is prudent. The MOD-030-02 gaps prevent BPAT from ensuring compliance with the other requirements in MOD-030-02. BPAT will remain at risk of recurring violations on the other requirements until the organizational, process, and automated tool gaps can be addressed. This blanket plan allows BPAT and WECC to reduce their administrative burden of managing individual self-reports each time a new compliance gap is identified, and allows BPAT to focus on holistically rebuilding our approach to MOD-030-02 compliance.

#### Update on 5/12/2014

BPA has concluded that complying with MOD-029 rather than MOD-030 is a more appropriate choice given our transmission network, regional data sharing or availability, and certain aspects of the MOD-030 standard. Additionally, BPA understands that its current process for uploading its Existing Transmission Commitments to its commercial systems is not in violation of MOD-001, R7. As a result, the remaining 18 months of milestones for BPA's 36 month mitigation plan on MOD-030 focus on tasks required to transition BPA's current MOD-030 network flowgates to MOD-029 paths.

For this transition, BPA has identified tasks in two focus areas:

- 1. Addition of new ATC Paths
- 2. Process controls and documentation

#### Addition of new ATC Paths

BPA identifies all of its control area to control area interconnections as ATC Paths and has chosen either MOD-029 or MOD-030 as the methodology for each interconnection. BPA has not established Flowgates for the control area to control area interconnections for which BPA has chosen MOD-030 due to language in MOD-030 R2.1.1.3 and R2.1.2.3 that states "lf any limiting element is kept within its limit for its associated worst Contingency by operating within the limits of another Flowgate, then no new Flowgate needs to be established for such limiting elements or Contingencies.†BPA's current MOD-030 network flowgates and MOD-029 paths protect for the control area to control area interconnections for which BPA is using MOD-030. Therefore, BPA concluded that additional Flowgates for these interconnections were not required under MOD-030.

BPA will be transitioning its MOD-030 network flowgates to MOD-029 paths. Since MOD-029 does not contain language similar to MOD-030 R2.1.1.3 and R2.1.2.3, BPA needs to analyze whether additional ATC Paths are required to account for the control area to control area interconnections for which MOD-030 is currently used. If new ATC Paths are needed, BPA will complete the studies and post the new ATC Paths and calculations in its OASIS.

#### Process controls and documentation

BPA will assess current process controls and enhance these controls if needed. The documentation in the ATCID will be updated to reflect the transition from MOD-030 to MOD-029.

C.3 Provide any relevant information regarding the identification of the violation(s) associated with this Mitigation Plan:

BPA ID P174

#### Section D: Details of Proposed Mitigation Plan

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

In order to close the gaps identified above, BPAT has determined that changes to its organizational structure and Available Flowgate Capability calculation processes are needed, in addition to automated tools. This mitigation plan outlines the milestones needed to accomplish these changes so that the identified gaps can be closed.

BPAT believes that it will need 36 months to make the appropriate organizational changes, to close calculation and data gaps, and to automate the resulting processes. Since this mitigation plan covers a significant process redesign, BPAT feels that the early milestone results will drive the details of the later milestones and therefore is submitting high level actions for the latter half of this mitigation plan at this time. BPAT will submit final milestones no later than 2/15/2014. This work will result in sustainable compliance with MOD-001-1 and MOD-030-02.

1. Gain Transmission Executive approval to form an Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

2. Staff Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

3. Identify roles and responsibilities of Energy Delivery Modeling group

Facilitates compliance with all requirements of MOD-030-02

Based on the information gleaned from BPATâ€<sup>™</sup>s benchmarking visits, BPAT believes that a centralized organization is the foundational building block for compliance with MOD-030-02. The requirements of MOD-030-02 are tightly interrelated, and BPATâ€<sup>™</sup>s current approach to compliance has distributed the different parts of the requirements across different organizations. The centralized organization is important for ongoing long-term support given the process re-design and system development initiatives that BPAT believes are necessary for sustainable compliance with MOD-030-02 (see milestones 4 through 17).

4. Identify and select data sources for base cases, including information on system topology, load and generation information

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 5, 6, 7

5. Design the process for collecting data necessary to produce monthly power flow studies

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 5, 6, 7

6. Design a process for keeping the assumptions on system topology aligned between the Total Flowgate Capability (TFC), ETC and PTDF calculations in the power flow studies

Facilitates compliance with the following requirements

MOD-001-01, R7

MOD-030-02, R1, 2, 3, 4, 5, 6, 7

7. Design the process for creating more frequent power flow cases Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R2, 5, 6, 7 8. Design a process for aligning the webTrans ETC with more frequent updates of the power flow ETC Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R3, 4, 5, 6, 7, 8, 9, 10, 11 9. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in webTrans Facilitates compliance with the following requirements MOD-001-01, R7 MOD-030-02, R3, 4, 5, 6, 7, 8, 9, 10, 11 10. Receive Agency Prioritization Steering Committee funding approval for automation initiatives needed to build more frequent power flow cases, based on the above process re-design Facilitates compliance with all requirements of MOD-030-02, but especially: MOD-001-01, R7 MOD-030-02, R3, 5, 6, 7 11. Deliver final milestones for remaining 18 months of this mitigation plan. 12. Develop preliminary list of ATC Paths that may need to be added under MOD-29 13. Finalize list of ATC Paths, if any, that need to be added under MOD-29 14. If new ATC Paths need to be added, design the process for ETC calculations for the new ATC Paths 15. If new ATC Paths need to be added, design the process for TTC calculations for the new ATC Paths 16. Analyze to determine whether new or further developed processes and internal process controls are required 17. If new ATC Paths need to be added, implement new ATC Paths in OASIS 18. Implement new or further developed processes and internal process controls 19. Update the ATCID, send updated ATCID to entities specified in MOD-001 R4 and post the updated ATCID on BPA's ATC Methodology webpage

D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: August 17, 2015

D.3 Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
121115 Milestone	1. Gain Transmission Executive approval to form an Energy Delivery Modeling group	11/15/2012	11/15/2012
130215 Milestone	<ol> <li>Staff Energy Delivery Modeling group</li> <li>Identify roles and responsibilities of Energy Delivery Modeling group</li> </ol>	02/15/2013	02/15/2013
130515 Milestone	4. Identify and select data sources for seed cases, including information on system topology, load and generation information	05/15/2013	05/15/2013

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater	Actual Completion Date
	5. Design the process for collecting data necessary to produce monthly power flow cases	than 3 months apart)	
130815 Milestone	6. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in the power flow studies	08/15/2013	08/15/2013
	7. Design the process for creating more frequent power flow cases		
131115 Milestone	8. Design a process for aligning the webTrans ETC with more frequent updates of the power flow ETC	11/15/2013	11/15/2013
	9. Design a process for keeping the assumptions on system topology aligned between the TFC, ETC and PTDF calculations in webTrans		
140215 Milestone	10. Receive Agency Prioritization Steering Committee funding approval for automation initiatives needed to build more frequent power flow cases, based on the above process re-design	02/15/2014	02/15/2014
140328 Milestone	11. Deliver final milestones for remaining 18 months of this mitigation plan.	03/28/2014	03/28/2014
140515 Milestone	12. Develop preliminary list of ATC Paths that may need to be added under MOD-29	05/15/2014	05/15/2014
140815 Milestone	13. Finalize list of ATC Paths, if any, that need to be added under MOD-29	08/15/2014	
141115 Milestone	14. If new ATC Paths need to be added, design the process for ETC calculations for the new ATC Paths	11/15/2014	
150215 Milestone	15. If new ATC Paths need to be added, design the process for TTC calculations for the new ATC Paths	02/15/2015	
150515 Milestone	16. Analyze to determine whether new or further developed processes and	05/15/2015	

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
	internal process controls are required		
150815 Milestone	17. If new ATC Paths need to be added, implement new ATC Paths in OASIS	08/15/2015	
	18. Implement new or further developed processes and internal process controls		
	19. Update the ATCID, send updated ATCID to entities specified in MOD-001 R4 and post the updated ATCID on BPA's ATC Methodology webpage		

D.4 Additional Relevant Information (Optional)

#### Section E: Interim and Future Reliability Risk

E.1 Abatement of Interim BPS Reliability Risk

While your organization is implementing the Mitigation Plan proposed in Section D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

The impact to the BPS is minimal.

MOD-030-02 is based on load and generation forecasts, so to a large extent, the projected values across the network flowgates are likely never 100% accurate compared to minute-by-minute flow. BPAT does not believe that the above violations have introduced significantly more variability than already exists in the load and generation forecasts necessary for MOD-030-02 in general.

E.2 Prevention of Future BPS Reliability Risk

Describe how successful completion of the Mitigation Plan as laid out in Section D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

Upon project completion, BPAT will transition its MOD-030 network flowgates to MOD-029 paths. BPA believes that this transition will provide for sustainable compliance with the NERC ATC MODs.

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Section D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Section C.1, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

#### Section F: Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

(a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and

(b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and

(c) Acknowledges:

- 1. I am Vice President, Planning & Asset Management of Bonneville Power Administration
- 2. I am qualified to sign this Mitigation Plan on behalf of Bonneville Power Administration
- 3. I have read and understand Bonneville Power Administration's obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
- 4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
- 5. Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authorities in Canada.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Hardev Juj

Title: Vice President, Planning & Asset Management

Authorized On: May 15, 2014

#### Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: Bonneville Power Administration NERC Registry ID: NCR05032 NERC Violation ID(s): WECC2012011394 Mitigated Standard Requirement(s): MOD-030-2 R10. Scheduled Completion as per Accepted Mitigation Plan: August 17, 2015 Date Mitigation Plan completed: August 10, 2015 WECC Notified of Completion on Date: August 10, 2015

Entity Comment: Please see attached completion packet for supporting evidence

	Additional Comments		
From	Comment	User Name	
Entity	This is part of BPA's holistic mitigation plan for MOD-030. BPA ID P174	Rachael Ferrin	
Entity	Lindsay Wickizer at BPA and Brent Read at WECC were working on this in the spring of 2014. At that time, BPA decided to switch from MOD-030 to MOD-029. Instead of updating all cases at once, and WECC having to reject them if they were unsatisfactory, Lindsay and Brent decided to update MOD-030 R3 only, and the remainder if WECC accepted the plan. While WECC was reviewing the plan, WECC rejected BPA's self-report on MOD-001 R7. BPA then needed to revise the mitigation plan to remove steps that addressed the MOD-001 R7 mitigation plan. As such, the revised steps were submitted to WECC prior to March 28, 2014, and then revised and re-submitted (in the same test-case manner on MOD-030 R3) in May. WECC accepted the plan in June 2014. BPA completed the milestones as required by its plan, but was unable to upload them in CDMS, because the plans had not been updated yet. This plan was originally uploaded to MOD-030 R3, as the sample requirement for WECC's review on 5-13-14.	Tanner Brier	

	Additional Documents		
From	Document Name	Description	Size in Bytes
Entity	121108 MOD-030-02 ALL Signed Mitigation Plan P174.pdf	Signed mitigation plan document.	779,103
Entity	140513 MOD-030 r1, r2, r3, r4, r6, r7, r8, r9, r10 revised	revised mitigation plan	215,508

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	revised mitigation plan signed.pdf	revised mitigation plan	215,508
Entity	150810 BPA P174 MOD-030- 02 R1-R10 Mitigation Plan Completion Package.pdf	BPA's Mitigation Completion Packet. All supporting evidence is attached to this PDF. This packet also contains the approval signature of BPA's Acting Reliability Officer: Jeff Cook.	14,750,719

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Jeff Cook

Title: Acting - Vice President, Planning & Asset Management

Email: jwcook@bpa.gov

Phone: 1 (360) 418-8981

Authorized Signature

Date \_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2012011394 Standard/Requirement: MOD-030-2 R10. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/09/2015 for the violation of MOD-030-2 R10.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

#### Thank you, OATI

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[OATI Information - Email Template: MitPlan\_Completed]



## **Attachment CC**

# Record documents for the violation of MOD-029-1a R5 (WECC2013011685)

CC-1. BPA's Self-Report dated January 25, 2013;

CC-2. BPA's Mitigation Plan designated as WECCMIT008823 submitted February 14, 2013;

CC-3. BPA's Certification of Mitigation Completion dated February 14, 2013;

CC-4. WECC's Verification of Mitigation Completion dated April 4, 2013.

#### Self Report - 2013

Entity Name: Bonneville Power Administration

Address: 905 NE 11 Avenue Portland OR 97232

NERC Registry ID: NCR05032

#### Standard Requirement: MOD-029-1a R5

When calculating ETC for firm Existing Transmission Commitments (ETCF) for a specified period for an ATC Path, the Transmission Service Provider shall use the algorithm below: [Violation Risk Factor: Lower] [Time Horizon: Operations Planning]

ETCF = NLF + NITSF + GFF + PTPF + RORF + OSF

Where:

NLF is the firm capacity set aside to serve peak Native Load forecast commitments for the time period being calculated, to include losses, and Native Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

NITSF is the firm capacity reserved for Network Integration Transmission Service serving Load, to include losses, and Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.

GFF is the firm capacity set aside for grandfathered Transmission Service and contracts for energy and/or Transmission Service, where executed prior to the effective date of a Transmission Service Provider's Open Access Transmission Tariff or "safe harbor tariff."

PTPF is the firm capacity reserved for confirmed Point-to-Point Transmission Service.

RORF is the firm capacity reserved for Roll-over rights for contracts granting Transmission Customers the right of first refusal to take or continue to take Transmission Service when the Transmission Customer's Transmission Service contract expires or is eligible for renewal.

OSF is the firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using Firm Transmission Service as specified in the ATCID.

Date of Alleged Violation:	November 27, 2012
Date Submitted:	January 15, 2013
Self Report Status:	Self Report has been submitted

Description and Cause: R5. When calculating ETC for firm Existing Transmission Commitments (ETCF) for a specified period for an ATC Path, the Transmission Service Provider shall use the algorithm below: [Violation Risk Factor: Lower] [Time Horizon: Operations Planning]

ETCF = NLF + NITSF + GFF + PTPF + RORF + OSF

On November 27, 2012, BPATâ€<sup>™</sup>s software vendor upgraded its webTrans system to version 4.5. The implementation started at 7:50 am on November 27, 2012. The upgrade was completed at 8:35 am and verified by the vendor at approximately 9:00 am. Shortly after

#### Self Report - 2013

the completion of the upgrade, BPA staff noticed that the system was posting committed and pending SATC values that far exceeded the measure

used to account for data differences when recalculating these values (within +/- 15% or 15MW whichever is greater of the original calculated value for any specific time period). BPA staff began to immediately work with the vendor to research the causes and take corrective action.

The version of the software upgrade that was installed on Nov. 27, 2012 contained updates that affected how the ETC calculation program handled Recall Transmission Service Requests (TSRs). Recall TSRs are used to account for a customer's use of their firm contract rights in response to specific transmission system actions. Prior to the upgrade, only the Parent TSR was included in the ETC calculation with the netted amount of MW (i.e. Parent MW minus Recall MW). After the upgrade was completed, both the Parent and the Recall TSR were being included separately in the ETC calculations and reports. These updates were not noted in the vendor's release notes, and therefore, the effects of these updates were not tested by BPA staff.

This software change resulted in the following impacts in BPAT's production system:

1. Confirmed Recall TSRs where the Parent TSRs were Annulled, were included in the ETC calculation upon completion of the upgrade. With only the Recall included in the calculation, the negative MW amount of the Recall was not netted against the positive MW of the Parent.

2. Recall TSRs were set to Include so they decremented from existing ATC.

3. If a Recall was of shorter duration than its Parent TSR, the Impacts of the Parent TSR were being calculated in the LRES (Long-Term Reservations) variable and impacts of the Recall were being calculated in the SRES (Short-Term Reservations) variable. Previously the Recall TSR impact would have been netted against the Parent TSR and that value placed in LRES.

A review of the initialization reports before and after the upgrade identified four MOD-029 Paths that were affected by these issues. This is an example of some of the impacts on these paths.

Path	Horizon	n LATC	SATC	Resolved
by				
LAGR_W:	>E ⊦	Hrly RT Went from 86 MW to -9970	2 Went fror	n 30 MW to 199984 11/28/12
13:40				
WOH_E>	W F	Irly PS No change		Went from 89 MW to 199702
11/27/12	10:11			
RATS_N>	⊳S ⊦	Irly PS No change		Went from 199 MW to -99699
11/28/12	13:40			
WOGARF	R_W>E⊦	Irly RT No change		Went from 916 MW to -
398911 17	1/28/12	13:40		

Potential Impact to the Bulk Potential Impact to the Bulk Electric System is Minimal.

Power System:

The installation of webTrans System Version 4.5 Upgrade impacted ETC Calculations for Firm Products which resulted in BPA's webTrans system posting ETC values above and

#### Self Report - 2013

beyond +/- 15% or 15MW of the originally calculated values for firm products across four of BPA's ATC paths.

This difference in ETC values resulted in temporarily inaccurate short-term firm sales across these affected paths until the posting issues could be resolved.

Additional Comments		
From	Comment	User Name
Entity	BPA intends to submit a mitigation plan on or about February 13, 2013. BPA ID P175.	Tanner Brier

### Mitigation Plan

#### Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version	
	WECC2013011685	MOD-029-1a R5	null	1	
	Mitigation Plan Subn	nitted On: February 13, 201	3		
	Mitigation Plan Accepted On:				
Mitigatior	Mitigation Plan Proposed Completion Date: December 20, 2012				
Actual Completion Date of Mitigation Plan:					
Mitigation Plan Certified Complete by BPA On: February 14, 2013					
Mitigation Plan Completion Verified by WECC On:					
Mitigation Plan Completed? (Yes/No): No					

#### Section A: Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

#### Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: Bonneville Power Administration

NERC Compliance Registry ID: NCR05032

Address: 905 NE 11 Avenue Portland OR 97232

B.2 Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Tanner Brier Title: Compliance Specialist Email: thbrier@bpa.gov Phone: 503-230-3649

#### Section C: Identification of Reliability Standard Violation(s) Associated with this Mitigation Plan

#### C.1 This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement
	Requirement Description	
WECC2013011685	11/27/2012	MOD-029-1a R5
When calculating ETC for firm Existing Tra the Transmission Service Provider shall us Operations Planning]	nsmission Commitments (ET the algorithm below: [Violat	CF) for a specified period for an ATC Path, ion Risk Factor: Lower] [Time Horizon:
ETCF = NLF + NITSF + GFF + PTPF + RC	DRF + OSF	
Where:		
NLF is the firm capacity set aside to serve calculated, to include losses, and Native Lo Capacity Benefit Margin.	peak Native Load forecast co oad growth, not otherwise inc	mmitments for the time period being uded in Transmission Reliability Margin or
NITSF is the firm capacity reserved for Net Load growth, not otherwise included in Tra	work Integration Transmissio nsmission Reliability Margin o	n Service serving Load, to include losses, and or Capacity Benefit Margin.
GFF is the firm capacity set aside for gran Transmission Service, where executed pric Transmission Tariff or "safe harbor ta	dfathered Transmission Servi or to the effective date of a Tra ariff."	ce and contracts for energy and/or ansmission Service Provider's Open Access
PTPF is the firm capacity reserved for conf	irmed Point-to-Point Transmi	ssion Service.
RORF is the firm capacity reserved for Rol refusal to take or continue to take Transmis contract expires or is eligible for renewal.	I-over rights for contracts grar ssion Service when the Trans	nting Transmission Customers the right of first mission Customer's Transmission Service
OSF is the firm capacity reserved for any c Transmission Service as specified in the A	other service(s), contract(s), o TCID.	r agreement(s) not specified above using Firm
2.2 Brief summary including the cause	of the violation(s) and mecha	nism in which it was identified above:
MOD-029-1a R5 became effective of	on April 1, 2011. and states:	
R5. When calculating ETC for firm Path, the Transmission Service Pro Horizon: Operations Planning]	Existing Transmission Comn vider shall use the algorithm I	nitments (ETCF) for a specified period for an AT pelow: [Violation Risk Factor: Lower] [Time
TCF = NLF + NITSF + GFF + PTPF	+ RORF + OSF	

On November 27, 2012, BPAT's software vendor upgraded its webTrans system to version 4.5. The implementation started at 7:50 am on November 27, 2012. The upgrade was completed at 8:35 and verified by vendor at approximately 9:00. Shortly after the completion of the upgrade, BPA staff noticed that the system was posting committed and pending SATC values that far exceeded the measure used to account for data differences when recalculating these values (within +/- 15% or 15MW whichever is greater of the original calculated value for any specific time period). BPA staff began to immediately work with the vendor to research the causes and take corrective action.

The version of the software upgrade that was installed on Nov. 27, 2012 contained updates that affected

how the ETC calculation program handled Recall Transmission Service Requests (TSRs). Recall TSRs are used to account for a customerâ€<sup>™</sup>s use of their firm contract rights in response to specific transmission system actions. Prior to the upgrade, only the Parent TSR was included in the ETC calculation with the netted amount of MW (i.e. Parent MW minus Recall MW). After the upgrade was completed, both the Parent and the Recall TSR were being included separately in the ETC calculations and reports, which changed the final posting. These updates were not noted in the vendorâ€<sup>™</sup>s release notes, and therefore, the affects of these updates were not tested by BPA staff.

A review of the initialization reports before and after the upgrade identified four MOD-029 Paths that were affected by these issues. An example of some of the impacts on these paths is displayed in the table below. Full details are contained in separate reports.

Path Horizon LATCSATCResolved byLAGR\_W>E Hrly RT Went from 86 MW to -99702 Went from 30 MW to 199984 11/28/12 13:40WOH\_E>W Hrly PS No changeWent from 89 MW to 199702 11/27/12 10:11RATS\_N>S Hrly PS No changeWent from 199 MW to -99699 11/28/12 13:40Wont from 199 MW to -99699 11/28/12 13:40WOGARR\_W>E Hrly RT No changeWent from 916 MW to -398911 11/28/12 13:40

C.3 Provide any relevant information regarding the identification of the violation(s) associated with this Mitigation Plan: BPA ID P175

#### Section D: Details of Proposed Mitigation Plan

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

1. Confirmed Recall TSRs where the Parent TSRs were Annulled, were included in the ETC calculation upon completion of the upgrade. With only the Recall included in the calculation, the negative MW amount of the Recall was not netted against the positive MW of the Parent.

Corrective Action Taken: Recall TSRs were Annulled.

2. Recall TSRs were set to Include so they decremented from existing ATC.

Corrective Action Taken: Recall TSRs were set to Exclude to match the Parent TSRs.

3. If a Recall was of shorter duration than its Parent TSR, the Impacts of the Parent TSR were being calculated in the LRES variable and impacts of the Recall were being calculated in the SRES variable. Previously the Recall TSR impact would have been netted and that value placed in LRES.

Corrective Action Taken: BPAT requested the Vendor place the Recall TSR in the same variable as the Parent TSR.

4. Update Technical Communication Protocol to include a step requiring software provider supply "Release Notes†which specifically detail and describe all impacts to BPA system functionality, including BPA custom code Corrective Action Taken: Technical Communication Protocol updated

D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: December 20, 2012

D.3 Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
MOD-029 R5 Milestone	<ul> <li>Task 1. Recall TSRs were Annulled.</li> <li>Task 2. Recall TSRs set to match Parent TSRs.</li> <li>Task 3. IT provider placed Recall TSR impacts in the same variable as the Parent TSR impacts.</li> <li>Task 4. Update Technical</li> <li>Communication Protocol to include a step requiring IT provider supply "Release Notes†which specifically detail and describe all impacts to BPA system functionality, including BPA custom code</li> </ul>	12/20/2012	12/20/2012

#### D.4 Additional Relevant Information (Optional)

#### Section E: Interim and Future Reliability Risk

E.1 Abatement of Interim BPS Reliability Risk

While your organization is implementing the Mitigation Plan proposed in Section D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

The potential impact to the BES was minimal.

This difference in ETC values resulted in temporarily inaccurate short-term firm sales across these affected paths until the posting issues could be resolved (which was not significant).

Note, this only impacted TSRs. In order to use a TSR, an e-tag or schedule has to be submitted. BPA monitors the impacted paths in several ways and has other reliability standards (specifically TOP-007-WECC-1 R2, amongst others) which require BPA to ensure that a path is not overscheduled. Any increased sales that caused the schedules to be above the system operating limit would have been curtailed.

#### E.2 Prevention of Future BPS Reliability Risk

Describe how successful completion of the Mitigation Plan as laid out in Section D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

Transmission Service's TSRF organization has updated its Technical Communication Protocol to include a step requiring software provider supply "Release Notes†which specifically detail and describe all impacts to BPA system functionality, including BPA custom code. This will assure a level of clarity which will result in testing protocols that prevent future upgrades from negatively impacting the system.

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Section D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Section C.1, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

#### Section F: Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

(a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and

(b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and

(c) Acknowledges:

- 1. I am VP, Planning & Asset Management, Transmission Services of Bonneville Power Administration
- 2. I am qualified to sign this Mitigation Plan on behalf of Bonneville Power Administration
- 3. I have read and understand Bonneville Power Administration's obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
- 4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
- 5. Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authorities in Canada.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Hardev S. Juj

Title: VP, Planning & Asset Management, Transmission Services

Authorized On: February 08, 2013

#### Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Bonneville Power Administration
NCR05032
WECC2013011685
MOD-029-1a R5,
December 20, 2012
December 20, 2012
: February 14, 2013

Entity Comment: Completion is submitted at the same time as the mitigation plan.

Additional Comments			
From	Comment	User Name	
Entity	Submitting this before 5 PM Pacific prevailing on 2-13-13. An extra signed mitigation plan was attached in error. This plan is being submitted as complete, and I will attempt to push that button in webCDMS, in looking right now, it does not appear to be available, but perhaps it will be after this is submitted. Regardless, a signed completion packet is attached here as an Adobe Portfolio, with the evidence attached to the paperclip in the lower-lefthand corner of the document.	Tanner Brier	

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	130208 MOD-030 R5 P174r Revised Signed Mitigation Plan.pdf	This document belongs to and was uploaded for a different requirement. It does not belong here. Apologies for any confusion.	462,362
Entity	130208 MOD-029 R5 Signed Mitigation Plan.pdf		450,488
Entity	130208 MOD-029 R5 Signed Mitigation Plan Completion Packet.pdf		2,779,502

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name:	Hardev S. Juj	
Title:	VP, Planning & Asset Management, Transmission Services	
Email:	hsjuj@bpa.gov	
Phone:	1 (360) 418-8981	
Authoria	ad Signatura	<b>D</b> /
Authoriz		Date

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

#### **E-Mail Notification Detail**

From:	noreply@oati.net
Sent:	04/04/2013 12:10:19
То:	reliabilitycompliance@bpa.gov
Subject:	WECC Notice - Completed Mitigation Plan Acceptance - MOD-029-1a R5 - Bonneville Power Administration

#### Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2013011685 Standard/Requirement: MOD-029-1a R5 Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 02/14/2013 for the violation of MOD-029-1a R5. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

If you have any questions or concerns, please contact Keshav Sarin at ksarin@wecc.biz.

**Note:** Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

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[OATI Information - Email Template: MitPlan\_Completed]



## **Attachment DD**

# Record documents for the violation of MOD-029-1a R1 (WECC2013011728)

DD-1. BPA's Violation Discovery Record dated January 23, 2013;

DD-2. BPA's Mitigation Plan designated as WECCMIT008787 submitted February 12, 2013;

DD-3. BPA's Certification of Mitigation Completion dated August 2, 2013.

#### Violation - Discovery Record

#### Registered Entity: Bonneville Power Administration

NERC Registry ID: NCR05032

NERC Violation ID: WECC2013011728

Discovery Method: Self Report

Date Submitted: January 23, 2013

Region Contact: Chris Luras

Phone: 801-891-7127 Email: cluras@wecc.biz

- Standard: MOD-029-1a Rated System Path Methodology
- Purpose: To increase consistency and reliability in the development and documentation of transfer capability calculations for short-term use performed by entities using the Rated System Path Methodology to support analysis and system operations.

Requirement: R1

When calculating TTCs for ATC Paths, the Transmission Operator shall use a Transmission model which satisfies the following requirements: [Violation Risk Factor: Lower] [Time Horizon: Operations Planning]

Violated Sub-Req(s):

Violated Function(s): TOP

Init Determ a VItn: March 29, 2012

Begin Date of Vltn: March 01, 2012

End Date:

Notified of Vltn on: March 29, 2012

Potential Impact to WECC Subject Matter Experts are currently reviewing the validity of the submittal. BES: As always, WECC will update the description if an alleged violation is verified.

Brief Vltn Descr. & WECC Subject Matter Experts are currently reviewing the validity of the submittal. Cause: As always, WECC will update the description if an alleged violation is verified.

Alleged Violation:

Registered Entity Report/Response:

> Risk Factor: Lower Severity Level: TBD Factual Basis:

### Mitigation Plan

#### Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
	WECC2013011728	MOD-029-1a R1	null	1
	Mitigation Plan Subm	nitted On: February 12, 2013	5	
Mitigation Plan Accepted On:				
Mitigation Plan Proposed Completion Date: August 01, 2013				
Actual Completion Date of Mitigation Plan:				
Mitigation Plan Certified Complete by BPA On:				
Mitigation Plan C	Completion Verified by W	ECC On:		
Mitiç	gation Plan Completed?	(Yes/No): No		

#### Section A: Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

#### Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: Bonneville Power Administration

NERC Compliance Registry ID: NCR05032

Address: 905 NE 11 Avenue Portland OR 97232

B.2 Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Tanner Brier Title: Compliance Specialist Email: thbrier@bpa.gov Phone: 503-230-3649

#### Section C: Identification of Reliability Standard Violation(s) Associated with this Mitigation Plan

C.1 This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement		
Requirement Description				
WECC2013011728	03/01/2012	MOD-029-1a R1		
When calculating TTCs for ATC Paths, the Transmission Operator shall use a Transmission model which satisfies the				

When calculating TTCs for ATC Paths, the Transmission Operator shall use a Transmission model which satisfies the following requirements: [Violation Risk Factor: Lower] [Time Horizon: Operations Planning]

C.2 Brief summary including the cause of the violation(s) and mechanism in which it was identified above:

NOTE: WECC Enforcement notified BPA in January 2013 that it had determined BPAâ€<sup>™</sup>s potential violation was of MOD-029-1a, R1, rather than MOD-029-1a, R2.1.2. Therefore, BPA is revising this Mitigation Plan to reflect that. There are no other changes to the Mitigation Plan.

On March 1, 2012, BPA was operating its interconnection with BC Hydro (WECC Path 3) based on outages it was aware of for that day that affect the System Operating Limit (SOL) of that path. Those were outages for BPAâ€<sup>™</sup>s Chief Joseph – Snohomish #4 345 kV transmission line and Seattle City Lightâ€<sup>™</sup>s (SCL) Massachusetts – Union St #2 115 kV transmission line. As described in the WECC Path Rating Catalog, WECC Path 3 is divided into westside and eastside Interties. The SOLs which appear to be violated on March 1 were the SOLs produced for the westside Intertie (Custer - Ingledow #1&2 500kV transmission lines). (During this time of year, the predominant flow on WECC Path 3 is in the south-to-north direction. It is the fact that BPA exceeded SOLs for heavy load conditions in the south-to-north direction that were the cause of this potential violation.)

SCL entered outage 1-116199 into the WECC Coordinated Outage System (COS) on January 9, 2012 and revised the outage in COS on February 6, 2012. Both versions included an outage of the Massachusetts – Union St. - Broad 115 kV cable.

BPA developed SOLs for WECC Path 3 on February 22, 2012, including an outage for the Massachusetts – Union St #2 115 kV transmission line rather than the Massachusetts – Union St. - Broad 115 kV cable. Those SOLs were provided to BPA's Dispatchers via a study report called "Official BPA Study Limits Information Memo (SLIM) NI\_22FEB12\_420â€, also referred to as Nomogram 420. The SOLs were implemented by BPA's Dispatchers at 0708 on March 1.

BPA and other utilities participated in numerous regional planned outage coordination activities, including publishing outage plans and participating in coordination calls, through March 1, 2012. During those activities, it was not recognized that BPA believed there was an outage on the Massachusetts â€" Union St #2 115 kV transmission line rather than the Massachusetts â€" Union St. - Broad 115 kV cable.

At approximately 1430 on March 1, during a phone call from BPA's technical operations engineer to a SCL operations engineer to discuss proper outage configurations for future planned studies, BPA's technical operations engineer was made aware that the SCL transmission line that was presently out of service was not Massachusetts â€" Union St. #2 115 kV transmission line, but was Massachusetts â€" Union â€" Broad St 115 kV cable instead. That outage would likely have a different effect on the WECC Path 3 SOLs.

BPAâ€<sup>™</sup>s technical operations engineer verified the outage with BPAâ€<sup>™</sup>s Dispatch organization to determine what SCL outage had been input into the WECC Coordinated Outage System (COS) for March 1. The Massachusetts â€<sup>"</sup> Union St. - Broad 115 kV cable outage was confirmed by BPAâ€<sup>™</sup>s Outage Office at approximately 1440. SCLâ€<sup>™</sup>s Massachusetts â€<sup>"</sup> Union St. - Broad 115 kV cable had been switched out of service at 0819 the morning of March 1 with an estimated return to service on March 4 at 2000.

BPA determined that it needed to perform a new study to determine appropriate SOLs given the new information. A new study with BPA's Chief Joseph – Snohomish #4 345kV transmission line and SCL's Massachusetts – Union St. - Broad 115 kV cable out of service was performed beginning at approximately 1525. The study was completed at approximately 1812 and study results were provided to BPA Dispatch at 1815. The new results were provided in Nomogram 423. This new nomogram resulted in a significant reduction in the south-to-north SOLs.

If BPA had operated to the SOLs provided in SLIM 423 starting at 0819 when SCL switched the Massachusetts  $\hat{a} \in$  "Union St.  $\hat{a} \in$ " Broad St. 115 kV cable out of service with Puget Sound area generation and load patterns as they were on March 1, the south to north flows on the westside Intertie portion of WECC Path 3 would have exceeded that SOL from 0819 to 1844 (a total of 10hrs and 25 minutes). Based on these assumptions the actual westside Intertie flow would have exceeded the SOL by range of 246  $\hat{a} \in$ " 966 MW depending upon the specific hour.

BPA Dispatch implemented Nomogram 423 at 1828. BPAâ€<sup>™</sup>s Transmission Scheduling organization began implementing curtailments on WECC Path 3 following notification from BPA Dispatch at 1831. BPAâ€<sup>™</sup>s Dispatch organization called the WECC RC advising it of the new nomogram, of the fact that SOLs had been exceeded, and of BPAâ€<sup>™</sup>s intent to curtail transmission schedules in order to bring actual flows below the new SOL. Actual flows on the Westside of WECC Path 3 in the south-to-north direction had been exceeded from 0819 to1844 on March 1 (10 hours and 25 minutes).

After implementing Nomogram 423 at 1828, BPA sent the required WECCNet advising of the new nomogram at 1835 to all WECCNet subscribers.

WECC Path 3 west side flows and total actual flows of WECC Path 3 were brought below the SOL at 1844.

A second study was run to refine and confirm the earlier results from Nomogram 423. There was no change in the SOL results for the south-to-north conditions that were experienced on March 1; that is, heavy load conditions. These results were once again provided to BPAâ€<sup>™</sup>s Dispatch organization and implemented at 1955. After implementing Nomogram 423R1, BPA sent the required WECCNet advising of the new nomogram at 2001.

BPA uses its SOLs as its TTCs. Since BPA was not operating within the correct SOLs on March 1 from 0819 to 1844, its TTC calculations for those hours had not been calculated correctly even though TTC calculations for March 1 had been determined using BPAâ€<sup>™</sup>s established process.

Since BPAâ€<sup>™</sup>s SOLs for WECC Path 3 for March 1 had been developed assuming an outage that was different than the actual outage on SCLâ€<sup>™</sup>s transmission system for that day, TTCs for the period between 0819 and 1844 were incorrect, based on the incorrect model.

C.3 Provide any relevant information regarding the identification of the violation(s) associated with this Mitigation Plan:
 BPA ID P164

#### Section D: Details of Proposed Mitigation Plan

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

BPA will take actions in the four areas identified below between now and August 1, 2013.

Outage planning and coordination

1. Prepare and send a letter to outage process participants indicating the need for accurate and timely outage information (via COS), participation in the monthly NWPP outage coordination reviews, and review of the coordinated outage plan for accuracy.

#### Validation of Outages

1. Implement alarming (on SCADA Intertie Protection Scheme (IPS)) for a change in status to SCL lines and equipment that are identified in the relevant Dispatcher Standing Order(s) (DSO) as having an affect on SOLs for WECC Path 3.

2. Implement alarming (on SCADA IPS) for a change in status to remaining utilities lines and equipment that are identified in the relevant Dispatcher Standing Order(s) (DSO) as having an affect on SOLs for BPA defined flowgates or WECC-identified paths for which BPA is the path operator.

3. Develop and implement a process to ensure SCADA IPS alarming is kept up-to-date with lines and equipment added to new and existing DSOs.

#### Establish SOLs for Unanticipated Events

1. Develop a plan to do the following: (a) complete studies to establish the most conservative limits to account for unplanned conditions for all WECC-identified Paths for which BPA is the path operator and for BPA internal flowgates and (b) update all relevant DSOs with SOLs for BPA's Dispatchers' use for unplanned conditions.

2. Update all relevant DSOs with default SOLs that have been developed through studies to account for unplanned conditions (i.e., unanticipated events). These default SOLs apply to all WECC-identified Paths for which BPA is the path operator and to BPA internal flowgates and will be used by BPA's Dispatchers during unplanned conditions.

#### State Estimator

1. Develop a project plan to expand BPA's State Estimation and Contingency Analysis capabilities to fully meet study needs. The plan will address:

• 24x7 availability of solved SE cases for use in the study process,

• a process to ensure continued data visibility from external entities needed to support the SE model quality, and

• a process to ensure correct non-telemetered equipment status.

- 2. Report on status of project showing on-time delivery of key project milestones.
- 3. Report on status of project showing on-time delivery of key project milestones.
- 4. Complete implementation of expanded SE/CA capabilities.
- D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: August 01, 2013

D.3 Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
120815 Milestone and 121115 Milestone	NOTE, in the originally submitted mitigation plan, Steps 1-3 were completed 8-15-12 and Steps 4-6 were completed 11-15-12. WebCDMS will not allow dates more than 90 days in the past, so those two milestones, which are already completed, are combined here.	11/15/2012	11/15/2012
	<ul> <li>combined here.</li> <li>1. Implement alarming (on SCADA Intertie Protection Scheme (IPS)) for a change in status to SCL lines and equipment that are identified in the relevant Dispatcher Standing Order(s) (DSO) as having an affect on SOLs for WECC Path 3</li> <li>2. Develop a plan to do the following: (a) complete studies to establish the most conservative limits to account for unplanned conditions for all WECC- identified Paths for which BPA is the path operator and for BPA internal flowgates and (b) update all relevant DSOs with SOLs for BPA's Dispatchers' use for unplanned conditions.</li> <li>3. Develop a project plan to expand BPA's State Estimation and Contingency Analysis capabilities to fully meet study needs. The plan will address:</li> <li>• 24x7 availability of solved SE cases for use in the study process, • a process to ensure continued data visibility from external entities needed to support the SE model quality, and • a process to ensure correct non- telemetered equipment status.</li> <li>4. Prepare and send a letter to outage</li> </ul>		
	<ul> <li>process participants indicating the need for accurate and timely outage information (via COS), participation in the monthly NWPP outage coordination reviews, and review of the coordinated outage plan for accuracy.</li> <li>5. Update all relevant DSOs with default SOLs that have been developed</li> </ul>		
Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
--------------------	--	---	------------------------------
	through studies to account for unplanned conditions (i.e., unanticipated events). These default SOLs apply to all WECC-identified Paths for which BPA is the path operator and to BPA internal flowgates and will be used by BPA's Dispatchers during unplanned conditions. 6. Report on status of state estimator project showing on-time delivery of key project milestones.		
130215 Milestone	<ol> <li>7. Implement alarming (on SCADA IPS) for a change in status to remaining utilities lines and equipment that are identified in the relevant Dispatcher</li> <li>Standing Order(s) (DSO) as having an affect on SOLs for BPA defined</li> <li>flowgates or WECC-identified paths for which BPA is the path operator.</li> <li>8. Report on status of state estimator project showing on-time delivery of key project milestones.</li> </ol>	02/15/2013	
130515 Milestone	9. Develop and implement a process to ensure SCADA IPS alarming is kept up-to-date with lines and equipment added to new and existing DSOs.	05/15/2013	
130801 Milestone	10. Complete implementation of expanded SE/CA capabilities.	08/01/2013	

D.4 Additional Relevant Information (Optional)

#### Section E: Interim and Future Reliability Risk

#### E.1 Abatement of Interim BPS Reliability Risk

While your organization is implementing the Mitigation Plan proposed in Section D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

Beginning March 19, 2012, BPAâ€<sup>™</sup>s two Control Centers (Munro Control Center and Dittmer Control Center) instituted a new procedure for night-shift Dispatchers wherein night-shift Dispatchers confirm next-day outages with foreign utilities. This is done during every night shift. Any discrepancies from the planned outages that BPA has are communicated to the Senior Dispatcher on shift for a determination of next steps.

#### E.2 Prevention of Future BPS Reliability Risk

Describe how successful completion of the Mitigation Plan as laid out in Section D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

Upon completion of this mitigation plan, BPA will have addressed several areas needing improvement regarding outage planning and coordination, the ability to validate outages on facilities that can affect SOLs, and system studies and tools used to determine SOLs. The improvements will achieve the dual goals of preventing recurrence of NERC standards violations and ensuring reliable operation of the BES. In addition to the issues that led to this mitigation plan, BPA will consider lessons learned from recent industry events in planning of the improvements. BPA will work both internally and externally with appropriate parties on many of these initiatives.

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Section D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Section C.1, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

#### Section F: Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

(a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and

(b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and

(c) Acknowledges:

- 1. I am VP, Planning & Asset Management, Transmission Services of Bonneville Power Administration
- 2. I am qualified to sign this Mitigation Plan on behalf of Bonneville Power Administration
- 3. I have read and understand Bonneville Power Administration's obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
- 4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
- 5. Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authorities in Canada.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Hardev S. Juj

Title: VP, Planning & Asset Management, Transmission Services

Authorized On: February 08, 2013

## Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name:	Bonneville Power Administration
NERC Registry ID:	NCR05032
NERC Violation ID(s):	WECC2013011728
Mitigated Standard Requirement(s):	MOD-029-1a R1,
Scheduled Completion as per Accepted Mitigation Plan:	August 01, 2013
Date Mitigation Plan completed:	August 01, 2013
WECC Notified of Completion on Date:	August 01, 2013
Entity Comment:	Evidence is attached in the signed completion document. The signed completion document is a PDF Portfolio and the attachments can be accessed by clicking on the paperclip in

the lower-left-hand corner.

Additional Comments				
From	Comment	User Name		
Entity	BPA submitted the self-report on this issue in March 2012 (along with several others pertaining to the same issue) on MOD-029 R2.1.2. A mitigation plan was submitted in August 2012. WECC determined that this should have been reported as MOD-029 R1, so BPA is submitting this mitigation plan to align with that expectation. WECC created a mitigation plan form which BPA is populating, presumably from the self-report submitted in March 2012.	Tanner Brier		

Additional Documents				
From	Document Name	Description	Size in Bytes	
Entity	120803 MOD-029 R2-1-2 CDMS_MitPlan.pdf	This mitigation plan was originally submitted under MOD-029 R2.1.2, this is a .pdf from webCDMS of that submittal.	22,138	
Entity	130208 MOD-029 R1 Signed Mitigation Plan MARCH 2012 SOL.pdf	Signed version of the MOD-029 R1 mitigation plan. Note, the only difference between this signed version and the signed version that was submitted in August 2012 is the reference to R1, and a brief note about the reason for the new submittal at the beginning of the description section.	288,308	
Entity	130801 SOL Mitigation Plan Completion signed without iCRS.pdf	signed completion document	19,663,504	

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Hardev Juj

Title: VP, Planning & Asset Management, Transmission Services

Email: hsjuj@bpa.gov

Phone: 1 (360) 418-8981

Authorized Signature

Date \_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)



# **Attachment EE**

# Record documents for the violation of PRC-017-0 R1 (WECC2013013089)

**EE-1. BPA's Violation Discovery Record** dated October 21, 2013;

EE-2. BPA's Mitigation Plan designated as WECCMIT011004 submitted September 11, 2014;

EE-3. BPA's Certification of Mitigation Completion dated June 29, 2015;

EE-4. WECC's Verification of Mitigation Completion dated June 26, 2015.

#### Violation - Discovery Record

#### Registered Entity: Bonneville Power Administration

NERC Registry ID: NCR05032

NERC Violation ID: WECC2013013089

Discovery Method: Audit

Date Submitted: October 18, 2013

Region Contact: Chris Luras

Phone: 801-891-7127 Email: cluras@wecc.biz

Standard: PRC-017-0 - Special Protection System Maintenance And Testing

Purpose:

Requirement: R1

The Transmission Owner, Generator Owner, and Distribution Provider that owns an SPS shall have a system maintenance and testing program(s) in place. The program(s) shall include:

Violated Sub-Req(s): R1.2, R1.4, R1.5

Violated Function(s): TO

Init Determ a VItn: October 11, 2013

Begin Date of Vltn: June 18, 2007

Notified of Vltn on: October 11, 2013

End Date:

#### Potential Impact to Severe Impact -

BES: The entity has in their RAS maintenance and testing program documentation a policy which recognizes an extension beyond both the interval and grace period cited in the RAS documentation.

This extension, as written fails to define an interval certain within which the maintenance and testing must occur. The audit team reviewed evidence that the system maintenance and testing is occurring and recognizes this extension may only be used in rare circumstances.

However, as written, this extension permits the entity to perform no RAS system maintenance and testing.

Brief Vltn Descr. & The entity failed to include defined intervals within which the RAS and SPS must be maintained and Cause: tested; a basis for those intervals, the grace periods and the extension; and a schedule for system maintenance and system testing their SPS maintenance and testing program.

Alleged Violation:

Registered Entity Report/Response:

Risk Factor: High

Severity Level: VSL - High

Factual Basis: High

From the most recent VSL Matrix, VRF\_Standards\_Applicability\_Matrix\_2013-10-01.xls

High

From the most recent VSL Matrix, VSL\_Matrix\_Complete\_2013-07-24.doc

The responsible entity's SPS equipment maintenance and testing program did not address three of the

subrequirements in R1.2 through R1.6.

R1. The Transmission Owner, Generator Owner, and Distribution Provider that owns an SPS shall have system maintenance and testing program(s) in place. The program(s) shall include:

- R1.2. Documentation of maintenance and testing intervals and their basis
- R1.4. Schedule for system testing
- R1.5. Schedule for system maintenance

## Mitigation Plan

#### Mitigation Plan Summary

#### Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
	WECC2013013089	PRC-017-0 R1.	10/21/2013	1
	Mitigation Plan Subm	itted On: September 11, 2	2014	
Mitigation Plan Accepted On:				
Mitigation	Mitigation Plan Proposed Completion Date: February 15, 2015			
Actual Completion Date of Mitigation Plan:				
Mitigation Plan Certified Complete by BPA On:				
Mitigation Plan	Completion Verified by WE	ECC On:		
Mitigation Plan Completed? (Yes/No): No				

#### Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

#### Entity Information

Identify your organization:

Entity Name: Bonneville Power Administration NERC Compliance Registry ID: NCR05032 Address: 905 NE 11 Avenue Portland WA 97232

Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Deanna Phillips Title: Senior Electrical Engineer Email: dmphillips@bpa.gov Phone: 360-418-8044

#### Violation(s)

This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement		
Requirement Description				
WECC2013013089	06/18/2007	PRC-017-0 R1.		
The Transmission Owner, Generator Owner, and Distribution Provider that owns an SPS shall have a system maintenance and testing program(s) in place. The program(s) shall include:				

Brief summary including the cause of the violation(s) and mechanism in which it was identified:

The root cause of this violation was that BPA misidentified the types of documentation necessary to demonstrate compliance with PRC-017-0 R1.

One of the findings of the 2013 WECC Audit of BPA was a possible violation of PRC-017-0 R1.

From the final WECC audit report dated December 4, 2013:

"BPA failed to include defined intervals within which the RAS and SPS must be maintained and tested; a basis for those intervals, the grace periods and the extension; and a schedule for system maintenance and system testing in their SPS maintenance and testing program."

BPA's documentation of compliance with PRC-017-0 R1 does not address some interpretations of this requirement.

a. Maintenance and Testing Intervals should be specified as a maximum length (not a target date with +/- time periods on either side of it).

b. Documentation that adequately addresses the "basis for those intervals†should include an explanation of why the interval was selected (not a discussion of who approved the intervals).

Relevant information regarding the identification of the violation(s):

BPA ID# P189

#### Plan Details

Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

BPA has completed the following:

1. BPA reviewed functional testing intervals for Main Grid and Local Area RAS, modified its functional testing intervals and requested and received approval from the WECC Remedial Action Scheme Reliability Subcommittee (RASRS) on the following functional test intervals:

- a) Wide-Area Protection Scheme 2 year interval with a target of 1 year
- b) Local-Area Protection Scheme 6 year interval with a target of 5 years

2. BPA reviewed maintenance testing intervals for Main Grid and Local Area RAS, modified its maintenance intervals to reflect the maintenance intervals included in PRC005-2.

3. BPA revised the maintenance testing requirements for Main Grid and Local Area RAS

4. BPA has revised its RAS/SPC maintenance test documentation (SPC STD MC-R00016 and 20) to include new, defined intervals and a description of what is to be tested. The Basis for the intervals is that they are as specified in PRC-005-2.

5. BPA has provided employees with the new System Protection and Control (SPC) Interval & Maintenance Standards documents that contain the new maintenance tests and testing intervals.

6. BPA has published its "internal standard(s)†and guide(s) via its standards websites. The standards websites are available for all employees supporting the equipment within the applicable "internal standard†or guide. As each internal standard is updated â€<sup>e</sup> the affected employees get an email alert to note the changes.

BPA will complete the following:

1. BPA will revise its RAS/SPS functional test documentation..

Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: February 15, 2015

Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
Modify Intervals for BPA's RAS/SPS System Testing	<ol> <li>BPA requested and received approval from the WECC RASRS on the following functional test intervals:         <ul> <li>a) Wide-Area Protection Scheme: 2 year interval with a target of 1 year</li> <li>b) Local-area Protection Scheme: 6 year interval with a target of 5 years.</li> </ul> </li> </ol>	09/11/2014	10/28/2013
Modify Intervals and Basis for BPA RAS/SPS Equipment Maintenance Test Documentation Modified	2. BPA revised its RAS/SPS equipment maintenance test documentation to include defined intervals and what to be tested. BPA's basis for the chosen intervals is that they are identical to	09/11/2014	05/15/2014

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
	<ul> <li>those specified in PRC005-2.</li> <li>3. BPA has provided employees with the new System Protection and Control (SPC) Interval Standards documents that contain the new maintenance and testing intervals.</li> <li>4. BPA has published its "internal standard(s)†and guide(s) via its standards website(s). The standards websites are available for all employees supporting the equipment within the applicable "internal standard†or guide.</li> </ul>		
11/15/14 Milestone - P189	BPA will prepare a draft of its basis for RAS/SPS functional test intervals.	11/15/2014	
2/15/15 Milestion - P189	BPA will finalize its RAS/SPS functional test documentation to include defined intervals and a basis for those intervals and a schedule for the testing.	02/15/2015	

Additional Relevant Information

#### Reliability Risk

#### **Reliability Risk**

While the Mitigation Plan is being implemented, the reliability of the bulk Power System may remain at higher Risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

The changes that BPA is implementing through this Mitigation Plan will neither increase nor decrease the frequency of BPA maintenance and testing of its RAS Schemes. Therefore. BPA concludes that this violation has no impact upon the reliability of the BPS.

#### Prevention

Describe how successful completion of this plan will prevent or minimize the probability further violations of the same or similar reliability standards requirements will occur

Upon completion of this Mitigation Plan, BPA will have accomplished the following:

- 1. BPA requested and received approval from the WECC RASRS on the following functional test intervals:
  - a) Wide-Area Protection Scheme 2 year interval with a target of 1 year
  - b) Local-Area Protection Scheme 6 year interval with a target of 5 years

2. BPA will have finalized its RAS/SPS functional test documentation to include defined intervals, a basis for the testing intervals and a schedule for the testing.

Completion of these actions will minimize the likelihood of further violations of PRC-017 R1 by clarifying our testing intervals and their basis in our documentation.

Describe any action that may be taken or planned beyond that listed in the mitigation plan, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements

BPA is expediting its transition to performing its maintenance activities under PRC-005-2. Since PRC-005-2 both superveeds PRC-017-0 and contains specified maximum maintenance intervals, this expedited transition will reduce the likelyhood that BPA would make similar future errors in either deciding upon apprpriate maximum maintenance intervals or determining an appropriate basis for such decisions.

#### Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

\* Submits the Mitigation Plan, as presented, to the regional entity for acceptance and approval by NERC, and

\* if applicable, certifies that the Mitigation Plan, as presented, was completed as specified.

Acknowledges:

- 1. I am qualified to sign this mitigation plan on behalf of my organization.
- 2. I have read and understand the obligations to comply with the mitigation plan requirements and ERO remedial action directives as well as ERO documents, including but not limited to, the NERC rules of procedure and the application NERC CMEP.
- 3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Hardev S. Juj

Title: Vice President, Transmission & Asset Management

Authorized On: September 11, 2014

### Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: Bonneville Power Administration
NERC Registry ID: NCR05032
NERC Violation ID(s): WECC2013013089
Mitigated Standard Requirement(s): PRC-017-0 R1.
Scheduled Completion as per Accepted Mitigation Plan: February 15, 2015
Date Mitigation Plan completed: February 05, 2015
WECC Notified of Completion on Date: February 25, 2015
DDA has completed this mitigation plan and is submitting it

Entity Comment: BPA has completed this mitigation plan and is submitting its completion package.

Additional Comments			
From	Comment	User Name	
Entity	The information contained in this submittal is sensitive. The recipient of this information is required to control, protect and safeguard this information at all times.	Ruth Miller	

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	140911 P189 PRC-017- 0_R1_FINAL Mit PlanWET INK Signature - Hardev.pdf		141,180
Entity	150213 PRC-017-0 R1 P189 Mitigation Plan Completion Package.pdf.pgp		2,684,254

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Randi R. Thomas

Title: Manager, Systems Operations

Email: rrthomas@bpa.gov

Phone: (360) 624-6726

Authorized Signature

Date

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2013013089 Standard/Requirement: PRC-017-0 R1. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 02/24/2015 for the violation of PRC-017-0 R1.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

If you have any questions or concerns, please contact Keshav Sarin at ksarin@wecc.biz.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

#### Thank you, OATI

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[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment FF**

# Record documents for the violation of PRC-005-1 R1 (WECC2013013091)

FF-1. BPA's Violation Discovery Record dated October 21, 2013;

FF-2. BPA's Mitigation Plan designated as WECCMIT011003 submitted September 11, 2014;

FF-3. BPA's Certification of Mitigation Completion dated November 18, 2014;

FF-4. WECC's Verification of Mitigation Completion dated April 1, 2015.

#### Violation - Discovery Record

NERC Registry ID: NCR05032

NERC Violation ID: WECC2013013091

Discovery Method: Audit

Date Submitted: October 18, 2013

Region Contact: Chris Luras

Phone: 801-891-7127 Email: cluras@wecc.biz

Standard: PRC-005-1 - Transmission And Generation Protection System Maintenance And Testing

Purpose:

Requirement: R1

Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation Protection System shall have a Protection System maintenance and testing program for Protection Systems that affect the reliability of the BES. The program shall include:

Violated Sub-Req(s): R1.1

Violated Function(s): TO

Init Determ a VItn: October 18, 2013

Begin Date of Vltn: June 18, 2007

Notified of Vltn on: October 11, 2013

#### Potential Impact to Severe Impact -

BES: The entity has a policy in place that, if and when implemented, violates this requirement. The policy permits the entity to delay maintenance activities beyond the point where the maintenance and testing becomes past due. The entity submitted evidence that maintenance and testing are being performed and the audit team recognizes this policy may be implemented in only rare circumstances.

End Date:

However, as written, this policy permits the entity, in the extreme, to perform no maintenance and testing and at least defines no date certain by which maintenance and testing must be performed.

Brief Vltn Descr. & The entity failed to include valid intervals and a basis for those intervals in its Protection System Cause: maintenance and testing program. The intervals and basis for all protection system devices are invalid due to an internal policy that permits delaying maintenance beyond the time the maintenance and testing become past due. Further, the entity has no basis for the 25% extension to the interval for battery maintenance and testing.

Alleged Violation:

Registered Entity Report/Response:

Risk Factor: High

Severity Level: VSL - High

Factual Basis: High

From the most recent VSL Matrix, VRF\_Standards\_Applicability\_Matrix\_2013-10-01.xls

High

From the most recent VSL Matrix, VSL\_Matrix\_Complete\_2013-07-24.doc

The responsible entity had a Protection System maintenance and testing program for Protection Systems that affect the reliability of the BES, but the maintenance and testing intervals and their basis were missing or incomplete.

R1. Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation Protection System shall have a Protection System maintenance and testing program for Protection Systems that affect the reliability of the BES. The program shall include:

R1.1. Maintenance and testing intervals and their basis.

#### CAN-0043

Historical Evidence as Basis for Testing and Maintenance Intervals states the CEA is to verify that the registered entity is to have clear documentation of its prior experience with the equipment for PA was unable to locate the data.

## Mitigation Plan

#### Mitigation Plan Summary

#### Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
	WECC2013013091	PRC-005-1 R1.	10/21/2013	1
Mitigation Plan Submitted On: September 11, 2014				
Mitigation Plan Accepted On:				
Mitigation Plan Proposed Completion Date: November 15, 2014				
Actual Completion Date of Mitigation Plan:				
Mitigation Plan Certified Complete by BPA On:				
Mitigation Plan Completion Verified by WECC On:				
Mitigation Plan Completed? (Yes/No): No				

#### Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

#### Entity Information

Identify your organization:

Entity Name: Bonneville Power Administration NERC Compliance Registry ID: NCR05032 Address: 905 NE 11 Avenue Portland WA 97232

Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Deanna Phillips Title: Senior Electrical Engineer Email: dmphillips@bpa.gov Phone: 360-418-8044

#### Violation(s)

This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement	
Requirement Description			
WECC2013013091	06/18/2007	PRC-005-1 R1.	
Each Transmission Owner and any Distribution Provider that owns a transmission Protection System and each Generator Owner that owns a generation Protection System shall have a Protection System maintenance and testing program for Protection Systems that affect the reliability of the BES. The program shall include:			

Brief summary including the cause of the violation(s) and mechanism in which it was identified:

As a result of the WECC compliance audit in October 2013 a finding was received that: BPA failed to have valid intervals and a basis for those intervals in its Protection System maintenance and testing program. The intervals and basis for all protection system devices are invalid due to an internal policy that permits delaying maintenance beyond the time the maintenance and testing become past due. Further, BPA has no basis for the 25% extension to the interval for battery maintenance and testing.

Relevant information regarding the identification of the violation(s):

WECC made a determination the BPA had a potential violation with regards to valid intervals and a basis for those intervals in its Protection System maintenance and testing program.

#### Plan Details

Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

- BPA will deactivate the Maintenance Interval Deviation Standard

- BPA will modify all battery maintenance documentation that references the 125% maintenance extension. This will impact the way that BPA defines its maintenance interval.

- BPA will revise its battery maintenance and testing documentation to include a defined basis for the maintenance and testing of Substation Control Batteries.

- BPA will communicate the changes within the Preventive Maintenance Guide to the field personnel

Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: November 15, 2014

Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
Remove Maintenance Internal Deviation Policy	Remove the Maintenance Interval Deviation General Policy standard from BPAs Work Standards Manual	09/11/2014	06/19/2014
11/15/14 Milestone 1: P190	1. BPA will modify all battery maintenance documentation that references the 125% maintenance extension	11/15/2014	
11/15/14 Milestone 2: P190	2. BPA will revise its battery maintenance and testing documentation to include a defined basis for the maintenance and testing of Substation Control Batteries.	11/15/2014	
11/15/14 Milestone 3: P190	3. BPA will Communicate the changes within the Preventive Maintenance Guide to the field personnel	11/15/2014	

Additional Relevant Information BPA ID# P190

#### Reliability Risk

#### **Reliability Risk**

While the Mitigation Plan is being implemented, the reliability of the bulk Power System may remain at higher Risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

The changes that BPA is implementing through this mitigation plan present no impact to the BPS as the maintenance and testing intervals defined will not change.

#### Prevention

Describe how successful completion of this plan will prevent or minimize the probability further violations of the same or similar reliability standards requirements will occur

Upon completion of the proposed mitigation plan, BPA will have a defined interval for battery maintenance and testing acceptable to the NERC standard PRC-005-1b R1. This interval will be included in a BPA document and contained within that document will be the basis for which the interval was derived for battery maintenance and testing. This will prevent further violations as to the validity of the interval and its basis.

Describe any action that may be taken or planned beyond that listed in the mitigation plan, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements

In an effort to prevent and minimize the probability of incurring further violations of the same or similar standard requirements, BPA will modify their battery maintenance and testing intervals, tasks and associated documentation to align with the requirements stated within the new NERC Reliability Standard PRC-005-2 being implemented by the April 1, 2015 effective date.

#### Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

\* Submits the Mitigation Plan, as presented, to the regional entity for acceptance and approval by NERC, and

\* if applicable, certifies that the Mitigation Plan, as presented, was completed as specified.

Acknowledges:

- 1. I am qualified to sign this mitigation plan on behalf of my organization.
- 2. I have read and understand the obligations to comply with the mitigation plan requirements and ERO remedial action directives as well as ERO documents, including but not limited to, the NERC rules of procedure and the application NERC CMEP.
- 3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Hardev S. Juj

Title: Senior Vice President, Transmission Planning and Asset Managemen

Authorized On: September 11, 2014

### Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: Bonneville Power Administration NERC Registry ID: NCR05032 NERC Violation ID(s): WECC2013013091 Mitigated Standard Requirement(s): PRC-005-1 R1. Scheduled Completion as per Accepted Mitigation Plan: November 15, 2014 Date Mitigation Plan completed: November 17, 2014 WECC Notified of Completion on Date: November 17, 2014

Entity Comment: Explanation of evidence is attached as a separate document.

Additional Documents				
From	Document Name	Description	Size in Bytes	
Entity	140911 P190 PRC-005- 1_R1_FINAL Mit Plan wet ink signature - Hardev.pdf		118,683	
Entity	2014 Substation Maintenance Equipment Standard 11012014.xls		502,784	
Entity	141114_Substation Maintenance Equipment Standard (SMES) revisions.msg	Email communicating the changes within the Preventative Maintenance Guide (renamed Substation Maintenance Equipment Standard) to the field personnel.	64,512	
Entity	140723 BPA-WS-0-0.pdf		214,280	
Entity	141117 PRC-005 completion explanation.docx		13,547	

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Hardev S. Juj

Title: Vice President-Planning and Asset Management

Email: hsjuj@bpa.gov

Phone: 1 (360) 418-8981

Authorized Signature

Date \_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2013013091 Standard/Requirement: PRC-005-1 R1. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 11/16/2014 for the violation of PRC-005-1 R1.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

If you have any questions or concerns, please contact Keshav Sarin at ksarin@wecc.biz.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

#### Thank you, OATI

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[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment GG**

# Record documents for the violation of TOP-004-2 R6 (WECC2014013891)

**GG-1. BPA's Violation Discovery Record dated June 2, 2014;** 

GG-2. BPA's Mitigation Plan designated as WECCMIT010735 submitted June 6, 2014;

**GG-3. BPA's Certification of Mitigation Completion dated June 9, 2014;** 

**GG-4. WECC's Verification of Mitigation Completion dated September 9, 2014** 

#### Violation - Discovery Record

Registered Entity: Bonneville Power Administration

NERC Registry ID: NCR05032

NERC Violation ID: WECC2014013891

Discovery Method: Self-Certification

Date Submitted: June 02, 2014

Region Contact: Chris Luras

Phone: 801-891-7127 Email: cluras@wecc.biz

Standard: TOP-004-2 - Transmission Operations

Purpose: To ensure that the transmission system is operated so that instability, uncontrolled separation, or cascading outages will not occur as a result of the most severe single Contingency and specified multiple Contingencies.

Requirement: R6

Transmission Operators, individually and jointly with other Transmission Operators, shall develop, maintain, and implement formal policies and procedures to provide for transmission reliability. These policies and procedures shall address the execution and coordination of activities that impact inter- and intra-Regional reliability, including:

Violated Sub-Req(s):

Violated Function(s): TOP

Init Determ a Vltn: June 02, 2014

Begin Date of Vltn: May 13, 2013

Notified of Vltn on: March 03, 2014

End Date:

Potential Impact to BES:

Brief Vltn Descr. & WECC Subject Matter Experts are currently reviewing the validity of the submittal. Cause: As always, WECC will update the description if an alleged violation is verified.

Alleged Violation:

Registered Entity Report/Response:

> Risk Factor: Medium Severity Level: Factual Basis:

## Mitigation Plan

#### Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
null	WECC2014013891	TOP-004-2 R6	null	1
Mitigation Plan Submitted On: June 06, 2014				
Mitigation Plan Accepted On:				
Mitigation Plan Proposed Completion Date: June 19, 2013				
Actual Completion Date of Mitigation Plan:				
Mitigation Plan Certified Complete by BPA On: June 06, 2014				
Mitigation Plan Completion Verified by WECC On:				
Mitigation Plan Completed? (Yes/No): No				

#### Section A: Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

#### Section B: Registered Entity Information

B.1 Identify your organization:

Entity Name: Bonneville Power Administration NERC Compliance Registry ID: NCR05032 Address: 905 NE 11 Avenue Portland OR 97232

B.2 Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Jenifur Rancourt Title: FERM Compliance Manager (Acting) Email: jlrancourt@bpa.gov Phone: 503-230-3672

#### Section C: Identification of Reliability Standard Violation(s) Associated with this Mitigation Plan

#### C.1 This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement	
Requirement Description			
WECC2014013891	05/13/2013	TOP-004-2 R6	
Transmission Operators, individually and jointly with other Transmission Operators, shall develop, maintain, and			

implement formal policies and procedures to provide for transmission reliability. These policies and procedures shall address the execution and coordination of activities that impact inter- and intra-Regional reliability, including:

C.2 Brief summary including the cause of the violation(s) and mechanism in which it was identified above:

In July 2008, BPA formally accepted Transmission Operator responsibilities for the Bureau of Reclamation (BOR) Grand Coulee (GCL) 500, 230, and 115KV switchyards. GCL Dispatch operates the BES elements included in the formal Transmission Operator agreement. BPA has Supervisory Control and Data Acquisition (SCADA) visibility for monitoring and alarming.

In September of 2010, the BOR and BPA further formalized the outage coordination process as it pertains to the operation of the GCL switchyard equipment affecting the operation of the BES. This agreement covers all BES and related equipment that can impact the reliability of the BES.

In September of 2011, BPA also revised its Outage and Reliability Coordination Reporting Requirements for Federal Generator Operators. This provides the process for coordination of generator unit outages. This document is referred to as the Federal Generator Reporting Requirements. This document was also coordinated and communicated to the BOR. This document is required because of the internal outage coordination process between the BOR, BPA Power Services, BPA Dispatch, and BPA Technical Operations/Study Engineers.

On May 16, 2013, the 500KV Switchyard at GCL was operating with 2 open bays. The bus configuration at GCL 500KV switchyard is "breaker and a halfâ€; therefore, 4 Power Circuit Breakers (PCBs) were open. The planned work was on GCL powerhouse (PH) units 20 and 21. The GCL PH units 20 and 21 were scheduled and coordinated following the agreed upon procedure between the BOR GCL and BPA (Federal Generator Reporting Requirements). However, the 4 PCB'S that were open were not scheduled or coordinated per the TOP agreement and the formalized outage coordination process. The conditions (2 open bays) were not addressed in any formal BPA Operating Procedure which BPA refers to as a Dispatcher Standing Order (DSO's); therefore, the condition was not identified to have an affect on the NOH flow gate. At approximately 0800 hrs on 5/16/2013, the Senior Dispatcher on shift and the BPA Study engineer were informed by the BPA Senior Outage Dispatcher the 4 PCB'S at GCL were not scheduled to be out of service and therefore the 4 PCB'S weren't included in the outage coordination/study process. This was the first time BPA Real Time Dispatchers were informed this configuration could be a problem. The BPA Senior Dispatcher immediately contacted the GCL Dispatcher and asked the GCL Dispatcher about the possibility of closing the 4 PCB's. The GCL Dispatcher agreed to check with his personnel and report back to the BPA Senior Dispatcher. At 0808, the BPA Study Engineer informed the BPA Senior Dispatcher the current GCL Switchyard configuration would require a reduction on the North of Hanford (NOH) flow gate. At 0808, the BPA Senior Dispatcher directed the GCL Dispatcher to close the 4 PCB's which would make up the 2 bays at GCL Switchyard. The new SOL of 2850MW was implemented at 0816hrs upon completion of a study by the BPA Study Engineer. The new SOL implemented was an 811MW reduction from the previous SOL of 3611MW. The actual flows were well below the new revised study limit. At 0836hrs, GCL Dispatch reported that all 4 PCB'S were closed. NOH SOL was set back to original SOL of 3661MW. The BPA Study Engineering group performed a post event analysis and determined the 4 PCBâ€<sup>™</sup>S were open for approximately 70hrs, but at no time during this 70hr period were actual flows on the NOH flow gate above the 2850MW SOL that should have been in place due to the configuration at the GCL 500KV Switchyard. The outage coordination process agreed upon wasn't followed in this instance and, therefore, this self-report is being filed by BPA as the TOP, even though BPA relies on BOR to implement the process. The BOR GCL did not submit an outage request for the 4 500KV PCB'S and these were not included in the outage coordination/study process. The specific BES equipment in this report was included in the outage coordination agreement between
BPA and BOR GCL.

C.3 Provide any relevant information regarding the identification of the violation(s) associated with this Mitigation Plan:

In the best interest of reliability and out of an abundance of caution, BPA is pursuing this self-report to strengthen its own internal processes regarding the transmission operating agreement BPA has with USBR, to bring awareness to the uniqueness of the operating condition of having multiple PCBâ€<sup>™</sup>s open, and to strengthen reliability. BPA emphasizes that there was no risk to the system for the following reasons:

• BPA operating condition during the time of the open PCB's was within in the N-1 parameters, therefore the impact to the system was very low – With the condition of the PCB's open, there was no impact on the system and the flowgate was intact:

o There was no instability, no cascading outages, and it was not a real time emergency.

- o The NOH flowgate is not part any of the 40 paths identified as Major WECC Transfer Paths.
- There were no flow concerns:

o The NOH is a separate and independent flowgate and while it is monitored internally, it is not part of the "Major WECC Transfer Paths in the Bulk Electric Systemâ€.

o The flows over the NOH path never exceeded the actual SOLs rated for the path.

 $\hat{a} \in \phi$  There was no over exceedance  $\hat{a} \in \hat{G}$  Generation is manageable on alternate paths where the NOH flowgate is able to keep it off the COI (California Oregon Intertie).

 $\hat{a} \in \phi$  There was no uncontrolled separation.

#### Section D: Details of Proposed Mitigation Plan

D.1 Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

• Update DSO-340, "North of Hanford (NOH) Operation Procedureâ€. Updated to include a definition of open bay, outline restrictions for open bay(s), and to ensure that the condition is not repeated in the future, BPA has modified its formal operating procedure DSO-340 (North of Hanford (NOH) Operating Procedure)

• Communication meetings with USBR.

BPA held an outreach on 6/5/13 with USBR (Grand Coulee) to strengthen procedures and communications between the two parties and have incorporated the results of that meeting into our processes.

D.2 Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: June 19, 2013

D.3 Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
130605 Milestone	BPA to hold a Coordination Working Session with the USBR to discuss the following; outage boundaries, outage coordination of multiple units out at one time, identification of nomenclature regarding TOp directives, clarify TOp directives specifically the protocols for three way communications and address Dispatch authority.	06/05/2013	06/05/2013
130619 Milestone	Update DSO-340 by providing a definition of open bay and to outline restrictions for open bay(s).	06/19/2013	06/19/2013

D.4 Additional Relevant Information (Optional) P188

#### Section E: Interim and Future Reliability Risk

#### E.1 Abatement of Interim BPS Reliability Risk

While your organization is implementing the Mitigation Plan proposed in Section D of this form, the reliability of the Bulk Power System may remain at higher risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are, or may be, known or anticipated: (i) identify any such risks or impacts; and (ii) discuss any actions that your organization is planning to take or is proposing as part of the Mitigation Plan to mitigate any increased risk to the reliability of the bulk power system while the Mitigation Plan is being implemented:

A reliability risk while the mitigation plan was being implemented was that a lack of communication for unscheduled PCBs could have resulted in an unknown operating state.

The following actions that took place to address risk/impacts are:

On June 5, 2013 BPA held a working session with USBR Grand Coulee to address the processes, communication, and coordination for outages. BPA also collaborated with USBR to determine the appropriate language for updating BPAâ€<sup>™</sup>s Dispatch Standing Order (DSO-340).

On June 19, 2013 BPA updated Dispatch Standing Order (DSO-340) to address multiple open bay conditions for the Grand Coulee 500kV Switchyard. The update includes a definition of an open bay, a list of the critical 500kV Grand Coulee bays, and who to immediately contact should a condition of multiple open bays occur.

#### E.2 Prevention of Future BPS Reliability Risk

Describe how successful completion of the Mitigation Plan as laid out in Section D of this form will prevent or minimize the probability that your organization incurs further violations of the same or similar reliability standards requirements in the future:

BPA addressed the gap in DSO-340 by including the Grand Coulee 500kV switchyard open bay condition:

- $\hat{a} \in \phi$  The definition of an open bay
- The identification of GCL's critical bays
- Open bay operating allowances

Upon completion of this mitigation plan, BPA addressed the NOH open bay condition by bringing to light the uniqueness of the operating condition and allowing the gap in DSO-340 to be recognized so it can be appropriately addressed and updated. The ability to identify and correct multiple open conditions for critical Grand Coulee 500kV bays will prevent the recurrence of NERC standard violations and further ensure the reliable operation of the BES. BPA has also communicated with USBR its responsibilities and processes for outage coordination.

E.3 Your organization may be taking or planning other action, beyond that listed in the Mitigation Plan, as proposed in Section D.1, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements listed in Section C.1, or of other reliability standards. If so, identify and describe any such action, including milestones and completion dates:

#### Section F: Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

(a) Submits the Mitigation Plan, as laid out in Section D, to the Regional Entity for acceptance and approval by NERC, and

(b) If applicable, certifies that the Mitigation Plan, as laid out in Section D of this form, was completed (i) as laid out in Section D of this form and (ii) on or before the date provided as the 'Date of Completion of the Mitigation Plan' on this form, and

(c) Acknowledges:

- 1. I am VP, Planning & Asset Management, Transmission Services of Bonneville Power Administration
- 2. I am qualified to sign this Mitigation Plan on behalf of Bonneville Power Administration
- 3. I have read and understand Bonneville Power Administration's obligations to comply with Mitigation Plan requirements and ERO remedial action directives as well as ERO documents, including, but not limited to, the NERC Rules of Procedure and the NERC CMEP currently in effect or the NERC CMEP-Province of Manitoba, Schedule B currently in effect, whichever is applicable.
- 4. I have read and am familiar with the contents of the foregoing Mitigation Plan.
- 5. Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authorities in Canada.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Hardev Juj

Title: VP, Planning & Asset Management, Transmission Services

Authorized On: June 06, 2014

#### Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name:	Bonneville Power Administration
NERC Registry ID:	NCR05032
NERC Violation ID(s):	WECC2014013891
Mitigated Standard Requirement(s):	TOP-004-2 R6,
Scheduled Completion as per Accepted Mitigation Plan:	June 19, 2013
Date Mitigation Plan completed:	June 19, 2013
WECC Notified of Completion on Date:	June 06, 2014
Entity Comment:	The information contained in this submittal

Comment: The information contained in this submittal is sensitive. The recipient of this information is required to control, protect and safeguard this information at all times. BPA has completed the mitigation plan and is attaching the supporting documents.

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	Completion Mitigation Plan TOP-004-2 R6.pdf		478,697
Entity	Mitigation Plan TOP-004-2 R6.pdf		66,446

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Hardev Juj

Title: VP, Planning & Asset Management, Transmission Services

Email: hsjuj@bpa.gov

Phone: 1 (360) 418-8981

Authorized Signature

Date \_\_\_\_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

#### Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2014013891 Standard/Requirement: TOP-004-2 R6. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 06/05/2014 for the violation of TOP-004-2 R6.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

If you have any questions or concerns, please contact Keshav Sarin at ksarin@wecc.biz.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

CONFIDENTIAL INFORMATION: This email and any attachment(s) contain confidential and/or proprietary information of Open Access Technology International, Inc. Do not copy or distribute without the prior written consent of OATI. If you are not a named recipient to the message, please notify the sender immediately and do not retain the message in any form, printed or electronic.

[OATI Information - Email Template: MitPlan\_Completed]



## **Attachment HH**

# Record documents for the violation of MOD-001-1a R1 (WECC2014014181)

HH-1. BPA's Self-Report dated August 5, 2014;

HH-2. BPA's Mitigation Plan designated as WECCMIT010951 submitted August 29, 2014;

HH-3. BPA's Certification of Mitigation Completion dated March 31, 2015;

HH-4. WECC's Verification of Mitigation Completion dated March 31, 2015.

#### Self Report - 2014

Entity Name: Bonneville Power Administration (BPA)

NERC ID: NCR05032

Active: Yes Violation Started in Program Year: 2013

Standard: MOD-001-1a

Requirement: R1

Date Submitted: August 04, 2014

Has this violation previously No been reported or discovered?:

#### Entity Information:

Joint Registration Organization (JRO) ID:

Coordinated Functional Registration (CFR) ID:

Contact Name: Jenifur Rancourt Contact Phone: 5032303672 Contact Email: jlrancourt@bpa.gov

#### Violation:

Violation Start Date:	November 22, 2013
End/Expected End Date:	August 01, 2014
Region Initially Determined a Violation On:	
Reliability Functions:	Transmission Operator (TOP)

Is Possible Violation still No occurring?:

Has this Possible Violation No been reported to other Regions?:

Which Regions:

Date Reported to Regions:

Detailed Description and On July 16, 2014, BPA noticed the Balancing Authority (BA) interconnection Cause of Possible Violation: between BPA and Gridforce Energy Management (GEM) was not listed in BPAâ€<sup>™</sup>s ATCID. According to the NERC Registry, GEM became a BA on November 22, 2013. BPAâ€<sup>™</sup>s ATCID documents BPAâ€<sup>™</sup>s ATC Paths and the ATC methodology BPA has selected for those paths. BPA did not identify GEM as an ATC Path or select an ATC methodology for this ATC Path until July 2014.

#### Mitigating Activities:

Description of Mitigating BPA has already updated its ATCID to identify GEM as an ATC Path, and has Activities and Preventative selected MOD-030 for this ATC Path, per MOD-001 R1. Measure:

Date Mitigating Activities August 01, 2014 Completed:

#### Impact and Risk Assessment:

Potential Impact to BPS: Minimal

Actual Impact to BPS: Minimal

There was no reliability risk due to this issue. Under MOD-030 R2.1.2.3, BPA

#### Self Report - 2014

Description of Potential and is protecting for GEM with its West of McNary flowgate, which is actively Actual Impact to BPS: monitored and protected for with contingency studies.

Risk Assessment of Impact to Because BPA is protecting for GEM with a flowgate that is actively monitored BPS: and protected for with contingency studies (West of McNary flowgate), the risk to the BES is minimal.

Additional Entity Comments: BPA intends to submit a mitigation plan on or about August 31, 2014.

BPA's identification number for this issue is P193.

Additional Comments			
From	Comment	User Name	
No Comments			
Additional Documents			

From	Document Name	Description	Size in Bytes
No Docume	nts		

### Mitigation Plan

#### Mitigation Plan Summary

#### Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
	WECC2014014181	MOD-001-1a R1.	null	1
	Mitigation Plan Subm	itted On: August 29, 2014		
Mitigation Plan Accepted On:				
Mitigation Plan Proposed Completion Date: February 15, 2015				
Actual Completion Date of Mitigation Plan:				
Mitigation Plan Certified Complete by BPA On:				
Mitigation Plan Completion Verified by WECC On:				
Mitigation Plan Completed? (Yes/No): No				

#### Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

#### Entity Information

Identify your organization:

Entity Name: Bonneville Power Administration NERC Compliance Registry ID: NCR05032 Address: 905 NE 11 Avenue Portland WA 97232

Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Jenifur Rancourt Title: FERC Compliance Manager-Acting Email: jlrancourt@bpa.gov Phone: 503-230-3672

#### Violation(s)

This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement	
Requirement Description			
WECC2014014181	11/22/2013	MOD-001-1a R1.	

Each Transmission Operator shall select one of the methodologies listed below for calculating Available Transfer Capability (ATC) or Available Flowgate Capability (AFC) for each ATC Path per time period identified in R2 for those Facilities within its Transmission operating area: [Time Horizon: Operations Planning] The Area Interchange Methodology, as described in MOD-028, The Rated System Path Methodology, as described in MOD-029, The Flowgate Methodology, as described in MOD-030

Brief summary including the cause of the violation(s) and mechanism in which it was identified:

On July 16, 2014, BPA noticed the Balancing Authority (BA) interconnection between BPA and Gridforce Energy Management (GEM) was not listed in BPA's ATCID. According to the NERC Registry, GEM became a BA on November 22, 2013. BPA's ATCID documents BPA's ATC Paths and the ATC methodology BPA has selected for those paths. BPA did not identify GEM as an ATC Path or select an ATC methodology for this ATC Path until July 2014.

Relevant information regarding the identification of the violation(s):

In response to this, BPA has already updated its ATCID to identify GEM as an ATC Path, and has selected MOD-030 for this ATC Path, per MOD-001 R1.

Additionally, BPA will modify its BA addition/change process to add communication and internal controls to avoid a repeat violation if another new BA is activated adjacent to BPA.

#### Plan Details

Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

 Update ATCID to identify the new ATC Path, and selected an ATC methodology to calculate ATC with.
 Identify necessary communication and internal controls to avoid a repeat violation if another new BA is activated adjacent to BPA.
 Finalize BPA's BA addition/change process so that the identified communication and internal controls are added to avoid a repeat violation if another new BA is activated adjacent to BPA and train staff on the new process.

Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: February 15, 2015

Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
140815 Milestone	Update ATCID to identify the new ATC Path, and selected an ATC methodology to calculate ATC with.	08/15/2014	08/01/2014
141115 Milestone	Identify necessary communication and internal controls to avoid a repeat violation if another new BA is activated adjacent to BPA.	11/15/2014	
150215 Milestone	Finalize BPAâ€ <sup>™</sup> s BA addition/change process so that the identified communication and internal controls are added to avoid a repeat violation if another new BA is activated adjacent to BPA and train staff on the new process.	02/15/2015	

Additional Relevant Information BPA Mitigation Plan P193

#### Reliability Risk

#### Reliability Risk

While the Mitigation Plan is being implemented, the reliability of the bulk Power System may remain at higher Risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

There was no reliability risk to the BPS due to this violation. Under MOD-030 R2.1.2.3, BPA is protecting for GEM with its West of McNary flowgate, which is actively monitored and protected for with contingency studies.

#### Prevention

Describe how successful completion of this plan will prevent or minimize the probability further violations of the same or similar reliability standards requirements will occur

Upon completion of this mitigation plan, BPA will have modified its BA addition/change process that will add communication and internal controls to avoid a repeat violation if another new BA is activated adjacent to BPA.

Describe any action that may be taken or planned beyond that listed in the mitigation plan, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements

#### Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

\* Submits the Mitigation Plan, as presented, to the regional entity for acceptance and approval by NERC, and

\* if applicable, certifies that the Mitigation Plan, as presented, was completed as specified.

Acknowledges:

- 1. I am qualified to sign this mitigation plan on behalf of my organization.
- 2. I have read and understand the obligations to comply with the mitigation plan requirements and ERO remedial action directives as well as ERO documents, including but not limited to, the NERC rules of procedure and the application NERC CMEP.
- 3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Thomas McDonald

Title: Chief Compliance Officer

Authorized On: August 28, 2014

#### Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: Bonneville Power Administration NERC Registry ID: NCR05032 NERC Violation ID(s): WECC2014014181 Mitigated Standard Requirement(s): MOD-001-1a R1. Scheduled Completion as per Accepted Mitigation Plan: February 15, 2015 Date Mitigation Plan completed: February 13, 2015 WECC Notified of Completion on Date: February 13, 2015

Entity Comment: None

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	150213_P193_MOD-001- 1a_R1_Signed Cert of Mit Plan Completion.pdf		3,002,935

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Hardev Juj

Title: Vice President, Planning & Asset Management

Email: hsjuj@bpa.gov

Phone: 1 (360) 418-8981

Authorized Signature

Date \_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2014014181 Standard/Requirement: MOD-001-1a R1. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 02/12/2015 for the violation of MOD-001-1a R1.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

If you have any questions or concerns, please contact Keshav Sarin at ksarin@wecc.biz.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

#### Thank you, OATI

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[OATI Information - Email Template: MitPlan\_Completed]



## **Attachment II**

# Record documents for the violation of PRC-011-0 R1 (WECC2014014392)

**II-1. BPA's Self-Report dated October 9**, 2014;

II-2. BPA's Mitigation Plan designated as WECCMIT011170 submitted November 17, 2014;

**II-3. BPA's Certification of Mitigation Completion dated November 18, 2014;** 

**II-4. WECC's Verification of Mitigation Completion dated April 2, 2015.** 

#### Self Report

Entity Name: Bonneville Power Administration (BPA)

```
NERC ID: NCR05032
Standard: PRC-011-0
Requirement: PRC-011-0 R1.
Date Submitted: October 08, 2014
```

Has this violation previously No been reported or discovered?:

#### **Entity Information:**

Joint Registration Organization (JRO) ID:

Coordinated Functional Registration (CFR) ID:

Contact Name: Jenifur Rancourt Contact Phone: 5032303672 Contact Email: jlrancourt@bpa.gov

#### Violation:

Violation Start Date:	April 01, 2013
End/Expected End Date:	November 15, 2014
Region Initially Determined a Violation On:	September 17, 2014
Reliability Functions:	Transmission Owner (TO)
Is Possible Violation still occurring?:	Yes
Has this Possible Violation been reported to other Regions?:	No

Which Regions:

Date Reported to Regions:

Detailed Description and BPA has idendified the lack of a clearly documented basis for the maintenance Cause of Possible Violation: and testing interval for Substation Control Batteries. According to NERC Reliability Standard PRC-011, the Transmission Owner and Distribution Provider that owns a UVLS system shall have a UVLS equipment maintenance and testing program in place. This program shall include documentation of maintenance and testing intervals and their basis, specifically referenced in requirement R1.2.

#### Mitigating Activities:

Description of Mitigating The specific tasks and actions that BPA will take to mitigate the self identified Activities and Preventative violation identified by above are the following:

Measure: - BPA will modify all battery documentation that references the 125% maintenance extension. This will impact the way that BPA defines its maintenance interval.

- BPA will revise its battery maintenance and testing documentation to include a defined basis for the maintenance and testing of Substation Control Batteries.

Date Mitigating Activities Completed: Self Report

#### Impact and Risk Assessment:

Potential Impact to BPS: Minimal

Actual Impact to BPS: Minimal

Description of Potential and BPA shall have completed modifying its Substation Control Batteries and Actual Impact to BPS: Chargers maintenance and testing documentation to include a basis for its maintenance and testing program by 11/15/2014.

There is no forseen potential or actual impact to the BPS from this potential violation.

Risk Assessment of Impact to There is no foreseen reliability risk from this potentional violation. BPS:

Additional Entity Comments: BPA intends to submit Mitigation Plan ID P198 on or about 11/7/2014

Additional Comments				
From	Comment	User Name		
No Comments				

Additional Documents				
From Document Name Description Size in Byte				
No Documents				

### Mitigation Plan

#### Mitigation Plan Summary

#### Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version		
	WECC2014014392	PRC-011-0 R1.	null	1		
	Mitigation Plan Submitted On: November 17, 2014					
Mitigation Plan Accepted On:						
Mitigation Plan Proposed Completion Date: November 15, 2014						
Actual Completion Date of Mitigation Plan:						
Mitigation Plan Certified Complete by BPA On: November 17, 2014						
Mitigation Plan Completion Verified by WECC On:						
Miti	Mitigation Plan Completed? (Yes/No): No					

#### Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

#### Entity Information

Identify your organization:

Entity Name: Bonneville Power Administration NERC Compliance Registry ID: NCR05032 Address: 905 NE 11 Avenue Portland OR 97232

Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Jenifur L. Rancourt Title: FERC Compliance Program Manager Email: jlrancourt@bpa.gov Phone: 503-230-3672

#### Violation(s)

This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement		
Requirement Description				
WECC2014014392	02/02/2008	PRC-011-0 R1.		
The Transmission Owner and Distribution Provider that owns a UVLS system shall have a UVLS equipment maintenance and testing program in place. This program shall include:				

Brief summary including the cause of the violation(s) and mechanism in which it was identified:

As a result of the WECC compliance audit in October 2013 a finding was received that: BPA failed to have valid intervals and a basis for those intervals in its Protection System maintenance and testing program. The intervals and basis for all protection system devices are invalid due to an internal policy that permits delaying maintenance beyond the time the maintenance and testing become past due. Further, BPA has no basis for the 25% extension to the interval for battery maintenance and testing. Based on the findings above, BPA has related this issue to the PRC-011-0 Undervoltage Load Shedding System Maintenance and Testing standard.

Relevant information regarding the identification of the violation(s):

WECC made a determination the BPA had a potential violation with regards to valid intervals and a basis for those intervals in its Protection System maintenance and testing program.

#### Plan Details

Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

The specific tasks and actions that BPA will take to mitigate the potential violations identified by the WEEC compliance audit are the following:

- Remove the Maintenance Interval Deviation General Policy standard from BPAs Work Standards Manual.

- BPA will modify all battery documentation that references the 125% maintenance extension. This will impact the way that BPA defines its maintenance interval.

- BPA will revise its battery maintenance and testing documentation to include a defined basis for the maintenance and testing of Substation Control Batteries.

- BPA will communicate the changes within the Preventive Maintenance Guide to the field personnel

Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: November 15, 2014

Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date
Remove Maintenance Internal Deviation Policy	Remove the Maintenance Interval Deviation General Policy standard from BPAs Work Standards Manual.	09/11/2014	06/19/2014
11/15/2014 Milestone 1: P198	1. BPA will modify all battery maintenance documentation that references the 125% maintenance extension. This will impact the way that BPA defines its maintenance interval.	11/15/2014	11/15/2014
11/15/2014 Milestone 2: P198	2. BPA will revise its battery maintenance and testing documentation to include a defined basis for the maintenance and testing of Substation Control Batteries.	11/15/2014	11/15/2014
11/15/2014 Milestone 3: P198	3. BPA will communicate the changes within the Preventive Maintenance Guide to the field personnel.	11/15/2014	11/15/2014

Additional Relevant Information BPA Reference P198

#### Reliability Risk

#### **Reliability Risk**

While the Mitigation Plan is being implemented, the reliability of the bulk Power System may remain at higher Risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

The changes that BPA is implementing through this mitigation plan present no impact to the BPS as the maintenance and testing intervals defined will not change.

#### Prevention

Describe how successful completion of this plan will prevent or minimize the probability further violations of the same or similar reliability standards requirements will occur

Upon completion of the proposed mitigation plan, BPA will have a defined interval for battery maintenance and testing acceptable to the NERC standard PRC-011-0 R1. This interval will be included in a BPA document and contained within that document will be the basis for which the interval was derived for battery maintenance and testing. This will prevent further violations as to the validity of the interval and its basis.

Describe any action that may be taken or planned beyond that listed in the mitigation plan, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements:

In an effort to prevent an minimize the probability of incurring further violations of the same of similar standard requirements, BPA will modify their control battery maintenance testing intervals, tasks and associated documentation to align with the requirements stated within the new NERC Reliability Standard PRC-005-02 being implemented by the April 1, 2015 effective date.

Describe any action that may be taken or planned beyond that listed in the mitigation plan, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements

In an effort to prevent an minimize the probability of incurring further violations of the same of similar standard requirements, BPA will modify their control battery maintenance testing intervals, tasks and associated documentation to align with the requirements stated within the new NERC Reliability Standard PRC-005-02 being implemented by the April 1, 2015 effective date.

#### Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

\* Submits the Mitigation Plan, as presented, to the regional entity for acceptance and approval by NERC, and

\* if applicable, certifies that the Mitigation Plan, as presented, was completed as specified.

Acknowledges:

- 1. I am qualified to sign this mitigation plan on behalf of my organization.
- 2. I have read and understand the obligations to comply with the mitigation plan requirements and ERO remedial action directives as well as ERO documents, including but not limited to, the NERC rules of procedure and the application NERC CMEP.
- 3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Hardev S. Juj

Title: VP, Planning and Asset Management

Authorized On: November 17, 2014

#### Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: Bonneville Power Administration
NERC Registry ID: NCR05032
NERC Violation ID(s): WECC2014014392
Mitigated Standard Requirement(s): PRC-011-0 R1.
Scheduled Completion as per Accepted Mitigation Plan: November 15, 2014
Date Mitigation Plan completed: November 17, 2014
WECC Notified of Completion on Date: November 17, 2014

Entity Comment: Explanation document describing how evidence demonstrates completion is a separate attachment to this web-form.

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	140723 BPA-WS-0-0.pdf		214,280
Entity	2014 Substation Maintenance Equipment Standard 11012014.xls		402,944
Entity	Substation Maintenance Equipment Standard (SMES) revisions.msg		59,904
Entity	141117 PRC-011 completion explanation.docx		13,693

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Hardev S. Juj

Title: Vice President-Planning and Asset Management

Email: hsjuj@bpa.gov

Phone: 1 (360) 418-8981

Authorized Signature

Date

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2014014392 Standard/Requirement: PRC-011-0 R1. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 11/16/2014 for the violation of PRC-011-0 R1.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

If you have any questions or concerns, please contact Keshav Sarin at ksarin@wecc.biz.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

#### Thank you, OATI

CONFIDENTIAL INFORMATION: This email and any attachment(s) contain confidential and/or proprietary information of Open Access Technology International, Inc. Do not copy or distribute without the prior written consent of OATI. If you are not a named recipient to the message, please notify the sender immediately and do not retain the message in any form, printed or electronic.

[OATI Information - Email Template: MitPlan\_Completed]



## **Attachment JJ**

# Record documents for the violation of PRC-017-0 R1 (WECC2014014519)

JJ-1. BPA's Self-Report dated December 15, 2014;

JJ-2. BPA's Mitigation Plan designated as WECCMIT011546 submitted December 16, 2014;

JJ-3. BPA's Certification of Mitigation Completion dated December 16, 2014;

JJ-4. WECC's Verification of Mitigation Completion dated April 2, 2015.

#### Self Report

Entity Name: Bonneville Power Administration (BPA)

```
NERC ID: NCR05032
Standard: PRC-017-0
Requirement: PRC-017-0 R1.
Date Submitted: December 15, 2014
```

Has this violation previously No been reported or discovered?:

#### **Entity Information:**

Joint Registration Organization (JRO) ID:

Coordinated Functional Registration (CFR) ID:

> Contact Name: Jenifur Rancourt Contact Phone: 5032303672 Contact Email: jlrancourt@bpa.gov

#### Violation:

Violation Start Date: December 15, 2014

End/Expected End Date: November 15, 2014

Region Initially Determined a Violation On:

Reliability Functions: Transmission Owner (TO)

Is Possible Violation still No occurring?:

Number of Instances: 1

Has this Possible Violation No been reported to other Regions?: Which Regions:

Date Reported to Regions:

Detailed Description and BPA has identified the lack of a clearly documented basis for the maintenance Cause of Possible Violation: and testing interval for Substation Control Batteries. According to NERC

Reliability Standard PRC-017, the Transmission Owner, Generator Owner, and Distribution Provider that owns an SPS shall have a system maintenance and testing program in place. This program shall include documentation of maintenance and testing intervals and their basis, specifically referenced in requirement R1.2.

#### Mitigating Activities:

Description of Mitigating The specific tasks and actions that BPA will take to mitigate the self identified Activities and Preventative violation identified by above are the following: Measure: - BPA will modify all battery documentation that references the 125% maintenance extension. This will impact the way that BPA defines its maintenance interval. - BPA will revise its battery maintenance and testing documentation to include a defined basis for the maintenance and testing of Substation Control Batteries.

November 15, 2014

Self Report

Date Mitigating Activities Completed:

#### Impact and Risk Assessment:

Potential Impact to BPS: Minimal Actual Impact to BPS: Minimal

Description of Potential and BPA completed modifying its Substation Control Batteries and Chargers Actual Impact to BPS: maintenance and testing documentation to include a basis for its maintenance and testing program by 11/15/2014.

There is no foreseen potential or actual impact to the BPS from this potential violation.

Risk Assessment of Impact to There is no foreseen reliability risk from this potential violation. BPS:

Additional Entity Comments: P200

Additional Comments				
From	Comment	User Name		
No Comments				

Additional Documents					
From	Document Name	Description	Size in Bytes		
No Documents					

### Mitigation Plan

#### Mitigation Plan Summary

#### Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version		
	WECC2014014519	PRC-017-0 R1.	04/02/2015	1		
	Mitigation Plan Submitted On: December 16, 2014					
Mitigation Plan Accepted On: April 02, 2015						
Mitigation Plan Proposed Completion Date: December 16, 2014						
Actual Completion Date of Mitigation Plan: November 14, 2014						
Mitigation Plan Certified Complete by BPA On: December 16, 2014						
Mitigation Plan Completion Verified by WECC On: April 02, 2015						
Mitigation Plan Completed? (Yes/No): Yes						

#### Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

#### Entity Information

Identify your organization:

Entity Name: Bonneville Power Administration NERC Compliance Registry ID: NCR05032 Address: 905 NE 11 Avenue Portland OR 97232

Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Jenifur L. Rancourt Title: FERC Compliance Program Manager Email: jlrancourt@bpa.gov Phone: 503-230-3672
# Violation(s)

This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement			
Requirement Description					
WECC2014014519	06/18/2007	PRC-017-0 R1.			
The Transmission Owner, Generator Owner, and Distribution Provider that owns an SPS shall have a system					

Brief summary including the cause of the violation(s) and mechanism in which it was identified:

As a result of the WECC compliance audit in October 2013 a finding was received that: BPA failed to have valid intervals and a basis for those intervals in its Protection System maintenance and testing program. The intervals and basis for all protection system devices are invalid due to an internal policy that permits delaying maintenance beyond the time the maintenance and testing become past due. Further, BPA has no basis for the 25% extension to the interval for battery maintenance and testing. Based on the findings above, BPA has related this issue to the PRC-017-0 Special Protection System Maintenance and Testing standard.

Relevant information regarding the identification of the violation(s):

WECC made a determination the BPA had a potential violation with regards to valid intervals and a basis for those intervals in its Protection System maintenance and testing program.

### Plan Details

Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

The specific tasks and actions that BPA will take to mitigate the potential violations identified by the WEEC compliance audit are the following:

- Remove the Maintenance Interval Deviation General Policy standard from BPAs Work Standards Manual.

- BPA will modify all battery documentation that references the 125% maintenance extension. This will impact the way that BPA defines its maintenance interval.

- BPA will revise its battery maintenance and testing documentation to include a defined basis for the maintenance and testing of Substation Control Batteries.

- BPA will communicate the changes within the Preventive Maintenance Guide to the field personnel

Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: December 16, 2014

Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
Remove Maintenance Internal Deviation Policy	Removed the Maintenance Interval Deviation General Policy standard from BPA's Work Standards Manual.	09/11/2014	06/19/2014	Completed	No
11/15/2014 Milestone	1. BPA will modify all battery maintenance documentation that references the 125% maintenance extension. This will impact the way that BPA defines its maintenance interval. 2. BPA will revise its battery maintenance and testing documentation to include a defined basis for the maintenance and	11/15/2014	11/15/2014	Completed	No

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
	testing of Substation Control Batteries. 3. BPA will communicate the changes within the Preventive Maintenance Guide to the field personnel.				

Additional Relevant Information

P200

### **Reliability Risk**

### **Reliability Risk**

While the Mitigation Plan is being implemented, the reliability of the bulk Power System may remain at higher Risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

The changes that BPA is implementing through this mitigation plan present no impact to the BPS as the maintenance and testing intervals defined will not change.

### Prevention

Describe how successful completion of this plan will prevent or minimize the probability further violations of the same or similar reliability standards requirements will occur

Upon completion of the proposed mitigation plan, BPA will have a defined interval for battery maintenance and testing acceptable to the NERC standard PRC-011-0 R1. This interval will be included in a BPA document and contained within that document will be the basis for which the interval was derived for battery maintenance and testing. This will prevent further violations as to the validity of the interval and its basis.

Describe any action that may be taken or planned beyond that listed in the mitigation plan, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements

In an effort to prevent an minimize the probability of incurring further violations of the same of similar standard requirements, BPA will modify their control battery maintenance testing intervals, tasks and associated documentation to align with the requirements stated within the new NERC Reliability Standard PRC-005-02 being implemented by the April 1, 2015 effective date.

### Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

\* Submits the Mitigation Plan, as presented, to the regional entity for acceptance and approval by NERC, and

\* if applicable, certifies that the Mitigation Plan, as presented, was completed as specified.

Acknowledges:

- 1. I am qualified to sign this mitigation plan on behalf of my organization.
- 2. I have read and understand the obligations to comply with the mitigation plan requirements and ERO remedial action directives as well as ERO documents, including but not limited to, the NERC rules of procedure and the application NERC CMEP.
- 3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Authorized Individual

Name: Hardev S. Juj

Title: VP, Planning and Asset Management

Authorized On: December 15, 2014

# Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name:	Bonneville Power Administration
NERC Registry ID:	NCR05032
NERC Violation ID(s):	WECC2014014519
Mitigated Standard Requirement(s):	PRC-017-0 R1.
Scheduled Completion as per Accepted Mitigation Plan:	December 16, 2014
Date Mitigation Plan completed:	December 16, 2014
WECC Notified of Completion on Date:	December 16, 2014
Entity Comment:	Note: WebCDMS would not allow BPA to enter a proposed mitigation plan completion date earlier than the "violation deemed" date, but BPA has already mitigated this issue. BPA entered an erroneous date of 12/16/14, the date of submittal, into the field in order to submit the forms. BPA points out that there will be times when a violation may be mitigated before it has been discovered, and requests that the software be modified to allow entering of factual information in this type of case.

	Additional Documents					
From	Document Name	Description	Size in Bytes			
Entity	141117 PRC-011 completion explanation.docx	This document was used to explain BPA's completion evidence under PRC-011 R1. It was subsequently determined that the same documentation cited by WECC in BPA's 2013 audit is used to demonstrate compliance under PRC-005 (audit), PRC-011 (previous self report), and PRC-017 (current self- report). Therefore, the same file is being uploaded to close the PRC-017 mitigation plan.	13,693			
Entity	Substation Maintenance Equipment Standard (SMES) revisions.msg		59,904			
Entity	Substation Maintenance Equipment Standard (SMES) revisions.msg		59,904			
Entity	140723 BPA-WS-0-0.pdf		214,280			

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Hardev S. Juj

Title:	VP, Planning and Asset Management
Email:	hsjuj@bpa.gov
Phone:	1 (360) 418-8981

Authorized Sig	gnature
----------------	---------

Date \_\_\_\_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2014014519 Standard/Requirement: PRC-017-0 R1. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 12/15/2014 for the violation of PRC-017-0 R1.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

If you have any questions or concerns, please contact Keshav Sarin at ksarin@wecc.biz.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

### Thank you, OATI

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[OATI Information - Email Template: MitPlan\_Completed]



# Attachment KK

# Record documents for the violation of PRC-011-0 R2 (WECC2015014564)

KK-1. BPA's Self-Report dated January 15, 2015;

KK-2. BPA's Mitigation Plan designated as WECCMIT011373-1 submitted August 11, 2015;

KK-3. BPA's Certification of Mitigation Completion dated August 20, 2015;

KK-4. WECC's Verification of Mitigation Completion dated August 19, 2015.

### Self Report

Entity Name: Bonneville Power Administration (BPA)

NERC ID: NCR05032 Standard: PRC-011-0 Requirement: PRC-011-0 R2. Date Submitted: January 15, 2015

Has this violation previously No been reported or discovered?:

# **Entity Information:**

Joint Registration Organization (JRO) ID:

Coordinated Functional Registration (CFR) ID:

> Contact Name: Jenifur Rancourt Contact Phone: 5032303672 Contact Email: jlrancourt@bpa.gov

# Violation:

Violation Start Date: May 31, 2014

End/Expected End Date: October 31, 2014

Region Initially Determined a Violation On:

Reliability Functions: Transmission Owner (TO)

Is Possible Violation still No occurring?:

Number of Instances: 1

Has this Possible Violation No been reported to other Regions?: Which Regions:

Date Reported to Regions:

Detailed Description and On May 1st, 2014, a change in the Sub Maintenance Preventative

Cause of Possible Violation: Maintenance Guide was implemented. This was done in response to a 2013 WECC audit that recommended BPA include the monthly substation battery and charger inspections, that are identified in the Battery interval basis, as part of the Protection System Maintenance and testing program documentation. During evidence collection for BPA annual self-certification process, a report on Operations monthly control battery inspections revealed 1 or more monthly inspections had been missed at 11 Sub Stations during the time period of May 1st, 2014-September 30th, 2014. The possible cause of the violation was due to field personnel's misinterpretation of internal requirements inspection frequency, as well as insufficient communication to field Operations staff on how the applicable internal requirements connected to BPAs compliance to NERC standards. The following is a list of the districts, stations impacted with equipment number, and the month or months the inspections were missed: Snohomish-Lopez Island (B02856)-September Sickler-East Omak (B03059)-May Kalispell-Garrison(B03042)-October The Dalles-Harvalum (B02293)-July, Aug The Dalles-Goldendale (B01904)- October The Dalles-Maupin (B02802)-August The Dalles-Rock Creek(B02853)-July Malin-Canby (B03332)-October Malin-Captain Jack (B02691)-September

# Self Report

Malin-Malin (B03043)-September Malin-Warner (B03342)-July Evaluation of October inspections is underway and produced some results of missed inspections. The final evaluation of October will be included with the submission of the mitigation plan.

# Mitigating Activities:

Description of Mitigating Further reporting capabilities are being refined to make monthly battery Activities and Preventative inspections by Operations staff visible to management on a weekly basis. The Measure: final production timeline of this report will also be included in the submission of the mitigation plan. Clarification of Operations Craft internal requirements and their connection to BPAs compliance to NERC standards has been disseminated to field Operations staff, their District Managers and Regional Managers on December

Date Mitigating Activities December 01, 2014 Completed:

1,2014.

# Impact and Risk Assessment:

Potential Impact to BPS: Minimal

Actual Impact to BPS: Minimal

Description of Potential and The potential impact to the BPS for not completing the a monthly control Actual Impact to BPS: battery inspection is a reduction in the ability of the owner to determine the condition of the battery and the battery may not perform as intended if the system experienced an event. There was no actual impact as the condition of the battery had no change due to the lapse of this inspection.

Risk Assessment of Impact to There was minimal risk of impacting the BPS due to the conservative BPS: frequency in which BPA applies this maintenance task which is over and above the upcoming NERC requirement being implemented on April 1st. No system events occurred at any point in this time frame that exposed the system to any potential vulnerability.

Additional Entity Comments:

Additional Comments						
From	From Comment User Name					
Entity BPA intends to submit a Mitigation Plan			Ruth Miller			
	Additional Documents					
From	Document Name	Description		Size in Bytes		
No Docume	ents					

# Mitigation Plan

# Mitigation Plan Summary

# Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
WECCMIT011373-	WECC2015014564	PRC-011-0 R2.	06/22/2015	2
1				
	Mitigation Plan Submitted	On: August 11, 2015		
Mitigation Plan Accepted On: August 19, 2015				
Mitigation	Plan Proposed Completion D	ate: August 15, 2015		
Actual Co	mpletion Date of Mitigation F	Plan: August 14, 2015		
Mitigation Pla				
Mitigation Plan C	ompletion Verified by WECC	On: August 19, 2015		
Mitig	ation Plan Completed? (Yes/	No): Yes		

### Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

### **Entity Information**

Identify your organization:

Entity Name: Bonneville Power Administration NERC Compliance Registry ID: NCR05032

> Address: 905 NE 11 Avenue Portland OR 97232

Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Jenifur Rancourt Title: FERC Compliance Officer Email: jlrancourt@bpa.gov Phone: 503-230-3672

# Violation(s)

This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement			
Requirement Description					
WECC2015014564	05/31/2014	PRC-011-0 R2.			
The Transmission Owner and Distribution Provider that owns a UVLS system shall provide documentation of its UVLS equipment maintenance and testing program and the implementation of that UVLS equipment maintenance					

and testing program to its Regional Reliability Organization and NERC on request (within 30 calendar days).

Brief summary including the cause of the violation(s) and mechanism in which it was identified:

During evidence collection for BPA annual self-certification process, a report on Operations monthly control battery inspections revealed 1 or more monthly inspections had been missed at 11 Sub Stations during the time period of May 1st, 2014-September 30th, 2014. The possible cause of the violation was due to field personnel's misinterpretation of internal requirements on inspection frequency, as well as insufficient communication to field Operations staff on how the applicable internal requirements connected to BPAs compliance to NERC standards.

Relevant information regarding the identification of the violation(s):

Evidence collection for self-certification process identified 1 or more missing inspections at 11 Sub Stations during the time period of May 1st, 2014-September 30th, 2014. Reporting was modified to include October, 2014 to show any missed inspections prior to the internal standard change by Sub Maintenance Tech Services in November, 2014. The change to the internal BPA standard aligns with the upcoming implementation of PRC-005 v2 and the timeline for battery inspections.

The following is a list of the districts, stations impacted with equipment number, and the month or months the inspections were missed prior to the internal standard change in November, 2014: Snohomish-Lopez Island (B02856)-September Sickler-East Omak (B03059)-May Kalispell-Dixon(B03042)-October The Dalles-Harvalum (B02293)-July, Aug The Dalles-Goldendale (B01904)- October The Dalles-Maupin (B02802)-August The Dalles-Rock Creek(B02853)-July Malin-Canby (B03332)-October Malin-Captain Jack (B02961)-September Malin-Malin (B03043)-September Malin-Warner (B03342)-July Redmond-Redmond (B03007)-July Redmond-Sand Springs Comp Station (B02595)-June, July All stations listed above are up to date on inspections at this time.

### Plan Details

Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

- 1. Submit final scope of final violation for May, 2014-October, 2014
- 2. Communicate intentions for new report development to Field Employees responsible for battery inspections
- 3. Finalize IT requirements to create reports for battery inspection visibility
- 3. Finalize and document enhancements to BPA's work standard
- 4. Put battery inspection reports into production
- 5. Communicate report implementation to Field Employees responsible for battery inspections
- 6. Submit any additional findings of standard violation
- 7. Close mitigation plan

Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: August 15, 2015

Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
2/15/15 Milestone	<ol> <li>Submit final scope of final violation for May, 2014-October, 2014</li> <li>Communicate intentions for new report development to Field Employees responsible for battery inspections</li> <li>Finalize IT requirements to create reports for battery inspection visibility</li> </ol>	02/15/2015	02/12/2015	BPA completed the following: 1. Submit final scope of final violation for May, 2014-October, 2014 2. Communicate intentions for new report development to Field Employees responsible for battery inspections 3. Finalize IT requirements to create reports for battery inspection visibility	No
5/15/15 Milestone	<ul> <li>3. Finalize and document enhancements to BPA's work standard</li> <li>4. Put battery inspection reports into production</li> <li>5. Communicate</li> </ul>	05/15/2015	05/15/2015	<ul> <li>3. BPA finalized and documented reporting internal controls</li> <li>4. BPA put battery inspection reports and internal controls into production</li> <li>5. BPA communicated</li> </ul>	No

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
	report implementation to Field Employees responsible for battery inspections			report implementation to Field Employees responsible for battery inspections	
8/15/15 Milestone	<ol> <li>Submit any additional findings of standard violation</li> <li>Close mitigation plan</li> </ol>	08/15/2015	08/14/2015	BPA is submitting n_Final scope for BPA owned battery violatons.pdf as part of the completion package to report additional batteries added to the scope of this violation ID as a result of the preceding milestone activities	No

Additional Relevant Information

P208

### **Reliability Risk**

### Reliability Risk

While the Mitigation Plan is being implemented, the reliability of the bulk Power System may remain at higher Risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

Due to the conservative approach that we have in place with regards to the Operators Battery Inspection task; BPA has eliminated any increased risks or impacts to the bulk Power System and will continue to do so as we implement the mitigation plan stated within this document.

### Prevention

Describe how successful completion of this plan will prevent or minimize the probability further violations of the same or similar reliability standards requirements will occur

Producing and monitoring the proposed reports will give management greater visibility into inspection schedules and progress. This should reduce the probability that maintenance intervals that are approaching their due date are not addressed and completed on time.

In order to ensure that BPA continues to have a complete and comprehensive battery maintenance program that considers system reliability, operability and safety while factoring in regulatory requirements; BPA will have a battery maintenance program that will meet and exceed future NERC reliability standard PRC-005-2.

Describe any action that may be taken or planned beyond that listed in the mitigation plan, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements

None

### Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

\* Submits the Mitigation Plan, as presented, to the regional entity for acceptance and approval by NERC, and

\* if applicable, certifies that the Mitigation Plan, as presented, was completed as specified.

Acknowledges:

- 1. I am qualified to sign this mitigation plan on behalf of my organization.
- 2. I have read and understand the obligations to comply with the mitigation plan requirements and ERO remedial action directives as well as ERO documents, including but not limited to, the NERC rules of procedure and the application NERC CMEP.
- 3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

### Authorized Individual

Name: Jeff Cook

Title: Vice President, Planning & Asset Management

Authorized On: August 11, 2015

# Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name:Bonneville Power AdministrationNERC Registry ID:NCR05032NERC Violation ID(s):WECC2015014564Mitigated Standard Requirement(s):PRC-011-0 R2.Scheduled Completion as per Accepted Mitigation Plan:August 15, 2015Date Mitigation Plan completed:August 14, 2015WECC Notified of Completion on Date:Entity Comment:See file within the completion package for batteries added to scope:

n\_Final scope for BPA owned battery violatons.pdf

Additional Documents				
From Document Name		Description	Size in Bytes	
Entity	150814 PRC-011 R2 P208 FINAL Completion Documentation.pdf	Final package for P208 completion	3,135,167	

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Jeff Cook

Title: Vice President, Planning & Asset Management

Email: jwcook@bpa.gov

Phone: (360) 418-8981

Authorized Signature

Date

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2015014564 Standard/Requirement: PRC-011-0 R2. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/13/2015 for the violation of PRC-011-0 R2.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

### Thank you, OATI

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[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment LL**

# Record documents for the violation of PRC-017-0 R2 (WECC2015014565)

LL-1. BPA's Self-Report dated January 15, 2015;

LL-2. BPA's Mitigation Plan designated as WECCMIT011734-1 submitted August 11, 2015;

LL-3. BPA's Certification of Mitigation Completion dated August 19, 2015;

LL-4. WECC's Verification of Mitigation Completion dated August 19, 2015.

### Self Report

Entity Name: Bonneville Power Administration (BPA)

```
NERC ID: NCR05032
Standard: PRC-017-0
Requirement: PRC-017-0 R2.
Date Submitted: January 15, 2015
```

Has this violation previously No been reported or discovered?:

# **Entity Information:**

Joint Registration Organization (JRO) ID:

Coordinated Functional Registration (CFR) ID:

> Contact Name: Jenifur Rancourt Contact Phone: 5032303672 Contact Email: jlrancourt@bpa.gov

# Violation:

Violation Start Date: May 31, 2014

End/Expected End Date: October 31, 2014

Region Initially Determined a Violation On:

Reliability Functions: Transmission Owner (TO)

Is Possible Violation still No occurring?:

Number of Instances: 1

Has this Possible Violation No been reported to other Regions?: Which Regions:

Date Reported to Regions:

Detailed Description and On May 1st, 2014, a change in the Sub Maintenance Preventative

Cause of Possible Violation: Maintenance Guide was implemented. This was done in response to a 2013 WECC audit that recommended BPA include the monthly substation battery and charger inspections, that are identified in the Battery interval basis, as part of the Protection System Maintenance and testing program documentation. During evidence collection for BPA annual self-certification process, a report on Operations monthly control battery inspections revealed 1 or more monthly inspections had been missed at 11 Sub Stations during the time period of May 1st. 2014-September 30th. 2014. The possible cause of the violation was due to field personnelââ,¬â,,¢ misinterpretation of internal requirements inspection frequency, as well as insufficient communication to field Operations staff on how the applicable internal requirements connected to BPAs compliance to NERC standards. The following is a list of the districts, stations impacted with equipment number, and the month or months the inspections were missed: Snohomish-Lopez Island (B02856)-September Sickler-East Omak (B03059)-May Kalispell-Garrison(B03042)-October The Dalles-Harvalum (B02293)-July, Aug The Dalles-Goldendale (B01904)- October The Dalles-Maupin (B02802)-August The Dalles-Rock Creek(B02853)-July Malin-Canby (B03332)-October Malin-Captain Jack (B02691)-September

# Self Report

Malin-Malin (B03043)-September Malin-Warner (B03342)-July Evaluation of October inspections is underway and produced some results of missed inspections. The final evaluation of October will be included with the submission of the mitigation plan.

# Mitigating Activities:

Description of Mitigating Further reporting capabilities are being refined to make monthly battery Activities and Preventative inspections by Operations staff visible to management on a weekly basis. The Measure: final production timeline of this report will also be included in the submission of the mitigation plan. Clarification of Operations Craft internal requirements and their connection to BPAs compliance to NERC standards has been disseminated to field Operations staff, their District Managers and Regional Managers on December

Date Mitigating Activities December 01, 2014 Completed:

1,2014.

# Impact and Risk Assessment:

Potential Impact to BPS: Minimal

Actual Impact to BPS: Minimal

Description of Potential and The potential impact to the BPS for not completing the a monthly control Actual Impact to BPS: battery inspection is a reduction in the ability of the owner to determine the condition of the battery and the battery may not perform as intended if the system experienced an event. There was no actual impact as the condition of the battery had no change due to the lapse of this inspection.

Risk Assessment of Impact to There was minimal risk of impacting the BPS due to the conservative BPS: frequency in which BPA applies this maintenance task which is over and above the upcoming NERC requirement being implemented on April 1st. No system events occurred at any point in this time frame that exposed the system to any potential vulnerability.

Additional Entity Comments:

Additional Comments					
From	From Comment User Name			er Name	
Entity BPA intends to submit a Mitigation Plan			Ruth Miller		
Additional Documents					
From	Document Name	Description		Size in Bytes	
No Documents					

# Mitigation Plan

# Mitigation Plan Summary

# Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version		
WECCMIT011374-	WECC2015014565	PRC-017-0 R2.	06/22/2015	2		
1						
Mitigation Plan Submitted On: August 11, 2015						
Mitigation Plan Accepted On: August 19, 2015						
Mitigation Plan Proposed Completion Date: August 15, 2015						
Actual Completion Date of Mitigation Plan: August 14, 2015						
Mitigation Plan Certified Complete by BPA On: August 14, 2015						
Mitigation Plan Completion Verified by WECC On: August 19, 2015						
Mitigation Plan Completed? (Yes/No): Yes						

### Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

### **Entity Information**

Identify your organization:

Entity Name: Bonneville Power Administration NERC Compliance Registry ID: NCR05032

> Address: 905 NE 11 Avenue Portland OR 97232

Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Jenifur Rancourt Title: FERC Compliance Officer Email: jlrancourt@bpa.gov Phone: 503-230-3672

# Violation(s)

This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement			
Requirement Description					
WECC2015014565	05/31/2014	PRC-017-0 R2.			
The Transmission Owner, Concreter Owner, and Distribution Provider that owner an SPS shall provide documentation					

The Transmission Owner, Generator Owner, and Distribution Provider that owns an SPS shall provide documentation of the program and its implementation to the appropriate Regional Reliability Organizations and NERC on request (within 30 calendar days).

Brief summary including the cause of the violation(s) and mechanism in which it was identified:

During evidence collection for BPA annual self-certification process, a report on Operations monthly control battery inspections revealed 1 or more monthly inspections had been missed at 11 Sub Stations during the time period of May 1st, 2014-September 30th, 2014. The possible cause of the violation was due to field personnel's misinterpretation of internal requirements on inspection frequency, as well as insufficient communication to field Operations staff on how the applicable internal requirements connected to BPAs compliance to NERC standards.

Relevant information regarding the identification of the violation(s):

Evidence collection for self-certification process identified 1 or more missing inspections at 11 Sub Stations during the time period of May 1st, 2014-September 30th, 2014. Reporting was modified to include October, 2014 to show any missed inspections prior to the internal standard change by Sub Maintenance Tech Services in November, 2014. The change to the internal BPA standard aligns with the upcoming implementation of PRC-005 v2 and the timeline for battery inspections.

The following is a list of the districts, stations impacted with equipment number, and the month or months the inspections were missed prior to the internal standard change in November, 2014: Snohomish-Lopez Island (B02856)-September Sickler-East Omak (B03059)-May Kalispell-Dixon(B03042)-October The Dalles-Harvalum (B02293)-July, Aug The Dalles-Goldendale (B01904)- October The Dalles-Maupin (B02802)-August The Dalles-Rock Creek(B02853)-July Malin-Canby (B03332)-October Malin-Captain Jack (B02961)-September Malin-Malin (B03043)-September Malin-Warner (B03342)-July Redmond-Redmond (B03007)-July Redmond-Sand Springs Comp Station (B02595)-June, July All stations listed above are up to date on inspections at this time.

### Plan Details

Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

- 1. Submit final scope of final violation for May, 2014-October, 2014
- 2. Communicate intentions for new report development to Field Employees responsible for battery inspections
- 3. Finalize IT requirements to create reports for battery inspection visibility
- 3. Finalize and document enhancements to BPA's work standard
- 4. Put battery inspection reports into production
- 5. Communicate report implementation to Field Employees responsible for battery inspections
- 6. Submit any additional findings of standard violation
- 7. Close mitigation plan

Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: August 15, 2015

Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
2/15/15 Milestone	<ol> <li>Submit final scope of final violation for May, 2014-October, 2014</li> <li>Communicate intentions for new report development to Field Employees responsible for battery inspections</li> <li>Finalize IT requirements to create reports for battery inspection visibility</li> </ol>	02/15/2015	02/12/2015	BPA completed the following: 1.Submit final scope of final violation for May, 2014-October, 2014 2. Communicate intentions for new report development to Field Employees responsible for battery inspections 3. Finalize IT requirements to create reports for battery inspection visibility	No
5/15/15 Milestone	<ol> <li>Finalize and document</li> <li>enhancements to</li> <li>BPA's work standard</li> <li>Put battery</li> <li>inspection reports</li> <li>into production</li> <li>Communicate</li> </ol>	05/15/2015	05/15/2015	<ol> <li>BPA finalized and documented reporting internal controls</li> <li>BPA put battery inspection reports and internal controls into production</li> <li>BPA communicated</li> </ol>	No

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
	report implementation to Field Employees responsible for battery inspections			report implementation to Field Employees responsible for battery inspections	
8/15/15 Milestone	<ol> <li>Submit any additional findings of standard violation</li> <li>Close mitigation plan</li> </ol>	08/15/2015	08/14/2015	See file n_Final scope for BPA owned battery violatons.pdf within the completion package for batteries added to scope as a result of the preceding milestone activities	No

Additional Relevant Information

P199

### **Reliability Risk**

### Reliability Risk

While the Mitigation Plan is being implemented, the reliability of the bulk Power System may remain at higher Risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

Due to the conservative approach that we have in place with regards to the Operators Battery Inspection task; BPA has eliminated any increased risks or impacts to the bulk Power System and will continue to do so as we implement the mitigation plan stated within this document.

### Prevention

Describe how successful completion of this plan will prevent or minimize the probability further violations of the same or similar reliability standards requirements will occur

Producing and monitoring the proposed reports will give management greater visibility into inspection schedules and progress. This should reduce the probability that maintenance intervals that are approaching their due date are not addressed and completed on time.

In order to ensure that BPA continues to have a complete and comprehensive battery maintenance program that considers system reliability, operability and safety while factoring in regulatory requirements; BPA will have a battery maintenance program that will meet and exceed future NERC reliability standard PRC-005-2.

Describe any action that may be taken or planned beyond that listed in the mitigation plan, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements

None

### Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

\* Submits the Mitigation Plan, as presented, to the regional entity for acceptance and approval by NERC, and

\* if applicable, certifies that the Mitigation Plan, as presented, was completed as specified.

Acknowledges:

- 1. I am qualified to sign this mitigation plan on behalf of my organization.
- 2. I have read and understand the obligations to comply with the mitigation plan requirements and ERO remedial action directives as well as ERO documents, including but not limited to, the NERC rules of procedure and the application NERC CMEP.
- 3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

### Authorized Individual

Name: Jeff Cook

Title: Vice President, Planning & Asset Management

Authorized On: August 11, 2015

# Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name:	Bonneville Power Administration
NERC Registry ID:	NCR05032
NERC Violation ID(s):	WECC2015014565
Mitigated Standard Requirement(s):	PRC-017-0 R2.
Scheduled Completion as per Accepted Mitigation Plan:	August 15, 2015
Date Mitigation Plan completed:	August 14, 2015
WECC Notified of Completion on Date:	August 14, 2015
Entity Comment:	See document n_Final scope for BPA owned battery violatons.pdf for batteries added to scope as a result of the preceding milestone activities

Additional Documents					
From	Document Name	Description	Size in Bytes		
Entity	150814 PRC-017 R2 P209 FINAL Completion Documentation.pdf	BPA completion package with attachments to close P209	3,134,794		

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Jeff Cook

Title: Vice President, Planning & Asset Management

Email: jwcook@bpa.gov

Phone: (360) 418-8981

Authorized Signature

Date

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2015014565 Standard/Requirement: PRC-017-0 R2. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/13/2015 for the violation of PRC-017-0 R2.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

### Thank you, OATI

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[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment MM**

# Record documents for the violation of MOD-001-1a R3 (WECC2015014911)

MM-1. BPA's Self-Report dated May 6, 2015;

MM-2. BPA's Mitigation Plan designated as WECCMIT011637 submitted September 22, 2015;

MM-3. BPA's Certification of Mitigation Completion dated October 13, 2015;

MM-4. WECC's Verification of Mitigation Completion dated October 8, 2015.

### Self Report

Entity Name: Bonneville Power Administration (BPA)

NERC ID: NCR05032 Standard: MOD-001-1a

Requirement: MOD-001-1a R3.

Date Submitted: May 06, 2015 Has this violation previously No

been reported or discovered?:

# **Entity Information:**

Joint Registration Organization (JRO) ID:

Coordinated Functional Registration (CFR) ID:

Contact Name: Jenifur Rancourt Contact Phone: 5032303672 Contact Email: jlrancourt@bpa.gov

# Violation:

Violation Start Date: April 01, 2011

End/Expected End Date:

Region Initially Determined a Violation On:

Reliability Functions: Transmission Service Provider (TSP)

Is Possible Violation still Yes occurring?: Number of Instances: 1

Has this Possible Violation No been reported to other Regions?: Which Regions:

Date Reported to Regions:

Detailed Description and During the period from 01/10/2015 to 04/10/2015, BPA conducted a thorough Cause of Possible Violation: review of its ATCID (version 33, dated 12/05/2014). This review process identified some areas where the ATCID has not been kept current as MOD-001 R3 requires. There were six specific items, detailed below, discovered

001 R3 requires. There were six specific items, detailed below, discovered and are the reason for this self-report.

Item #1 - OB-19 retirement Lines 216-219 were the following.

"Attachment B, "Significant Equipment List," in Significant Equipment Operating Bulletin No. 19 (OB 19) (Appendix B of this ATCID) lists the significant Transmission Facilities to which the NWPP outage planning process applies and which BPA considers in its daily and hourly TTC and TFC calculations."

The language did not reflect the retirement of Significant Equipment Operating Bulletin No. 19 (OB 19) document which is also Appendix B of the ATCID.

Item #2 - Facility Changes Lines 371-373 were the following.

"If Facility changes are made by BPA or another entity, then the base cases will not reflect these changes until the seasonal operating study reflecting these changes is completed by BPA and any required approval is obtained."
This language did not reflect BPA's current business practice of including Mid-Season updates to the seasonal base case.

Item #3 - LaGrande TTCs Lines 437-442 & 462-463 were the following.

"With the exception of the LaGrande Path, BPA does not have any ATC Paths whose Ratings were established, known, and used in operation since January 1, 1994, and no action has been taken to have the Path rated using a different method. For the LaGrande Path, BPA uses the Association from the Accepted Rating of Existing Path 14, Idaho to Northwest for the IPCO-BPA interconnection, included in the WECC Path Rating Catalog. BPA refers to the IPCO-BPA interconnection as LaGrande."

"For La Grande, Idaho Power Company determines TTC."

This language did not reflect BPA's current practice of setting the LaGrande TTC according to a contractual value allowed for under MOD-029 R2.6. BPA cannot use MOD-029 R2.7 as the basis for a TTC for LaGrande as this WECC path limit was revisited in 2010. Also, IPCO does not determine the TTC for LaGrande; it is set by the contractual value.

Item #4 - Montana Intertie TTCs Lines 416-417 & 463-464 were the following.

"The Montana Intertie Path is limited by the Colstrip Project contract. NorthWestern Energy is the Transmission Operator and sets the TTC for this ATC Path."

"For Montana Intertie, NorthWestern Energy sets the TTC."

This language did not reflect BPA's current practice of setting the Montana Intertie TTC according to a contractual value allowed for under MOD-029 R2.6. NorthWestern Energy does not determine the TTC for the Montana Intertie; it is set by the contractual value.

Item #5 - Allocation Agreements Appendix A, "Lists of Contracts and Specific Paths with Shared Ownership" did not include the allocation agreements BPA uses to set TTCs for LaGrande and Montana Intertie paths.

Item #6 - Transformers for PTDF Calculations Lines 1033-1035 were the following.

"Transmission outages for Transmission Lines, sections of Transmission Lines, and taps are used to set branches as open in the appropriate base case for the hour being calculated."

The language did not reflect BPA's current practice of also using transformers to set branches open for hourly PTDF calculations.

#### Mitigating Activities:

Description of Mitigating BPA will be updating its ATCID that will accurately reflect current practices for Activities and Preventative the above items. BPA intends to submit a mitigation plan within 30 days from Measure: self-report submission.

Date Mitigating Activities Completed:

### Impact and Risk Assessment:

Potential Impact to BPS:	Minimal
Actual Impact to BPS:	Minimal
Description of Potential and Actual Impact to BPS:	None of the items given above posed a reliability risk to the system. The items were a documentation issue where BPA did not update its ATCID to reflect its current practices.
Risk Assessment of Impact to BPS:	None of the items given above posed a reliability risk to the system. The items were a documentation issue where BPA did not update its ATCID to reflect its current practices.

Additional Entity Comments: None.

	Additional Comments	
From	Comment	User Name
No Comme	nts	
	Additional Documents	

From	Document Name	Description	Size in Bytes
No Docume	ents		

### Mitigation Plan

#### Mitigation Plan Summary

#### Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version	
WECCMIT011637	WECC2015014911	MOD-001-1a R3.	08/10/2015	1	
	Mitigation Plan Submitted	On: June 10, 2015			
Mitigation Plan Accepted On: September 18, 2015					
Mitigation Plan Proposed Completion Date: June 01, 2015					
Actual Completion Date of Mitigation Plan:					
Mitigation Plan Certified Complete by BPA On: June 10, 2015					
Mitigation Plan Completion Verified by WECC On:					
Mitigation Plan Completed? (Yes/No): No					

#### Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

#### **Entity Information**

Identify your organization:

Entity Name: Bonneville Power Administration NERC Compliance Registry ID: NCR05032

> Address: 905 NE 11 Avenue Portland OR 97232

Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Jenifur Rancourt Title: FERC Compliance Manager Email: jlrancourt@bpa.gov Phone: 503-230-3672

#### Violation(s)

This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement	
	Requirement Description		
WECC2015014911 04/01/2011 MOD-001-1a R3.			
Each Transmission Service Provider shall prepare and keep current an Available Transfer Capability Implementation			

Document (ATCID) that includes, at a minimum, the following information: [Time Horizon: Operations Planning]

Brief summary including the cause of the violation(s) and mechanism in which it was identified:

During the period from 01/10/2015 to 04/10/2015, BPA conducted a thorough review of its ATCID (version 33, dated 12/05/2014). The review process identified some areas where the ATCID has not been kept current as MOD-001 R3 requires.

Relevant information regarding the identification of the violation(s):

Six specific items were discovered:

Item #1 – OB-19 retirement Lines 216-219 were the following.

"Attachment B, "Significant Equipment List," in Significant Equipment Operating Bulletin No. 19 (OB 19) (Appendix B of this ATCID) lists the significant Transmission Facilities to which the NWPP outage planning process applies and which BPA considers in its daily and hourly TTC and TFC calculations."

The language did not reflect the retirement of Significant Equipment Operating Bulletin No. 19 (OB 19) document which is also Appendix B of the ATCID.

Item #2 – Facility Changes Lines 371-373 were the following.

"If Facility changes are made by BPA or another entity, then the base cases will not reflect these changes until the seasonal operating study reflecting these changes is completed by BPA and any required approval is obtained."

This language did not reflect BPA's current business practice of including Mid-Season updates to the seasonal base case.

Item #3 – LaGrande TTCs Lines 437-442 & 462-463 were the following.

"With the exception of the LaGrande Path, BPA does not have any ATC Paths whose Ratings were established, known, and used in operation since January 1, 1994, and no action has been taken to have the Path rated using a different method. For the LaGrande Path, BPA uses the Association from the Accepted Rating of Existing Path 14, Idaho to Northwest for the IPCO–BPA interconnection, included in the WECC Path Rating Catalog. BPA refers to the IPCO-BPA interconnection as LaGrande."

"For La Grande, Idaho Power Company determines TTC."

This language did not reflect BPA's current practice of setting the LaGrande TTC according to a contractual value allowed for under MOD-029 R2.6. BPA cannot use MOD-029 R2.7 as the basis for a TTC for LaGrande as this WECC path limit was revisited in 2010. Also, IPCO does not determine the TTC for LaGrande; it is set by the contractual value.

Item #4 – Montana Intertie TTCs Lines 416-417 & 463-464 were the following. "The Montana Intertie Path is limited by the Colstrip Project contract. NorthWestern Energy is the Transmission Operator and sets the TTC for this ATC Path."

"For Montana Intertie, NorthWestern Energy sets the TTC."

This language did not reflect BPA's current practice of setting the Montana Intertie TTC according to a contractual value allowed for under MOD-029 R2.6. NorthWestern Energy does not determine the TTC for the Montana Intertie; it is set by the contractual value.

Item #5 – Allocation Agreements Appendix A, "Lists of Contracts and Specific Paths with Shared Ownership" did not include the allocation agreements BPA uses to set TTCs for LaGrande and Montana Intertie paths.

Item #6 – Transformers for PTDF Calculations Lines 1033-1035 were the following.

"Transmission outages for Transmission Lines, sections of Transmission Lines, and taps are used to set branches as open in the appropriate base case for the hour being calculated."

The language did not reflect BPA's current practice of also using transformers to set branches open for hourly PTDF calculations.

#### Plan Details

Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

Update the ATCID to accurately reflect current BPA practice.

Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: June 01, 2015

Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
Update the ATCID to accurately reflect current BPA practice	Update the ATCID to accurately reflect current BPA practice.	06/01/2015	06/01/2015	The following updates to BPA's ATCID were made to satisfy this mitigation plan. Item #1 – OB-19 retirement Previous Version - P. 9, lines 179-238 / New Version - P. 7, Lines 138-140: Added "and Criteria for TTC and TFC Calculations"	No

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
				to section title and deleted "Timeline" from title. Deleted all content in section except "Outage planned and the policy are posted to the Outage Plans website."	
				Appendix B: Deleted – Significant Equipment Operating Bulletin 19.	
				Item #2 – Facility Changes Previous Version - P.17, lines 371-373 / New Version - P.12, lines 263-264: Changed language to reflect current practices for Facility Rating changes.	
				Previous Version - P. 19 lines 460-484 / New Version – P. 14, lines 337-340: Updated language on TTC ratings.	
				Item #3 – LaGrande TTCs Previous Version - P. 18, lines 437-442 / New Version - P. 13, lines 318-319: Deleted language related to path ratings and reference to LaGrande Path.	
				Previous Version - P. 19, lines 462-463 / New Version - P. 14, lines 337-340: Deleted reference to LaGrande Path.	
				Item #4 – Montana Intertie	

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
				TTCs Previous Version - P. 18, lines 416-417 / New Version - P. 13, lines N/A: Deleted language related to Montanan Intertie Path limitation by Colstrip Project and NorthWestern Energy is the TO and set TTC for this ATC Path.	
				<ul> <li>Previous Version - P. 19,</li> <li>lines 463-464 / New Version</li> <li>P. 14, lines 337-340:</li> <li>Deleted reference to</li> <li>Montana Intertie Path.</li> </ul>	
				Item #5 – Allocation Agreements Appendix A: Updated chart listing contracts and specific paths with shared ownership, specifically Montana-NW/West of Garrison and added Montana Intertie and La Grande.	
				Item #6 – Transformers for PTDF Calculations Previous Version - P. 40, lines 1032-1035 / New Version – P. 34, lines 862- 865: Updated language for accuracy regarding the use of transformer outages in PTDF calculations.	

Additional Relevant Information BPA Mitigation Plan #P210

#### **Reliability Risk**

#### Reliability Risk

While the Mitigation Plan is being implemented, the reliability of the bulk Power System may remain at higher Risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

None of the items given above posed a reliability risk to the system. The items were a documentation issue where BPA did not update its ATCID to reflect its current practices.

#### Prevention

Describe how successful completion of this plan will prevent or minimize the probability further violations of the same or similar reliability standards requirements will occur

BPA has designated a single point of contract for managing its ATCID. This position has been incorporated into the communication processes for changes to BPA Transmission business practices, processes, and procedures. This control should prevent future instances of the BPA ATCID not reflecting BPA's current business structure. This control was put into place prior to the self-reporting of this violation. This mitigation plan is to address discrepancies that occurred prior to the initiation of this control.

Describe any action that may be taken or planned beyond that listed in the mitigation plan, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements

None.

#### Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

\* Submits the Mitigation Plan, as presented, to the regional entity for acceptance and approval by NERC, and

\* if applicable, certifies that the Mitigation Plan, as presented, was completed as specified.

Acknowledges:

- 1. I am qualified to sign this mitigation plan on behalf of my organization.
- 2. I have read and understand the obligations to comply with the mitigation plan requirements and ERO remedial action directives as well as ERO documents, including but not limited to, the NERC rules of procedure and the application NERC CMEP.
- 3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

#### Authorized Individual

Name: Jeff Cook

Title: Acting Vice President of Transmission Planning and Asset Managem

Authorized On: June 09, 2015

#### Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name:	Bonneville Power Administration
NERC Registry ID:	NCR05032
NERC Violation ID(s):	WECC2015014911
Mitigated Standard Requirement(s):	MOD-001-1a R3.
Scheduled Completion as per Accepted Mitigation Plan:	June 01, 2015
Date Mitigation Plan completed:	June 01, 2015
WECC Notified of Completion on Date:	June 10, 2015
Entity Comment:	The following updates to BPA's ATCID were made to satisfy this mitigation plan.
	Item #1 – OB-19 retirement Previous Version - P. 9, lines 179-238 / New Version - P. 7, Lines 138-140: Added "and Criteria for TTC and TFC Calculations" to section title and deleted "Timeline" from title. Deleted all content in section except "Outage planned and the policy are posted to the Outage Plans website."
	Appendix B: Deleted – Significant Equipment Operating Bulletin 19.
	Item #2 – Facility Changes Previous Version - P.17, lines 371-373 / New Version - P.12, lines 263-264: Changed language to reflect current practices for Facility Rating changes.
	Previous Version - P. 19 lines 460-484 / New Version – P. 14, lines 337-340: Updated language on TTC ratings.
	Item #3 – LaGrande TTCs Previous Version - P. 18, lines 437-442 / New Version - P. 13, lines 318-319: Deleted language related to path ratings and reference to LaGrande Path.
	Previous Version - P. 19, lines 462-463 / New Version - P. 14, lines 337-340: Deleted reference to LaGrande Path.
	Item #4 – Montana Intertie TTCs Previous Version - P. 18, lines 416-417 / New Version - P. 13, lines N/A: Deleted language related to Montanan Intertie Path

limitation by Colstrip Project and NorthWestern Energy is the TO and set TTC for this ATC Path.

Previous Version - P. 19, lines 463-464 / New Version - P. 14, lines 337-340: Deleted reference to Montana Intertie Path.

Item #5 – Allocation Agreements

Appendix A: Updated chart listing contracts and specific paths with shared ownership, specifically Montana-NW/West of Garrison and added Montana Intertie and La Grande.

Item #6 – Transformers for PTDF Calculations Previous Version - P. 40, lines 1032-1035 / New Version – P. 34, lines 862-865: Updated language for accuracy regarding the use of transformer outages in PTDF calculations.

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	150609_P210_MOD-001- 1a_R3_Signed Cert of Mit Plan Completion.pdf		3,597,073

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Jeff Cook

Title: Acting Vice President, Planning & Asset Management

Email: jwcook@bpa.gov

Phone: (360) 418-8981

#### Authorized Signature

Date \_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2015014911 Standard/Requirement: MOD-001-1a R3. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 06/09/2015 for the violation of MOD-001-1a R3.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

#### Thank you, OATI

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[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment NN**

# Record documents for the violation of TOP-002-2.1b R11 (WECC2015015074)

NN-1. BPA's Self-Report dated July 10, 2015;

NN-2. BPA's Mitigation Plan designated as WECCMIT011731 submitted August 28, 2015;

NN-3. BPA's Certification of Mitigation Completion dated September 25, 2015;

**NN-4. WECC's Verification of Mitigation Completion dated September 25, 2015** 

Entity Name: Bonneville Power Administration (BPA)

NERC ID: NCR05032 Standard: TOP-002-2.1b Requirement: TOP-002-2.1b R11. Date Submitted: July 10, 2015

Has this violation previously No been reported or discovered?:

#### **Entity Information:**

Joint Registration Organization (JRO) ID:

Coordinated Functional Registration (CFR) ID:

Contact Name: Jenifur Rancourt Contact Phone: 5032303672 Contact Email: jlrancourt@bpa.gov

#### Violation:

Violation Start Date: August 18, 2014

End/Expected End Date: August 18, 2014

Region Initially Determined a Violation On:

Reliability Functions: Transmission Operator (TOP)

Is Possible Violation still No occurring?:

Number of Instances: 1

Has this Possible Violation No been reported to other Regions?: Which Regions:

Date Reported to Regions:

Detailed Description and On May 6, 2015, while performing analysis on historic South of Allston (SOA) Cause of Possible Violation: curtailment events for the I-5 Reinforcement Project, BPA discovered that on August 18, 2014, BPA should have had SOA generation drop armed but did not due to incorrect information on the Study Limits Information Memo (SLIM) which is the document that instructs BPA Dispatch on what System Operating Limits (SOLs) and Remedial Action Schemes (RAS) settings to use for a particular path.

On July 30, 2014 SLIM SOA\_30JUL14\_338 was issued for outages effective August 18-22, 2014. Studies are performed approximately two weeks ahead of the outage week and are based upon conservative assumptions. This SLIM was valid and contained accurate SOLs and RAS arming thresholds.

On August 18, 2014, the SOA transmission path experienced high flows. Based upon then-current system conditions, BPA revised the SOA SOL and issued a new SLIM SOA\_18AUG14\_343 which resulted in a somewhat higher SOL. This SLIM was incorrectly written such that it appeared no RAS was required, when in fact it was. The nature of the incorrect writing was a misunderstanding on the part of the study engineer of the meaning of a standard notation normally used in the section on RAS arming to indicate that RAS is not needed. Dispatch disarmed the RAS and set the new SOL based on this SLIM. BPA operated the SOA path on August 18, 2014 with flows in excess of the path's reliable operating limit.

BPA has identified the following standards as being subject to potential violation:

STANDARD REQUIREMENT REASON

TOP-002-2 R11 Proper RAS Arming levels were not made available to the Transmission Operator.

TOP-004-2 R1 While operating under the Study Limit Information Memo (SLIM #343), BPA was not operating under the established System Operating Limits (SOLs).

TOP-004-2 R4 While operating under the Study Limit Information Memo (SLIM #343), BPA was operating in an unknown operating state.

#### TOP-008-1 R1

While operating under the Study Limit Information Memo (SLIM #343) BPA contributed to an SOL violation on the South of Alston (SOA) path (71) for duration of 10 hours, 7 minutes, 12 seconds. Because BPA did not know it was operating to an incorrect SLIM, BPA did not take immediate steps to relieve the condition which may have included shedding firm load

#### TOP-008-1 R2

While operating under the Study Limit Information Memo (SLIM #343), BPA operated to create an SOL violation for a duration of 10 hours, 7 minutes, 12 seconds. Because BPA did not know it was operating to an incorrect SLIM, BPA did not operate to prevent the likelihood that a disturbance action or inaction would result in an IROL or SOL violation.

#### TOP-008-1 R4

At the time of the event, BPA's Real Time Contingency Analysis (RTCA) tool was not identifying where generation drop was not armed and was operating as if generation drop was always armed. Therefore, BPA did not have sufficient information or analysis tools to determine if an SOL violation was occurring and as a result, BPA had no real-time analysis to immediately mitigate the SOL violation.

#### Mitigating Activities:

Description of Mitigating In November 2014, BPA began monitoring during normal business hours Activities and Preventative Monday through Friday excluding holidays, Real time Contingency Analysis Measure: which has the actual RAS arming status as an input.

After discovery of this incorrectly written SLIM, study engineers were educated regarding this mistake in choice of wording, and BPA's SLIM User Guides and the SLIM electronic templates are being updated to clearly define the use of the fields filled in by study engineers.

Have Mitigating Activities No been Completed?

Date Mitigating Activities Completed:

#### Impact and Risk Assessment:

Potential Impact to BPS: Moderate

Actual Impact to BPS: Minimal

Description of Potential and Based upon after-the-fact analysis of the actual system conditions, BPA Actual Impact to BPS: determined that the potential impact of the N-1 contingency of the Keeler-Allston or Pearl-Keeler 500 kV lines would have resulted in thermal overloads on PGE's system. The highest loading found in the analysis was on PGE's Trojan-Rivergate 230 kV line (123% of its emergency rating). There were no other overloads above 11% of their emergency rating.

Actual Impact: Neither of the contingencies above occurred.

Risk Assessment of Impact to Risk = Impact\* Probability BPS: At the time: Potential Impact = Moderate Probability = minimal because Keeler-Allston and Pearl-Keeler 500 kV lines do not have a history of frequent trips

Additional Entity Comments:

	Additional Comments	
From	Comment	User Name
No Comme	nts	

		Additional Documents	
From	Document Name	Description	Size in Bytes
No Docume	nts		

## Mitigation Plan

#### Mitigation Plan Summary

#### Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
WECCMIT011731	WECC2015015074	TOP-002-2.1b R11.	09/15/2015	1
	Mitigation Plan Submitted	On: August 28, 2015		
Mitigation	Plan Proposed Completion D	Date: August 03, 2015		
Actual Co	ompletion Date of Mitigation F	Plan: August 03, 2015		
Mitigation Pla	n Certified Complete by BPA	On: August 28, 2015		
Mitigation Plan C	ompletion Verified by WECC	On: September 18, 2015		
Mitig	ation Plan Completed? (Yes/	No): Yes		

#### Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

#### **Entity Information**

Identify your organization:

Entity Name: Bonneville Power Administration NERC Compliance Registry ID: NCR05032

> Address: 905 NE 11 Avenue Portland OR 97232

Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Jenifur Rancourt Title: Supvry Public Utilities Specialist Email: jlrancourt@bpa.gov Phone: 503-230-3672

#### Violation(s)

This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement			
Requirement Description					
WECC2015015074	08/18/2014	TOP-002-2.1b R11.			
The Transmission Operator shall perform seasonal, next-day, and current-day Bulk Electric System studies to determine SOLs. Neighboring Transmission Operators shall utilize identical SOLs for common facilities. The Transmission Operator shall update these Bulk Electric System studies as necessary to reflect current system					
conditions; and shall make the results of Bulk Electric System studies available to the Transmission Operators, Balancing Authorities (subject to confidentiality requirements), and to its Reliability Coordinator					

Brief summary including the cause of the violation(s) and mechanism in which it was identified:

On May 6, 2015, while performing analysis on historic South of Allston (SOA), WECC Path 75, curtailment events for the I-5 Reinforcement Project, BPA discovered that on August 18, 2014, BPA should have had SOA generation drop scheme armed but did not due to incorrect information on the Study Limits Information Memo (SLIM). The SLIM is the document that instructs BPA Dispatch on what System Operating Limits (SOLs) and Remedial Action Schemes (RAS) settings to use for a particular path for studied outage conditions.

Relevant information regarding the identification of the violation(s):

P214, P215, P216, P217, P218, P219

#### Plan Details

Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

Revise the "BPA NI-5 Team SLIM User Guide" to clearly define the use of the fields completed by the study engineers on the SLIM document.

Revise the electronic NI-5 SLIM templates to require specific action when "No Gen Drop" is needed for the path SOL.

Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: August 03, 2015

Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
Revise SLIM Templates	Revise SLIM templates to require specific action when "No Gen Drop" is needed for the path SOL including some automated population of those fields.	08/03/2015	08/03/2015	Revised the SLIM templates to require specific action when "No Gen Drop" is needed for the path SOL including some automated population of those fields.	No
Revise the "BPA NI-5 Team SLIM User Guide"	Revise the "BPA NI-5 Team SLIM User Guide" to clearly define and provide examples of the proper use of each field when "No Gen Drop" is used.	08/03/2015	07/17/2015	Revised the "BPA NI-5 Team SLIM User Guide" to clearly define and provide examples of the proper use of each field when "No Gen Drop" is used.	No

Additional Relevant Information

#### **Reliability Risk**

#### Reliability Risk

While the Mitigation Plan is being implemented, the reliability of the bulk Power System may remain at higher Risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

No known risks/impacts

#### Prevention

Describe how successful completion of this plan will prevent or minimize the probability further violations of the same or similar reliability standards requirements will occur

Updating the User guides to clearly define each SLIM field will provide a complete and clear reference for the Study Engineer to use when creating SLIMs. Updating SLIM templates to require specific action when "No Gen Drop" is used including the automated population of some fields which standardizes notations. These revisions will reduce the likelihood that incorrect information is entered in the SLIM.

Describe any action that may be taken or planned beyond that listed in the mitigation plan, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements

#### Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

\* Submits the Mitigation Plan, as presented, to the regional entity for acceptance and approval by NERC, and

\* if applicable, certifies that the Mitigation Plan, as presented, was completed as specified.

Acknowledges:

- 1. I am qualified to sign this mitigation plan on behalf of my organization.
- 2. I have read and understand the obligations to comply with the mitigation plan requirements and ERO remedial action directives as well as ERO documents, including but not limited to, the NERC rules of procedure and the application NERC CMEP.
- 3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

#### Authorized Individual

Name: Jeffrey Cook

Title: VP Transmission Planning and Asset Management

Authorized On: August 25, 2015

#### Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name: Bonneville Power Administration NERC Registry ID: NCR05032 NERC Violation ID(s): WECC2015015074 Mitigated Standard Requirement(s): TOP-002-2.1b R11. Scheduled Completion as per Accepted Mitigation Plan: August 03, 2015 Date Mitigation Plan completed: August 03, 2015 WECC Notified of Completion on Date: August 28, 2015

Entity Comment: Evidence is attached within the uploaded signed completion certificate

Additional Documents				
From	Document Name	Description	Size in Bytes	
Entity	150827 Signed Mitigation Plan form TOP-002-2 R11_P214.pdf		1,023,756	
Entity	150827 Signed Mitigation Plan Completion form TOP-002-2 R11_214.pdf		2,252,217	

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Jeffrey Cook

Title: VP Transmission Planning and Asset Management

Email: jwcook@bpa.gov

Phone: (360) 418-8981

Authorized Signature

Date \_

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2015015074 Standard/Requirement: TOP-002-2.1b R11. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/27/2015 for the violation of TOP-002-2.1b R11.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

#### Thank you, OATI

CONFIDENTIAL INFORMATION: This email and any attachment(s) contain confidential and/or proprietary information of Open Access Technology International, Inc. Do not copy or distribute without the prior written consent of OATI. If you are not a named recipient to the message, please notify the sender immediately and do not retain the message in any form, printed or electronic.

[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment OO**

# Record documents for the violation of TOP-004-2 R1 (WECC2015015075)

**OO-1. BPA's Self-Report dated July 10,** 2015;

OO-2. BPA's Mitigation Plan designated as WECCMIT011733 submitted August 28, 2015;

**OO-3. BPA's Certification of Mitigation Completion dated September 25, 2015;** 

**OO-4. WECC's Verification of Mitigation Completion dated September 25, 2015** 

Entity Name: Bonneville Power Administration (BPA)

```
NERC ID: NCR05032
Standard: TOP-004-2
Requirement: TOP-004-2 R1.
Date Submitted: July 10, 2015
```

Has this violation previously No been reported or discovered?:

#### **Entity Information:**

Joint Registration Organization (JRO) ID:

Coordinated Functional Registration (CFR) ID:

Contact Name: Jenifur Rancourt Contact Phone: 5032303672 Contact Email: jlrancourt@bpa.gov

#### Violation:

Violation Start Date: August 14, 2014

End/Expected End Date: August 18, 2014

Region Initially Determined a Violation On:

Reliability Functions: Transmission Operator (TOP)

Is Possible Violation still No occurring?:

Number of Instances: 1

Has this Possible Violation No been reported to other Regions?: Which Regions:

Date Reported to Regions:

Detailed Description and On May 6, 2015, while performing analysis on historic South of Allston (SOA) Cause of Possible Violation: curtailment events for the I-5 Reinforcement Project, BPA discovered that on August 18, 2014, BPA should have had SOA generation drop armed but did not due to incorrect information on the Study Limits Information Memo (SLIM) which is the document that instructs BPA Dispatch on what System Operating Limits (SOLs) and Remedial Action Schemes (RAS) settings to use for a particular path.

On July 30, 2014 SLIM SOA\_30JUL14\_338 was issued for outages effective August 18-22, 2014. Studies are performed approximately two weeks ahead of the outage week and are based upon conservative assumptions. This SLIM was valid and contained accurate SOLs and RAS arming thresholds.

On August 18, 2014, the SOA transmission path experienced high flows. Based upon then-current system conditions, BPA revised the SOA SOL and issued a new SLIM SOA\_18AUG14\_343 which resulted in a somewhat higher SOL. This SLIM was incorrectly written such that it appeared no RAS was required, when in fact it was. The nature of the incorrect writing was a misunderstanding on the part of the study engineer of the meaning of a standard notation normally used in the section on RAS arming to indicate that RAS is not needed. Dispatch disarmed the RAS and set the new SOL based on this SLIM. BPA operated the SOA path on August 18, 2014 with flows in excess of the path's reliable operating limit.

BPA has identified the following standards as being subject to potential violation:

STANDARD REQUIREMENT REASON

TOP-002-2 R11 Proper RAS Arming levels were not made available to the Transmission Operator.

TOP-004-2 R1 While operating under the Study Limit Information Memo (SLIM #343), BPA was not operating under the established System Operating Limits (SOLs).

TOP-004-2 R4 While operating under the Study Limit Information Memo (SLIM #343), BPA was operating in an unknown operating state.

#### TOP-008-1 R1

While operating under the Study Limit Information Memo (SLIM #343) BPA contributed to an SOL violation on the South of Alston (SOA) path (71) for duration of 10 hours, 7 minutes, 12 seconds. Because BPA did not know it was operating to an incorrect SLIM, BPA did not take immediate steps to relieve the condition which may have included shedding firm load

#### TOP-008-1 R2

While operating under the Study Limit Information Memo (SLIM #343), BPA operated to create an SOL violation for a duration of 10 hours, 7 minutes, 12 seconds. Because BPA did not know it was operating to an incorrect SLIM, BPA did not operate to prevent the likelihood that a disturbance action or inaction would result in an IROL or SOL violation.

#### TOP-008-1 R4

At the time of the event, BPA's Real Time Contingency Analysis (RTCA) tool was not identifying where generation drop was not armed and was operating as if generation drop was always armed. Therefore, BPA did not have sufficient information or analysis tools to determine if an SOL violation was occurring and as a result, BPA had no real-time analysis to immediately mitigate the SOL violation.

#### Mitigating Activities:

Description of Mitigating In November 2014, BPA began monitoring during normal business hours Activities and Preventative Monday through Friday excluding holidays, Real time Contingency Analysis Measure: which has the actual RAS arming status as an input.

After discovery of this incorrectly written SLIM, study engineers were educated regarding this mistake in choice of wording, and BPA's SLIM User Guides and the SLIM electronic templates are being updated to clearly define the use of the fields filled in by study engineers.

Have Mitigating Activities No been Completed?

Date Mitigating Activities Completed:

#### Impact and Risk Assessment:

Potential Impact to BPS: Moderate

Actual Impact to BPS: Minimal

Description of Potential and Based upon after-the-fact analysis of the actual system conditions, BPA Actual Impact to BPS: determined that the potential impact of the N-1 contingency of the Keeler-Allston or Pearl-Keeler 500 kV lines would have resulted in thermal overloads on PGE's system. The highest loading found in the analysis was on PGE's Trojan-Rivergate 230 kV line (123% of its emergency rating). There were no other overloads above 11% of their emergency rating.

Actual Impact: Neither of the contingencies above occurred.

Risk Assessment of Impact to Risk = Impact\* Probability BPS: At the time: Potential Impact = Moderate Probability = minimal because Keeler-Allston and Pearl-Keeler 500 kV lines do not have a history of frequent trips

Additional Entity Comments:

	Additional Comments			
From	Comment	User Name		
No Comments				

Additional Documents				
From	Document Name	Description	Size in Bytes	
No Docume	nts			

## Mitigation Plan

#### Mitigation Plan Summary

#### Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
WECCMIT011733	WECC2015015075	TOP-004-2 R1.	09/15/2015	1
	Mitigation Plan Submitted	On: August 28, 2015		
	Mitigation Plan Accepted	On: September 17, 2015		
Mitigation	Plan Proposed Completion D	Date: August 03, 2015		
Actual Co	ompletion Date of Mitigation F	Plan: August 03, 2015		
Mitigation Pla	n Certified Complete by BPA	On: August 28, 2015		
Mitigation Plan C	ompletion Verified by WECC	On: September 18, 2015		
Mitig	ation Plan Completed? (Yes/	No): Yes		

#### Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

#### **Entity Information**

Identify your organization:

Entity Name: Bonneville Power Administration NERC Compliance Registry ID: NCR05032

> Address: 905 NE 11 Avenue Portland OR 97232

Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Jenifur Rancourt Title: Supvry Public Utilities Specialist Email: jlrancourt@bpa.gov Phone: 503-230-3672

#### Violation(s)

This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement		
Requirement Description				
WECC2015015075 08/14/2014 TOP-004-2 R1.				
Each Transmission Operator shall operate within the Interconnection Reliability Operating Limits (IROLs) and System				

Each Transmission Operator shall operate within the Interconnection Reliability Operating Limits (IROLs) and System Operating Limits (SOLs).

Brief summary including the cause of the violation(s) and mechanism in which it was identified:

On May 6, 2015, while performing analysis on historic South of Allston (SOA), WECC Path 75, curtailment events for the I-5 Reinforcement Project, BPA discovered that on August 18, 2014, BPA should have had SOA generation drop scheme armed but did not due to incorrect information on the Study Limits Information Memo (SLIM). The SLIM is the document that instructs BPA Dispatch on what System Operating Limits (SOLs) and Remedial Action Schemes (RAS) settings to use for a particular path for studied outage conditions.

Relevant information regarding the identification of the violation(s):

P214, P215, P216, P217, P218, P219

#### Plan Details

Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

Revise the "BPA NI-5 Team SLIM User Guide" to clearly define the use of the fields completed by the study engineers on the SLIM document.

Revise the electronic NI-5 SLIM templates to require specific action when "No Gen Drop" is needed for the path SOL.

Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: August 03, 2015

Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
Revise SLIM templates	Revise SLIM templates to require specific action when "No Gen Drop" is needed for the path SOL including some automated population of those fields.	08/03/2015	08/03/2015	Revised the SLIM templates to require specific action when "No Gen Drop" is needed for the path SOL including some automated population of those fields.	No
Revise the "BPA NI-5 Team SLIM User Guide"	Revise the "BPA NI-5 Team SLIM User Guide" to clearly define and provide examples of the proper use of each field when "No Gen Drop" is used.	08/03/2015	07/17/2015	Revised the "BPA NI-5 Team SLIM User Guide" to clearly define and provide examples of the proper use of each field when "No Gen Drop" is used. User guides have been updated to clearly define use of each SLIM field. SLIM templates have been updated to require specific action when "No Gen Drop" is used including the automated population of some fields. These revisions will reduce the likelihood that incorrect information is entered in the	No
Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
--------------------	-------------	---	------------------------------	--	---------------------------------
				SLIM. Notification of changes made to the guide and template were emailed to TOT which consists of the Operations Study engineers, TOD which is the Dittmer Control Center System Dispatchers and TOV which is the Munro Control Center System Dispatchers and BPA outage which is the Outage Coordination Office.	

Additional Relevant Information

#### **Reliability Risk**

#### Reliability Risk

While the Mitigation Plan is being implemented, the reliability of the bulk Power System may remain at higher Risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

No known risks/impacts

#### Prevention

Describe how successful completion of this plan will prevent or minimize the probability further violations of the same or similar reliability standards requirements will occur

Updating the User guides to clearly define each SLIM field will provide a complete and clear reference for the Study Engineer to use when creating SLIMs. Updating SLIM templates to require specific action when "No Gen Drop" is used including the automated population of some fields which standardizes notations. These revisions will reduce the likelihood that incorrect information is entered in the SLIM.

Describe any action that may be taken or planned beyond that listed in the mitigation plan, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements

#### Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

\* Submits the Mitigation Plan, as presented, to the regional entity for acceptance and approval by NERC, and

\* if applicable, certifies that the Mitigation Plan, as presented, was completed as specified.

Acknowledges:

- 1. I am qualified to sign this mitigation plan on behalf of my organization.
- 2. I have read and understand the obligations to comply with the mitigation plan requirements and ERO remedial action directives as well as ERO documents, including but not limited to, the NERC rules of procedure and the application NERC CMEP.
- 3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

#### Authorized Individual

Name: Jeffrey Cook

Title: VP Transmission Planning and Asset Management

Authorized On: August 25, 2015

# Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name:Bonneville Power AdministrationNERC Registry ID:NCR05032NERC Violation ID(s):WECC2015015075Mitigated Standard Requirement(s):TOP-004-2 R1.Scheduled Completion as per Accepted Mitigation Plan:August 03, 2015Date Mitigation Plan completed:August 03, 2015WECC Notified of Completion on Date:August 28, 2015

Entity Comment: Evidence is attached within the uploaded signed completion certificate

Additional Documents				
From	Document Name	Description	Size in Bytes	
Entity	150827 Signed Mitigation Plan form TOP-004-2 R1_P215.pdf	Attached is BPA's signed mitigation plan	1,022,332	
Entity	150827 Signed Mitigation Plan Completion form TOP-004-2 R1_P215.pdf		2,245,509	

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Jeffrey Cook

Title: VP Transmission Planning and Asset Management

Email: jwcook@bpa.gov

Phone: (503) 418-8981

Authorized Signature

Date

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2015015075 Standard/Requirement: TOP-004-2 R1. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/27/2015 for the violation of TOP-004-2 R1.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

#### Thank you, OATI

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[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment PP**

# Record documents for the violation of TOP-004-2 R4 (WECC2015015076)

PP-1. BPA's Self-Report dated July 10, 2015;

PP-2. BPA's Mitigation Plan designated as WECCMIT011756 submitted August 28, 2015;

**PP-3. BPA's Certification of Mitigation Completion dated September 25, 2015;** 

**PP-4. WECC's Verification of Mitigation Completion dated September 25, 2015** 

Entity Name: Bonneville Power Administration (BPA)

NERC ID: NCR05032 Standard: TOP-004-2 Requirement: TOP-004-2 R4. Date Submitted: July 10, 2015

Has this violation previously No been reported or discovered?:

# **Entity Information:**

Joint Registration Organization (JRO) ID:

Coordinated Functional Registration (CFR) ID:

Contact Name: Jenifur Rancourt Contact Phone: 5032303672 Contact Email: jlrancourt@bpa.gov

# Violation:

Violation Start Date: August 18, 2014

End/Expected End Date: August 18, 2014

Region Initially Determined a Violation On:

Reliability Functions: Transmission Operator (TOP)

Is Possible Violation still No occurring?:

Number of Instances: 1

Has this Possible Violation No been reported to other Regions?: Which Regions:

Date Reported to Regions:

Detailed Description and On May 6, 2015, while performing analysis on historic South of Allston (SOA) Cause of Possible Violation: curtailment events for the I-5 Reinforcement Project, BPA discovered that on August 18, 2014, BPA should have had SOA generation drop armed but did not due to incorrect information on the Study Limits Information Memo (SLIM) which is the document that instructs BPA Dispatch on what System Operating Limits (SOLs) and Remedial Action Schemes (RAS) settings to use for a particular path.

On July 30, 2014 SLIM SOA\_30JUL14\_338 was issued for outages effective August 18-22, 2014. Studies are performed approximately two weeks ahead of the outage week and are based upon conservative assumptions. This SLIM was valid and contained accurate SOLs and RAS arming thresholds.

On August 18, 2014, the SOA transmission path experienced high flows. Based upon then-current system conditions, BPA revised the SOA SOL and issued a new SLIM SOA\_18AUG14\_343 which resulted in a somewhat higher SOL. This SLIM was incorrectly written such that it appeared no RAS was required, when in fact it was. The nature of the incorrect writing was a misunderstanding on the part of the study engineer of the meaning of a standard notation normally used in the section on RAS arming to indicate that RAS is not needed. Dispatch disarmed the RAS and set the new SOL based on this SLIM. BPA operated the SOA path on August 18, 2014 with flows in excess of the path's reliable operating limit.

BPA has identified the following standards as being subject to potential violation:

STANDARD REQUIREMENT REASON

TOP-002-2 R11 Proper RAS Arming levels were not made available to the Transmission Operator.

TOP-004-2 R1 While operating under the Study Limit Information Memo (SLIM #343), BPA was not operating under the established System Operating Limits (SOLs).

TOP-004-2 R4 While operating under the Study Limit Information Memo (SLIM #343), BPA was operating in an unknown operating state.

#### TOP-008-1 R1

While operating under the Study Limit Information Memo (SLIM #343) BPA contributed to an SOL violation on the South of Alston (SOA) path (71) for duration of 10 hours, 7 minutes, 12 seconds. Because BPA did not know it was operating to an incorrect SLIM, BPA did not take immediate steps to relieve the condition which may have included shedding firm load

#### TOP-008-1 R2

While operating under the Study Limit Information Memo (SLIM #343), BPA operated to create an SOL violation for a duration of 10 hours, 7 minutes, 12 seconds. Because BPA did not know it was operating to an incorrect SLIM, BPA did not operate to prevent the likelihood that a disturbance action or inaction would result in an IROL or SOL violation.

#### TOP-008-1 R4

At the time of the event, BPA's Real Time Contingency Analysis (RTCA) tool was not identifying where generation drop was not armed and was operating as if generation drop was always armed. Therefore, BPA did not have sufficient information or analysis tools to determine if an SOL violation was occurring and as a result, BPA had no real-time analysis to immediately mitigate the SOL violation.

# Mitigating Activities:

Description of Mitigating In November 2014, BPA began monitoring during normal business hours Activities and Preventative Monday through Friday excluding holidays, Real time Contingency Analysis Measure: which has the actual RAS arming status as an input.

After discovery of this incorrectly written SLIM, study engineers were educated regarding this mistake in choice of wording, and BPA's SLIM User Guides and the SLIM electronic templates are being updated to clearly define the use of the fields filled in by study engineers.

Have Mitigating Activities No been Completed?

Date Mitigating Activities Completed:

## Impact and Risk Assessment:

Potential Impact to BPS: Moderate

Actual Impact to BPS: Minimal

Description of Potential and Based upon after-the-fact analysis of the actual system conditions, BPA Actual Impact to BPS: determined that the potential impact of the N-1 contingency of the Keeler-Allston or Pearl-Keeler 500 kV lines would have resulted in thermal overloads on PGE's system. The highest loading found in the analysis was on PGE's Trojan-Rivergate 230 kV line (123% of its emergency rating). There were no other overloads above 11% of their emergency rating.

Actual Impact: Neither of the contingencies above occurred.

Risk Assessment of Impact to Risk = Impact\* Probability BPS: At the time: Potential Impact = Moderate Probability = minimal because Keeler-Allston and Pearl-Keeler 500 kV lines do not have a history of frequent trips

Additional Entity Comments:

	Additional Comments	
From	Comment	User Name
No Comme	nts	

	Additional Documents				
From Document Name Description Size in By					
	No Documents				

# Mitigation Plan

# Mitigation Plan Summary

# Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
WECCMIT011756	WECC2015015076	TOP-004-2 R4.	09/15/2015	1
	Mitigation Plan Submitted	On: August 28, 2015		
	Mitigation Plan Accepted	On: September 17, 2015		
Mitigation	Plan Proposed Completion Da	ate: August 03, 2015		
Actual Co	mpletion Date of Mitigation P	lan: August 03, 2015		
Mitigation Pla	n Certified Complete by BPA	On: August 28, 2015		
Mitigation Plan C	ompletion Verified by WECC	On: September 18, 2015		
Mitig	ation Plan Completed? (Yes/N	No): Yes		

## Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

## **Entity Information**

Identify your organization:

Entity Name: Bonneville Power Administration NERC Compliance Registry ID: NCR05032

> Address: 905 NE 11 Avenue Portland OR 97232

Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Jenifur Rancourt Title: Supvry Public Utilities Specialist Email: jlrancourt@bpa.gov Phone: 503-230-3672

## Violation(s)

This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement		
Requirement Description				
WECC2015015076	08/18/2014	TOP-004-2 R4.		

If a Transmission Operator enters an unknown operating state (i.e. any state for which valid operating limits have not been determined), it will be considered to be in an emergency and shall restore operations to respect proven reliable power system limits within 30 minutes.

Brief summary including the cause of the violation(s) and mechanism in which it was identified:

On May 6, 2015, while performing analysis on historic South of Allston (SOA), WECC Path 75, curtailment events for the I-5 Reinforcement Project, BPA discovered that on August 18, 2014, BPA should have had SOA generation drop scheme armed but did not due to incorrect information on the Study Limits Information Memo (SLIM). The SLIM is the document that instructs BPA Dispatch on what System Operating Limits (SOLs) and Remedial Action Schemes (RAS) settings to use for a particular path for studied outage conditions.

Relevant information regarding the identification of the violation(s):

P214, P215, P216, P217, P218, P219

#### Plan Details

Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

Revise the "BPA NI-5 Team SLIM User Guide" to clearly define the use of the fields completed by the study engineers on the SLIM document.

Revise the electronic NI-5 SLIM templates to require specific action when "No Gen Drop" is needed for the path SOL.

Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: August 03, 2015

Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
Revise SLIM templates	Revise SLIM templates to require specific action when "No Gen Drop" is needed for the path SOL including some automated population of those fields.	08/03/2015	08/03/2015	Revised the SLIM templates to require specific action when "No Gen Drop" is needed for the path SOL including some automated population of those fields.	No
Revise the "BPA NI-5 Team SLIM User Guide"	Revise the "BPA NI-5 Team SLIM User Guide" to clearly define and provide examples of the proper use of each field when "No Gen Drop" is used.	08/03/2015	07/17/2015	Revised the "BPA NI-5 Team SLIM User Guide" to clearly define and provide examples of the proper use of each field when "No Gen Drop" is used. User guides have been updated to clearly define use of each SLIM field. SLIM templates have been updated to require specific action when "No Gen Drop" is used including the automated population of some fields. These revisions will reduce the likelihood that incorrect information is entered in the	No

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
				SLIM. Notification of changes made to the guide and template were emailed to TOT which consists of the Operations Study engineers, TOD which is the Dittmer Control Center System Dispatchers and TOV which is the Munro Control Center System Dispatchers and BPA outage which is the Outage Coordination Office.	

Additional Relevant Information

#### **Reliability Risk**

#### Reliability Risk

While the Mitigation Plan is being implemented, the reliability of the bulk Power System may remain at higher Risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

No known risks/impacts

#### Prevention

Describe how successful completion of this plan will prevent or minimize the probability further violations of the same or similar reliability standards requirements will occur

Updating the User guides to clearly define each SLIM field will provide a complete and clear reference for the Study Engineer to use when creating SLIMs. Updating SLIM templates to require specific action when "No Gen Drop" is used including the automated population of some fields which standardizes notations. These revisions will reduce the likelihood that incorrect information is entered in the SLIM.

Describe any action that may be taken or planned beyond that listed in the mitigation plan, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements

#### Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

\* Submits the Mitigation Plan, as presented, to the regional entity for acceptance and approval by NERC, and

\* if applicable, certifies that the Mitigation Plan, as presented, was completed as specified.

Acknowledges:

- 1. I am qualified to sign this mitigation plan on behalf of my organization.
- 2. I have read and understand the obligations to comply with the mitigation plan requirements and ERO remedial action directives as well as ERO documents, including but not limited to, the NERC rules of procedure and the application NERC CMEP.
- 3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

#### Authorized Individual

Name: Jeffrey Cook

Title: VP Transmission Planning and Asset Management

Authorized On: August 25, 2015

# Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name:Bonneville Power AdministrationNERC Registry ID:NCR05032NERC Violation ID(s):WECC2015015076Mitigated Standard Requirement(s):TOP-004-2 R4.Scheduled Completion as per Accepted Mitigation Plan:August 03, 2015Date Mitigation Plan completed:August 03, 2015WECC Notified of Completion on Date:August 28, 2015Entity Comment:Evidence is attached within the uploaded signed completion

certificate

	Additional Documents				
From	Document Name	Description	Size in Bytes		
Entity	150827 Signed Mitigation Plan form TOP-004-2 R4_P216.pdf	Attached is BPA's signed mitigation plan	1,025,392		
Entity	150827 Signed Mitigation Plan Completion form TOP-004-2 R4_P216.pdf		2,248,631		

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Jeffrey Cook

Title: VP Transmission Planning and Asset Management

Email: jwcook@bpa.gov

Phone: (503) 418-8981

Authorized Signature

Date

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2015015076 Standard/Requirement: TOP-004-2 R4. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/27/2015 for the violation of TOP-004-2 R4.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

#### Thank you, OATI

CONFIDENTIAL INFORMATION: This email and any attachment(s) contain confidential and/or proprietary information of Open Access Technology International, Inc. Do not copy or distribute without the prior written consent of OATI. If you are not a named recipient to the message, please notify the sender immediately and do not retain the message in any form, printed or electronic.

[OATI Information - Email Template: MitPlan\_Completed]



# **Attachment QQ**

# Record documents for the violation of TOP-008-1 R1 (WECC2015015077)

QQ-1. BPA's Self-Report dated July 10, 2015;

QQ-2. BPA's Mitigation Plan designated as WECCMIT011757 submitted August 28, 2015;

QQ-3. BPA's Certification of Mitigation Completion dated September 25, 2015;

QQ-4. WECC's Verification of Mitigation Completion dated September 25, 2015

Entity Name: Bonneville Power Administration (BPA)

```
NERC ID: NCR05032
Standard: TOP-008-1
Requirement: TOP-008-1 R1.
Date Submitted: July 10, 2015
```

Has this violation previously No been reported or discovered?:

# **Entity Information:**

Joint Registration Organization (JRO) ID:

Coordinated Functional Registration (CFR) ID:

Contact Name: Jenifur Rancourt Contact Phone: 5032303672 Contact Email: jlrancourt@bpa.gov

# Violation:

Violation Start Date: August 18, 2014

End/Expected End Date: August 18, 2014

Region Initially Determined a Violation On:

Reliability Functions: Transmission Operator (TOP)

Is Possible Violation still No occurring?:

Number of Instances: 1

Has this Possible Violation No been reported to other Regions?: Which Regions:

Date Reported to Regions:

Detailed Description and On May 6, 2015, while performing analysis on historic South of Allston (SOA) Cause of Possible Violation: curtailment events for the I-5 Reinforcement Project, BPA discovered that on August 18, 2014, BPA should have had SOA generation drop armed but did not due to incorrect information on the Study Limits Information Memo (SLIM) which is the document that instructs BPA Dispatch on what System Operating Limits (SOLs) and Remedial Action Schemes (RAS) settings to use for a particular path.

On July 30, 2014 SLIM SOA\_30JUL14\_338 was issued for outages effective August 18-22, 2014. Studies are performed approximately two weeks ahead of the outage week and are based upon conservative assumptions. This SLIM was valid and contained accurate SOLs and RAS arming thresholds.

On August 18, 2014, the SOA transmission path experienced high flows. Based upon then-current system conditions, BPA revised the SOA SOL and issued a new SLIM SOA\_18AUG14\_343 which resulted in a somewhat higher SOL. This SLIM was incorrectly written such that it appeared no RAS was required, when in fact it was. The nature of the incorrect writing was a misunderstanding on the part of the study engineer of the meaning of a standard notation normally used in the section on RAS arming to indicate that RAS is not needed. Dispatch disarmed the RAS and set the new SOL based on this SLIM. BPA operated the SOA path on August 18, 2014 with flows in excess of the path's reliable operating limit.

BPA has identified the following standards as being subject to potential violation:

STANDARD REQUIREMENT REASON

TOP-002-2 R11 Proper RAS Arming levels were not made available to the Transmission Operator.

TOP-004-2 R1 While operating under the Study Limit Information Memo (SLIM #343), BPA was not operating under the established System Operating Limits (SOLs).

TOP-004-2 R4 While operating under the Study Limit Information Memo (SLIM #343), BPA was operating in an unknown operating state.

#### TOP-008-1 R1

While operating under the Study Limit Information Memo (SLIM #343) BPA contributed to an SOL violation on the South of Alston (SOA) path (71) for duration of 10 hours, 7 minutes, 12 seconds. Because BPA did not know it was operating to an incorrect SLIM, BPA did not take immediate steps to relieve the condition which may have included shedding firm load

#### TOP-008-1 R2

While operating under the Study Limit Information Memo (SLIM #343), BPA operated to create an SOL violation for a duration of 10 hours, 7 minutes, 12 seconds. Because BPA did not know it was operating to an incorrect SLIM, BPA did not operate to prevent the likelihood that a disturbance action or inaction would result in an IROL or SOL violation.

#### TOP-008-1 R4

At the time of the event, BPA's Real Time Contingency Analysis (RTCA) tool was not identifying where generation drop was not armed and was operating as if generation drop was always armed. Therefore, BPA did not have sufficient information or analysis tools to determine if an SOL violation was occurring and as a result, BPA had no real-time analysis to immediately mitigate the SOL violation.

# Mitigating Activities:

Description of Mitigating In November 2014, BPA began monitoring during normal business hours Activities and Preventative Monday through Friday excluding holidays, Real time Contingency Analysis Measure: which has the actual RAS arming status as an input.

After discovery of this incorrectly written SLIM, study engineers were educated regarding this mistake in choice of wording, and BPA's SLIM User Guides and the SLIM electronic templates are being updated to clearly define the use of the fields filled in by study engineers.

Have Mitigating Activities No been Completed?

Date Mitigating Activities Completed:

# Impact and Risk Assessment:

Potential Impact to BPS: Moderate

Actual Impact to BPS: Minimal

Description of Potential and Based upon after-the-fact analysis of the actual system conditions, BPA Actual Impact to BPS: determined that the potential impact of the N-1 contingency of the Keeler-Allston or Pearl-Keeler 500 kV lines would have resulted in thermal overloads on PGE's system. The highest loading found in the analysis was on PGE's Trojan-Rivergate 230 kV line (123% of its emergency rating). There were no other overloads above 11% of their emergency rating.

Actual Impact: Neither of the contingencies above occurred.

Risk Assessment of Impact to Risk = Impact\* Probability BPS: At the time: Potential Impact = Moderate Probability = minimal because Keeler-Allston and Pearl-Keeler 500 kV lines do not have a history of frequent trips

Additional Entity Comments:

	Additional Comments	
From	Comment	User Name
No Comme	nts	

Additional Documents					
From	From Document Name Description Size in Byt				
No Documents					

# Mitigation Plan

# Mitigation Plan Summary

# Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version
WECCMIT011757	WECC2015015077	TOP-008-1 R1.	09/15/2015	1
	Mitigation Plan Submitted	On: August 28, 2015		
	Mitigation Plan Accepted	On: September 18, 2015		
Mitigation	Plan Proposed Completion D	Date: August 03, 2015		
Actual Co	mpletion Date of Mitigation F	Plan: August 03, 2015		
Mitigation Pla	n Certified Complete by BPA	On: August 28, 2015		
Mitigation Plan C	ompletion Verified by WECC	On: September 18, 2015		
Mitig	ation Plan Completed? (Yes/	No): Yes		

## Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

## **Entity Information**

Identify your organization:

Entity Name: Bonneville Power Administration NERC Compliance Registry ID: NCR05032

> Address: 905 NE 11 Avenue Portland OR 97232

Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Jenifur Rancourt Title: Supvry Public Utilities Specialist Email: jlrancourt@bpa.gov Phone: 503-230-3672

# Violation(s)

This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement		
Requirement Description				
WECC2015015077	08/18/2014	TOP-008-1 R1.		
The Transmission Operator experiencing or contributing to an IROL or SOL violation shall take immediate steps to relieve the condition, which may include shedding firm load.				

Brief summary including the cause of the violation(s) and mechanism in which it was identified:

On May 6, 2015, while performing analysis on historic South of Allston (SOA), WECC Path 75, curtailment events for the I-5 Reinforcement Project, BPA discovered that on August 18, 2014, BPA should have had SOA generation drop scheme armed but did not due to incorrect information on the Study Limits Information Memo (SLIM). The SLIM is the document that instructs BPA Dispatch on what System Operating Limits (SOLs) and Remedial Action Schemes (RAS) settings to use for a particular path for studied outage conditions.

Relevant information regarding the identification of the violation(s):

P214, P215, P216, P217, P218, P219

#### Plan Details

Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

Revise the "BPA NI-5 Team SLIM User Guide" to clearly define the use of the fields completed by the study engineers on the SLIM document.

Revise the electronic NI-5 SLIM templates to require specific action when "No Gen Drop" is needed for the path SOL.

Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: August 03, 2015

Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
Revise SLIM templates	Revise SLIM templates to require specific action when "No Gen Drop" is needed for the path SOL including some automated population of those fields.	08/03/2015	08/03/2015	Revised the SLIM templates to require specific action when "No Gen Drop" is needed for the path SOL including some automated population of those fields.	No
Revise the "BPA NI-5 Team SLIM User Guide"	Revise the "BPA NI-5 Team SLIM User Guide" to clearly define and provide examples of the proper use of each field when "No Gen Drop" is used.	08/03/2015	07/17/2015	Revised the "BPA NI-5 Team SLIM User Guide" to clearly define and provide examples of the proper use of each field when "No Gen Drop" is used. User guides have been updated to clearly define use of each SLIM field. SLIM templates have been updated to require specific action when "No Gen Drop" is used including the automated population of some fields. These revisions will reduce the likelihood that incorrect information is entered in the	No

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
				SLIM. Notification of changes made to the guide and template were emailed to TOT which consists of the Operations Study engineers, TOD which is the Dittmer Control Center System Dispatchers and TOV which is the Munro Control Center System Dispatchers and BPA outage which is the Outage Coordination Office.	

Additional Relevant Information

#### **Reliability Risk**

#### Reliability Risk

While the Mitigation Plan is being implemented, the reliability of the bulk Power System may remain at higher Risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

No known risks/impacts

#### Prevention

Describe how successful completion of this plan will prevent or minimize the probability further violations of the same or similar reliability standards requirements will occur

Updating the User guides to clearly define each SLIM field will provide a complete and clear reference for the Study Engineer to use when creating SLIMs. Updating SLIM templates to require specific action when "No Gen Drop" is used including the automated population of some fields which standardizes notations. These revisions will reduce the likelihood that incorrect information is entered in the SLIM.

Describe any action that may be taken or planned beyond that listed in the mitigation plan, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements

#### Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

\* Submits the Mitigation Plan, as presented, to the regional entity for acceptance and approval by NERC, and

\* if applicable, certifies that the Mitigation Plan, as presented, was completed as specified.

Acknowledges:

- 1. I am qualified to sign this mitigation plan on behalf of my organization.
- 2. I have read and understand the obligations to comply with the mitigation plan requirements and ERO remedial action directives as well as ERO documents, including but not limited to, the NERC rules of procedure and the application NERC CMEP.
- 3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

#### Authorized Individual

Name: Jeffrey Cook

Title: VP Transmission Planning and Asset Management

Authorized On: August 25, 2015

# Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name:Bonneville Power AdministrationNERC Registry ID:NCR05032NERC Violation ID(s):WECC2015015077Mitigated Standard Requirement(s):TOP-008-1 R1.Scheduled Completion as per Accepted Mitigation Plan:August 03, 2015Date Mitigation Plan completed:August 03, 2015WECC Notified of Completion on Date:August 28, 2015

Entity Comment: Evidence is attached within the uploaded signed completion certificate

Additional Documents				
From	Document Name	Description	Size in Bytes	
Entity	150827 Signed Mitigation Plan form TOP-008-1 R1_P217.pdf	Attached is BPA's signed mitigation plan	1,013,945	
Entity	150827 Signed Mitigation Plan Completion form TOP-008-1 R1_P217.pdf	Attached is BPA's signed completion certificate	2,241,219	

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Jeffrey Cook

Title: VP Transmission Planning and Asset Management

Email: jwcook@bpa.gov

Phone: (503) 418-8981

Authorized Signature

Date

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2015015077 Standard/Requirement: TOP-008-1 R1. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/27/2015 for the violation of TOP-008-1 R1.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

#### Thank you, OATI

CONFIDENTIAL INFORMATION: This email and any attachment(s) contain confidential and/or proprietary information of Open Access Technology International, Inc. Do not copy or distribute without the prior written consent of OATI. If you are not a named recipient to the message, please notify the sender immediately and do not retain the message in any form, printed or electronic.

[OATI Information - Email Template: MitPlan\_Completed]

NERC

# **Attachment RR**

# Record documents for the violation of TOP-008-1 R2 (WECC2015015078)

RR-1. BPA's Self-Report dated July 10, 2015;

**RR-2. BPA's Mitigation Plan designated as WECCMIT011758 submitted August 28,** 2015;

**RR-3. BPA's Certification of Mitigation Completion dated September 25, 2015;** 

**RR-4. WECC's Verification of Mitigation Completion dated September 25, 2015** 

Entity Name: Bonneville Power Administration (BPA)

NERC ID: NCR05032 Standard: TOP-008-1 Requirement: TOP-008-1 R2. Date Submitted: July 10, 2015

Has this violation previously No been reported or discovered?:

# **Entity Information:**

Joint Registration Organization (JRO) ID:

Coordinated Functional Registration (CFR) ID:

Contact Name: Jenifur Rancourt Contact Phone: 5032303672 Contact Email: jlrancourt@bpa.gov

# Violation:

Violation Start Date: August 18, 2014

End/Expected End Date: August 18, 2014

Region Initially Determined a Violation On:

Reliability Functions: Transmission Operator (TOP)

Is Possible Violation still No occurring?:

Number of Instances: 1

Has this Possible Violation No been reported to other Regions?: Which Regions:

Date Reported to Regions:

Detailed Description and On May 6, 2015, while performing analysis on historic South of Allston (SOA) Cause of Possible Violation: curtailment events for the I-5 Reinforcement Project, BPA discovered that on August 18, 2014, BPA should have had SOA generation drop armed but did not due to incorrect information on the Study Limits Information Memo (SLIM) which is the document that instructs BPA Dispatch on what System Operating Limits (SOLs) and Remedial Action Schemes (RAS) settings to use for a particular path.

On July 30, 2014 SLIM SOA\_30JUL14\_338 was issued for outages effective August 18-22, 2014. Studies are performed approximately two weeks ahead of the outage week and are based upon conservative assumptions. This SLIM was valid and contained accurate SOLs and RAS arming thresholds.

On August 18, 2014, the SOA transmission path experienced high flows. Based upon then-current system conditions, BPA revised the SOA SOL and issued a new SLIM SOA\_18AUG14\_343 which resulted in a somewhat higher SOL. This SLIM was incorrectly written such that it appeared no RAS was required, when in fact it was. The nature of the incorrect writing was a misunderstanding on the part of the study engineer of the meaning of a standard notation normally used in the section on RAS arming to indicate that RAS is not needed. Dispatch disarmed the RAS and set the new SOL based on this SLIM. BPA operated the SOA path on August 18, 2014 with flows in excess of the path's reliable operating limit.

BPA has identified the following standards as being subject to potential violation:

STANDARD REQUIREMENT REASON

TOP-002-2 R11 Proper RAS Arming levels were not made available to the Transmission Operator.

TOP-004-2 R1 While operating under the Study Limit Information Memo (SLIM #343), BPA was not operating under the established System Operating Limits (SOLs).

TOP-004-2 R4 While operating under the Study Limit Information Memo (SLIM #343), BPA was operating in an unknown operating state.

#### TOP-008-1 R1

While operating under the Study Limit Information Memo (SLIM #343) BPA contributed to an SOL violation on the South of Alston (SOA) path (71) for duration of 10 hours, 7 minutes, 12 seconds. Because BPA did not know it was operating to an incorrect SLIM, BPA did not take immediate steps to relieve the condition which may have included shedding firm load

#### TOP-008-1 R2

While operating under the Study Limit Information Memo (SLIM #343), BPA operated to create an SOL violation for a duration of 10 hours, 7 minutes, 12 seconds. Because BPA did not know it was operating to an incorrect SLIM, BPA did not operate to prevent the likelihood that a disturbance action or inaction would result in an IROL or SOL violation.

#### TOP-008-1 R4

At the time of the event, BPA's Real Time Contingency Analysis (RTCA) tool was not identifying where generation drop was not armed and was operating as if generation drop was always armed. Therefore, BPA did not have sufficient information or analysis tools to determine if an SOL violation was occurring and as a result, BPA had no real-time analysis to immediately mitigate the SOL violation.

# Mitigating Activities:

Description of Mitigating In November 2014, BPA began monitoring during normal business hours Activities and Preventative Monday through Friday excluding holidays, Real time Contingency Analysis Measure: which has the actual RAS arming status as an input.

After discovery of this incorrectly written SLIM, study engineers were educated regarding this mistake in choice of wording, and BPA's SLIM User Guides and the SLIM electronic templates are being updated to clearly define the use of the fields filled in by study engineers.

Have Mitigating Activities No been Completed?

Date Mitigating Activities Completed:

# Impact and Risk Assessment:

Potential Impact to BPS: Moderate
Actual Impact to BPS: Minimal

Description of Potential and Based upon after-the-fact analysis of the actual system conditions, BPA Actual Impact to BPS: determined that the potential impact of the N-1 contingency of the Keeler-Allston or Pearl-Keeler 500 kV lines would have resulted in thermal overloads on PGE's system. The highest loading found in the analysis was on PGE's Trojan-Rivergate 230 kV line (123% of its emergency rating). There were no other overloads above 11% of their emergency rating.

Actual Impact: Neither of the contingencies above occurred.

Risk Assessment of Impact to Risk = Impact\* Probability BPS: At the time: Potential Impact = Moderate Probability = minimal because Keeler-Allston and Pearl-Keeler 500 kV lines do not have a history of frequent trips

Additional Entity Comments:

	Additional Comments	
From	Comment	User Name
No Comme	nts	

Additional Documents					
	From	Document Name	Description	Size in Bytes	
	No Documents				

# Mitigation Plan

# Mitigation Plan Summary

# Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version	
WECCMIT011758	WECC2015015078	TOP-008-1 R2.	09/15/2015	1	
	Mitigation Plan Submitted	On: August 28, 2015			
Mitigation Plan Proposed Completion Date: August 03, 2015					
Actual Co	mpletion Date of Mitigation P	lan: August 03, 2015			
Mitigation Pla					
Mitigation Plan C	ompletion Verified by WECC	On: September 18, 2015			
Mitig	ation Plan Completed? (Yes/I	No): Yes			

#### Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

#### **Entity Information**

Identify your organization:

Entity Name: Bonneville Power Administration NERC Compliance Registry ID: NCR05032

> Address: 905 NE 11 Avenue Portland OR 97232

Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Jenifur Rancourt Title: Supvry Public Utilities Specialist Email: jlrancourt@bpa.gov Phone: 503-230-3672

# Violation(s)

This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement	
Requirement Description			
WECC2015015078 08/18/2014 TOP-008-1 R2.			

Each Transmission Operator shall operate to prevent the likelihood that a disturbance, action, or inaction will result in an IROL or SOL violation in its area or another area of the Interconnection. In instances where there is a difference in derived operating limits, the Transmission Operator shall always operate the Bulk Electric System to the most limiting parameter.

Brief summary including the cause of the violation(s) and mechanism in which it was identified:

On May 6, 2015, while performing analysis on historic South of Allston (SOA), WECC Path 75, curtailment events for the I-5 Reinforcement Project, BPA discovered that on August 18, 2014, BPA should have had SOA generation drop scheme armed but did not due to incorrect information on the Study Limits Information Memo (SLIM). The SLIM is the document that instructs BPA Dispatch on what System Operating Limits (SOLs) and Remedial Action Schemes (RAS) settings to use for a particular path for studied outage conditions.

Relevant information regarding the identification of the violation(s):

P214, P215, P216, P217, P218, P219

#### Plan Details

Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

Revise the "BPA NI-5 Team SLIM User Guide" to clearly define the use of the fields completed by the study engineers on the SLIM document.

Revise the electronic NI-5 SLIM templates to require specific action when "No Gen Drop" is needed for the path SOL.

Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: August 03, 2015

Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
Revise SLIM templates	Revise SLIM templates to require specific action when "No Gen Drop" is needed for the path SOL including some automated population of those fields.	08/03/2015	08/03/2015	Revised the SLIM templates to require specific action when "No Gen Drop" is needed for the path SOL including some automated population of those fields.	No
Revise the "BPA NI-5 Team SLIM User Guide"	Revise the "BPA NI-5 Team SLIM User Guide" to clearly define and provide examples of the proper use of each field when "No Gen Drop" is used.	08/03/2015	07/17/2015	Revised the "BPA NI-5 Team SLIM User Guide" to clearly define and provide examples of the proper use of each field when "No Gen Drop" is used. User guides have been updated to clearly define use of each SLIM field. SLIM templates have been updated to require specific action when "No Gen Drop" is used including the automated population of some fields. These revisions will reduce the likelihood that incorrect information is entered in the	No

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
				SLIM. Notification of changes made to the guide and template were emailed to TOT which consists of the Operations Study engineers, TOD which is the Dittmer Control Center System Dispatchers and TOV which is the Munro Control Center System Dispatchers and BPA outage which is the Outage Coordination Office.	

Additional Relevant Information

#### **Reliability Risk**

#### Reliability Risk

While the Mitigation Plan is being implemented, the reliability of the bulk Power System may remain at higher Risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

No known risks/impacts

#### Prevention

Describe how successful completion of this plan will prevent or minimize the probability further violations of the same or similar reliability standards requirements will occur

Updating the User guides to clearly define each SLIM field will provide a complete and clear reference for the Study Engineer to use when creating SLIMs. Updating SLIM templates to require specific action when "No Gen Drop" is used including the automated population of some fields which standardizes notations. These revisions will reduce the likelihood that incorrect information is entered in the SLIM.

Describe any action that may be taken or planned beyond that listed in the mitigation plan, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements

#### Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

\* Submits the Mitigation Plan, as presented, to the regional entity for acceptance and approval by NERC, and

\* if applicable, certifies that the Mitigation Plan, as presented, was completed as specified.

Acknowledges:

- 1. I am qualified to sign this mitigation plan on behalf of my organization.
- 2. I have read and understand the obligations to comply with the mitigation plan requirements and ERO remedial action directives as well as ERO documents, including but not limited to, the NERC rules of procedure and the application NERC CMEP.
- 3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

#### Authorized Individual

Name: Jeffrey Cook

Title: VP Transmission Planning and Asset Management

Authorized On: August 25, 2015

# Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name:Bonneville Power AdministrationNERC Registry ID:NCR05032NERC Violation ID(s):WECC2015015078Mitigated Standard Requirement(s):TOP-008-1 R2.Scheduled Completion as per Accepted Mitigation Plan:August 03, 2015Date Mitigation Plan completed:August 03, 2015WECC Notified of Completion on Date:August 28, 2015Entity Comment:Evidence is attached within the uploaded signed completion

certificate

Additional Documents				
From	Document Name	Description	Size in Bytes	
Entity	150827 Signed Mitigation Plan form TOP-008-1 R2_P218.pdf	Attached is BPA's signed mitigation plan	1,015,171	
Entity	150827 Signed Mitigation Plan Completion form TOP-008-1 R2_P218.pdf	Attached is BPA's signed completion certificate	2,241,722	

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Jeffrey Cook

Title: VP Transmission Planning and Asset Management

Email: jwcook@bpa.gov

Phone: (360) 418-8981

Authorized Signature

Date

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2015015078 Standard/Requirement: TOP-008-1 R2. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/27/2015 for the violation of TOP-008-1 R2.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

#### Thank you, OATI

CONFIDENTIAL INFORMATION: This email and any attachment(s) contain confidential and/or proprietary information of Open Access Technology International, Inc. Do not copy or distribute without the prior written consent of OATI. If you are not a named recipient to the message, please notify the sender immediately and do not retain the message in any form, printed or electronic.

[OATI Information - Email Template: MitPlan\_Completed]

NERC

# **Attachment SS**

# Record documents for the violation of TOP-008-1 R4 (WECC2015015079)

SS-1. BPA's Self-Report dated July 10, 2015;

SS-2. BPA's Mitigation Plan designated as WECCMIT011759 submitted August 28, 2015;

SS-3. BPA's Certification of Mitigation Completion dated September 25, 2015;

SS-4. WECC's Verification of Mitigation Completion dated September 25, 2015

Entity Name: Bonneville Power Administration (BPA)

NERC ID: NCR05032 Standard: TOP-008-1 Requirement: TOP-008-1 R4. Date Submitted: July 10, 2015

Has this violation previously No been reported or discovered?:

# **Entity Information:**

Joint Registration Organization (JRO) ID:

Coordinated Functional Registration (CFR) ID:

Contact Name: Jenifur Rancourt Contact Phone: 5032303672 Contact Email: jlrancourt@bpa.gov

# Violation:

Violation Start Date: August 18, 2014

End/Expected End Date: August 18, 2014

Region Initially Determined a Violation On:

Reliability Functions: Transmission Operator (TOP)

Is Possible Violation still No occurring?:

Number of Instances: 1

Has this Possible Violation No been reported to other Regions?: Which Regions:

Date Reported to Regions:

Detailed Description and On May 6, 2015, while performing analysis on historic South of Allston (SOA) Cause of Possible Violation: curtailment events for the I-5 Reinforcement Project, BPA discovered that on August 18, 2014, BPA should have had SOA generation drop armed but did not due to incorrect information on the Study Limits Information Memo (SLIM) which is the document that instructs BPA Dispatch on what System Operating Limits (SOLs) and Remedial Action Schemes (RAS) settings to use for a particular path.

On July 30, 2014 SLIM SOA\_30JUL14\_338 was issued for outages effective August 18-22, 2014. Studies are performed approximately two weeks ahead of the outage week and are based upon conservative assumptions. This SLIM was valid and contained accurate SOLs and RAS arming thresholds.

On August 18, 2014, the SOA transmission path experienced high flows. Based upon then-current system conditions, BPA revised the SOA SOL and issued a new SLIM SOA\_18AUG14\_343 which resulted in a somewhat higher SOL. This SLIM was incorrectly written such that it appeared no RAS was required, when in fact it was. The nature of the incorrect writing was a misunderstanding on the part of the study engineer of the meaning of a standard notation normally used in the section on RAS arming to indicate that RAS is not needed. Dispatch disarmed the RAS and set the new SOL based on this SLIM. BPA operated the SOA path on August 18, 2014 with flows in excess of the path's reliable operating limit.

BPA has identified the following standards as being subject to potential violation:

STANDARD REQUIREMENT REASON

TOP-002-2 R11 Proper RAS Arming levels were not made available to the Transmission Operator.

TOP-004-2 R1 While operating under the Study Limit Information Memo (SLIM #343), BPA was not operating under the established System Operating Limits (SOLs).

TOP-004-2 R4 While operating under the Study Limit Information Memo (SLIM #343), BPA was operating in an unknown operating state.

#### TOP-008-1 R1

While operating under the Study Limit Information Memo (SLIM #343) BPA contributed to an SOL violation on the South of Alston (SOA) path (71) for duration of 10 hours, 7 minutes, 12 seconds. Because BPA did not know it was operating to an incorrect SLIM, BPA did not take immediate steps to relieve the condition which may have included shedding firm load

#### TOP-008-1 R2

While operating under the Study Limit Information Memo (SLIM #343), BPA operated to create an SOL violation for a duration of 10 hours, 7 minutes, 12 seconds. Because BPA did not know it was operating to an incorrect SLIM, BPA did not operate to prevent the likelihood that a disturbance action or inaction would result in an IROL or SOL violation.

#### TOP-008-1 R4

At the time of the event, BPA's Real Time Contingency Analysis (RTCA) tool was not identifying where generation drop was not armed and was operating as if generation drop was always armed. Therefore, BPA did not have sufficient information or analysis tools to determine if an SOL violation was occurring and as a result, BPA had no real-time analysis to immediately mitigate the SOL violation.

# Mitigating Activities:

Description of Mitigating In November 2014, BPA began monitoring during normal business hours Activities and Preventative Monday through Friday excluding holidays, Real time Contingency Analysis Measure: which has the actual RAS arming status as an input.

After discovery of this incorrectly written SLIM, study engineers were educated regarding this mistake in choice of wording, and BPA's SLIM User Guides and the SLIM electronic templates are being updated to clearly define the use of the fields filled in by study engineers.

Have Mitigating Activities No been Completed?

Date Mitigating Activities Completed:

# Impact and Risk Assessment:

Potential Impact to BPS: Moderate

Actual Impact to BPS: Minimal

Description of Potential and Based upon after-the-fact analysis of the actual system conditions, BPA Actual Impact to BPS: determined that the potential impact of the N-1 contingency of the Keeler-Allston or Pearl-Keeler 500 kV lines would have resulted in thermal overloads on PGE's system. The highest loading found in the analysis was on PGE's Trojan-Rivergate 230 kV line (123% of its emergency rating). There were no other overloads above 11% of their emergency rating.

Actual Impact: Neither of the contingencies above occurred.

Risk Assessment of Impact to Risk = Impact\* Probability BPS: At the time: Potential Impact = Moderate Probability = minimal because Keeler-Allston and Pearl-Keeler 500 kV lines do not have a history of frequent trips

Additional Entity Comments:

	Additional Comments	
From	Comment	User Name
No Comme	nts	

Additional Documents					
	From	Document Name	Description	Size in Bytes	
	No Documents				

# Mitigation Plan

# Mitigation Plan Summary

# Registered Entity: Bonneville Power Administration

Mit Plan Code	NERC Violation ID	Requirement	Violation Validated On	Mit Plan Version	
WECCMIT011759	WECC2015015079	TOP-008-1 R4.	09/15/2015	1	
	Mitigation Plan Submitted	On: August 28, 2015			
Mitigation Plan Proposed Completion Date: August 03, 2015					
Actual Co	mpletion Date of Mitigation P	lan: August 03, 2015			
Mitigation Pla					
Mitigation Plan C	ompletion Verified by WECC	On: September 18, 2015			
Mitig	ation Plan Completed? (Yes/N	No): Yes			

#### Compliance Notices

Section 6.2 of the NERC CMEP sets forth the information that must be included in a Mitigation Plan. The Mitigation Plan must include:

(1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.

(2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.

(3) The cause of the Alleged or Confirmed Violation(s).

(4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).

(5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).

(6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.

(7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.

(8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.

(9) Any other information deemed necessary or appropriate.

(10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.

(11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.

• The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.

• This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.

• If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.

• Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.

• Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.

• The user has read and accepts the conditions set forth in these Compliance Notices.

#### **Entity Information**

Identify your organization:

Entity Name: Bonneville Power Administration NERC Compliance Registry ID: NCR05032

> Address: 905 NE 11 Avenue Portland OR 97232

Identify the individual in your organization who will serve as the Contact to the Regional Entity regarding this Mitigation Plan. This person shall be technically knowledgeable regarding this Mitigation Plan and authorized to respond to Regional Entity regarding this Mitigation Plan:

Name: Jenifur Rancourt Title: Supvry Public Utilities Specialist Email: jlrancourt@bpa.gov Phone: 503-230-3672

# Violation(s)

This Mitigation Plan is associated with the following violation(s) of the reliability standard listed below:

Violation ID	Date of Violation	Requirement		
Requirement Description				
WECC2015015079	08/18/2014	TOP-008-1 R4.		
The Transmission Operator shall have sufficient information and analysis tools to determine the cause(s) of SOL violations. This analysis shall be conducted in all operating timeframes. The Transmission Operator shall use the				

results of these analyses to immediately mitigate the SOL violation.

Brief summary including the cause of the violation(s) and mechanism in which it was identified:

On May 6, 2015, while performing analysis on historic South of Allston (SOA), WECC Path 75, curtailment events for the I-5 Reinforcement Project, BPA discovered that on August 18, 2014, BPA should have had SOA generation drop scheme armed but did not due to incorrect information on the Study Limits Information Memo (SLIM). The SLIM is the document that instructs BPA Dispatch on what System Operating Limits (SOLs) and Remedial Action Schemes (RAS) settings to use for a particular path for studied outage conditions.

Relevant information regarding the identification of the violation(s):

P214, P215, P216, P217, P218, P219

#### Plan Details

Identify and describe the action plan, including specific tasks and actions that your organization is proposing to undertake, or which it undertook if this Mitigation Plan has been completed, to correct the violation(s) identified above in Section C.1 of this form:

Revise the "BPA NI-5 Team SLIM User Guide" to clearly define the use of the fields completed by the study engineers on the SLIM document.

Revise the electronic NI-5 SLIM templates to require specific action when "No Gen Drop" is needed for the path SOL.

Provide the timetable for completion of the Mitigation Plan, including the completion date by which the Mitigation Plan will be fully implemented and the violations associated with this Mitigation Plan are corrected:

Proposed Completion date of Mitigation Plan: August 03, 2015

Milestone Activities, with completion dates, that your organization is proposing for this Mitigation Plan:

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
Revise SLIM templates	Revise SLIM templates to require specific action when "No Gen Drop" is needed for the path SOL including some automated population of those fields.	08/03/2015	08/03/2015	Revised the SLIM templates to require specific action when "No Gen Drop" is needed for the path SOL including some automated population of those fields.	No
Revise the "BPA NI-5 Team SLIM User Guide"	Revise the "BPA NI-5 Team SLIM User Guide" to clearly define and provide examples of the proper use of each field when "No Gen Drop" is used.	08/03/2015	07/17/2015	Revised the "BPA NI-5 Team SLIM User Guide" to clearly define and provide examples of the proper use of each field when "No Gen Drop" is used. User guides have been updated to clearly define use of each SLIM field. SLIM templates have been updated to require specific action when "No Gen Drop" is used including the automated population of some fields. These revisions will reduce the	No

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
				likelihood that incorrect information is entered in the SLIM. Notification of changes made to the guide and template were emailed to TOT which consists of the Operations Study engineers, TOD which is the Dittmer Control Center System Dispatchers and TOV which is the Munro Control Center System Dispatchers and BPA outage which is the Outage Coordination Office.	

Additional Relevant Information

#### **Reliability Risk**

#### Reliability Risk

While the Mitigation Plan is being implemented, the reliability of the bulk Power System may remain at higher Risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

No known risks/impacts

#### Prevention

Describe how successful completion of this plan will prevent or minimize the probability further violations of the same or similar reliability standards requirements will occur

Updating the User guides to clearly define each SLIM field will provide a complete and clear reference for the Study Engineer to use when creating SLIMs. Updating SLIM templates to require specific action when "No Gen Drop" is used including the automated population of some fields which standardizes notations. These revisions will reduce the likelihood that incorrect information is entered in the SLIM.

Describe any action that may be taken or planned beyond that listed in the mitigation plan, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements

#### Authorization

An authorized individual must sign and date the signature page. By doing so, this individual, on behalf of your organization:

\* Submits the Mitigation Plan, as presented, to the regional entity for acceptance and approval by NERC, and

\* if applicable, certifies that the Mitigation Plan, as presented, was completed as specified.

Acknowledges:

- 1. I am qualified to sign this mitigation plan on behalf of my organization.
- 2. I have read and understand the obligations to comply with the mitigation plan requirements and ERO remedial action directives as well as ERO documents, including but not limited to, the NERC rules of procedure and the application NERC CMEP.
- 3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

Bonneville Power Administration Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

Authorized Individual Signature:

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

#### Authorized Individual

Name: Jeffrey Cook

Title: VP Transmission Planning and Asset Management

Authorized On: August 25, 2015

# Certification of Mitigation Plan Completion

Submittal of a Certification of Mitigation Plan Completion shall include data or information sufficient for the Regional Entity to verify completion of the Mitigation Plan. The Regional Entity may request additional data or information and conduct follow-up assessments, on-site or other Spot Checking, or Compliance Audits as it deems necessary to verify that all required actions in the Mitigation Plan have been completed and the Registered Entity is in compliance with the subject Reliability Standard. (CMEP Section 6.6)

Registered Entity Name:Bonneville Power AdministrationNERC Registry ID:NCR05032NERC Violation ID(s):WECC2015015079Mitigated Standard Requirement(s):TOP-008-1 R4.Scheduled Completion as per Accepted Mitigation Plan:August 03, 2015Date Mitigation Plan completed:August 03, 2015WECC Notified of Completion on Date:August 28, 2015Entity Comment:Evidence is attached within the uploaded signed completion

certificate

Additional Documents						
From	Document Name	Description	Size in Bytes			
Entity	150827 Signed Mitigation Plan form TOP-008-1 R4_P219.pdf	Attached is BPA's signed mitigation plan	1,014,896			
Entity	150827 Signed Mitigation Plan Completion form TOP-008-1 R4_P219.pdf	Attached is BPA's signed completion certificate	2,239,293			

I certify that the Mitigation Plan for the above named violation(s) has been completed on the date shown above and that all submitted information is complete and correct to the best of my knowledge.

Name: Jeffrey Cook

Title: VP Transmission Planning and Asset Management

Email: jwcook@bpa.gov

Phone: (360) 418-8981

Authorized Signature

Date

(Electronic signature was received by the Regional Office via CDMS. For Electronic Signature Policy see CMEP.)

Please do not REPLY to this message. It was sent from an unattended mailbox and replies are not monitored. If you have a question, send a new message to the OATI Help Desk at support@oati.net.

NERC Registration ID: NCR05032 NERC Violation ID: WECC2015015079 Standard/Requirement: TOP-008-1 R4. Subject: Completed Mitigation Plan Acceptance

The Western Electricity Coordinating Council (WECC) received the Certification of Mitigation Plan Completion submitted by Bonneville Power Administration on 08/27/2015 for the violation of TOP-008-1 R4.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

Note: Effective 04/01/2013, WECC will formally notify registered entities of completed Mitigation Plan acceptances via this email notice. WECC will no longer notify entities by uploading a Notice of Completed Mitigation Plan Acceptance letter to the Enhanced File Transfer (EFT) Server.

#### Thank you, OATI

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[OATI Information - Email Template: MitPlan\_Completed]