NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation		
RFC2018019840	COM-002-4	R3.	Lower	High	7/1/2016 (when the Standard became mandatory and enforceable on the entity)	3/1/2018 (when the entity provided the training to each of its operating personnel who can receive an oral two-party, person- to-person Operating Instruction)	Compliance Audit	3/1/2018	10/21/2019		
Description of the Violat document, each violatio a "violation," regardless posture and whether it v	ion (For purpose n at issue is desci of its procedural vas a possible, o	s of this ribed as r	During a Compliance Audit conducted from April 30, 2018 through May 8, 2018, ReliabilityFirst determined that the entity, as a Distribution Provider, was in violation of COM-002-4 R3. The entity did not conduct initial training for each of its operating personnel who can receive an oral two-party, person-to-person Operating Instruction prior to that individual operator receiving an oral two-party, person-to-person Operating Instruction prior to that individual operator receiving an oral two-party, person-to-person Operating Instruction date for COM-002-4 R3 was								
confirmed violation.)			During the Compliance Aud receives instructions from operator confirms it. The F established communication This violation involves the misunderstanding is a root	dit, the entity informed the C the FE Dispatcher. The FE op E Operator also has written n process with FE negated th management practices of we cause of this violation as it l	Derating instructions prior to receiving Compliance Audit Team that all oral two perator then instructs the entity personr switching orders that are used and follo he need for training of its own personne orkforce management and grid operatio led to the entity not performing the trai	The required training on March 1, 201 -party, person-to-person Operating In- nel to perform the operation on the en wed at the direction of the FE Dispatch I. I. I. I. The entity did not understand that ning for operating personnel.	8. structions are provided w tity equipment after the ner. The entity misinterp it needed to provide ini	with a FirstEnergy (FE entity repeats the in reted the Standard a tial training to its ope	) operator on-site who struction and the FE nd believed that its rating personnel. That		
Risk Assessment			This violation posed a mod operating personnel can in duration. The risk is partia and confirmed. Although e part communication in pra occurred.	erate risk and did not pose a crease the chance of errors Ily reduced because entity p ntity personnel had not bee ctice when receiving Operat	a serious or substantial risk to the reliab when receiving operating instructions a personnel only receive Operating Instruc n formally trained on how to receive an ing Instructions, thereby reducing the ri	ility of the bulk power system (BPS). T nd that could cause harm to the BPS. T tions in the presence of FE operators v oral two-party, person-to-person Ope sk. ReliabilityFirst also notes that the e	he risk posed by this vio he risk is not minimal be vith written switching or rating Instruction, the en entity only has a peak loa	lation is that lack of c ecause of the extende ders who ensured ins ntity indicated that po Id of 68 MW. No har	ommunication training to ed almost two year structions were repeated ersonnel performed three- m is known to have		
Mitigation			<ol> <li>To mitigate this violation, t</li> <li>trained the three individed its procedure</li> <li>Operating Instruction.</li> </ol>	he entity: iduals that can receive an or to ensure that all future per	al two-party, person-to-person Operati sonnel will get training on how to receiv	ng Instruction; and /e an oral two-party, person-to-person	Operating Instruction b	efore they are put in	to a position to receive an		
Other Factors			ReliabilityFirst reviewed the ReliabilityFirst considered t discovery, ReliabilityFirst d	e entity's internal complianc he entity's compliance histo etermined that sending a m	ce program and considered it to be a new ory and determined there were no relev essage via a Settlement Agreement inst	utral factor in the penalty determination ant instances of noncompliance. Given ead of an FFT to incent compliance was	on. • the long duration of bo s an important step.	th violations involved	l, and the method of		

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation
RFC2018019839	PRC-005-2(i)	R3	High	Severe	10/1/2015 (when the Standard became mandatory and enforceable on the entity)	7/13/2018	Compliance Audit	7/13/2018	TBD
Description of the Violation (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, or confirmed violation.] The entity has one set of batteries and one charger that are subject to compliance with PRC-005-6. Although the entity performed quarterly tests (The entity inspected the batteries quar following: voltage of every cell in the battery, and specific gravity of any cell which has voltage outside the range of 2.12 and 2.27 volts.) and monthly tests (The entity inspected the batteries the following: float charge voltage at the battery terminal, float charge voltage at the charger, float current, electrolyte levels, pilot cell voltage, electrolyte temperature, evidence of crack evidence of corrosion of terminals, rack or connectors.) on the protection system equipment, the entity did not perform all required testing. The entity did not perform the following four PRC-005-6 Table 1-4: (a) Unintentional ground test (must be conducted every four months); (b) Battery terminal connection resistance test (must be conducted every 18 months); (c) Bat unit to unit connections resistance test (must be conducted every 18 months); and (d) Load test (the entity could not provide evidence of the every 18 months) is to properly schedule battery testing to comply with the standard. Grid operations. Planning and work management is involved because by misunderstanding PRC-002 to properly schedule battery testing to comply with the standard. Grid operations is involved because a failure to update arises from poor planning and is a roor violation.						2(i) R3. ries quarterly for the he batteries monthly for e of cracks or leaking, and ving four tests required by ); (c) Battery intercell or six years load test). PRC-005 the entity failed lity to function properly. is a root cause of this			
<b>Risk Assessment</b> This violation posed a moderate risk and did not pose a serious or substantial risk to the reliability of the bulk power system (BPS) The risk posed by this violation is that maintenance and testing activities for the batteries and chargers creates the possibility that they will not function properly when needed, which could negatively affect to The risk is not minimal because of the extended almost three-year duration. The risk is partially reduced because the entity was performing quarterly tests and monthly equipment and that testing would likely indicate to the entity any battery degradation before failure occurred. ReliabilityFirst also notes that the entity only has a peak let to have occurred.						tion is that not comp vely affect the reliabl nd monthly tests on t nas a peak load of 68	leting all of the required le operation of the BPS. he protection system MW. No harm is known		
Mitigation			<ol> <li>To mitigate this violation, the entity:</li> <li>1) performed all of the overdue testing: unintentional ground test, battery terminal connection resistance test, battery intercell or unit to unit connections resistance test, and load test; an</li> <li>2) updated its Protection System Maintenance Program with the new tests required by PRC-005-6, Table 1-4 to prevent recurrence.</li> </ol>						oad test; and
Other Factors       ReliabilityFirst reviewed the entity's internal compliance program and considered it to be a neutral factor in the penalty determination.         ReliabilityFirst considered the entity's compliance history and determined there were no relevant instances of noncompliance.									

Bonneville Power Admini	istration (BPA) –	NCR05032			NOC-2657				No Penalty		
NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation		
WECC2017017579	TOP-002-2.1b	R1	Medium	High	11/30/2016 (when the work permit was issued)	11/30/2016 (when the work permit was released)	Self-Report	4/1/2017	1/25/2018		
Description of the Viola	ation (For purpos	es of this	On May 18, 2017, BPA su	bmitted a Self-Report stating	g, as a Transmission Operator (TOP),	, it had a potential noncompliance w	ith TOP-002-2.1b R1.				
document, each violati	on at issue is des	cribed as a									
whether it was a possible, or confirmed violation.)			implement the published Study Limit Information Memo (SLIM), as is required by BPA's Operating Plan during the outage. The SLIM for this outage condition specified that a 650 MW System Operating Limit (SOL) should be set at the one boundary's flowgate. The Dispatcher, however, implemented a restricted generation limit of 650 MW at the boundary generation station. BPA did not lower the boundary SOL from 1300 MW to 650 MW. This mistake resulted in BPA operating a boundary SOL that was 650 MW higher than the setting should have been. As a result, the boundary RAS was operated in a degraded state. In addition, BPA had not included the boundary RAS in the list of Special Protection Systems that were incorporated into the Coordinated Outage System and therefore not reported to BPA's RC.								
			The outage work that rest the guidance was not app in the control system, the there were SOL exceedar	ulted in the boundary RAS is dicable. This misunderstandi a alarm monitoring did not a nces.	; usually completed one line at a time ing between the SLIM and DSO resul lert to three SOL exceedances betwe	e. When the SLIM was issued in this Ited in BPA not manually entering the een 2:15 PM and 2:45 PM on Novem	case, the Dispatcher also r e SOL into the control syst ber 30, 2016. Due to the l	reviewed a Dispatch S em. Because the low lack of alarms, the Dis	tanding Order (DSO) but er SOL was not entered spatcher did not realize		
Bick According			The root cause of the viol operating instructions he 002-2.1b R1. As a result, F a. did not correctly i b. did not provide it c. did not operate w d. did not inform its e. did not provide it i. the corre ii. the notifi correct th iii. boundary f. did not notify its 0 R1. These violations began of day of noncompliance wi	ations associated with TOP-( should follow during an out 3PA: implement its Operating Plat s neighboring RC and TOPs w vithin the SOLs during this ou RC that the RAS was operat s RC with the following, as su ct boundary SOL; cations of SOL exceedance a ne problems; / RAS being operated in a de RC of the SOL exceedances r n November 30, 2016 at 8:30 th each these Standards and	002-2.1b R1, TOP-002-2.1b R4, TOP- agebetween the SLIM and the DSO n using the SLIM, as required by TOP with the correct SOL because it had b utage, as required by TOP-004-2 R1; ed in a degraded state, as required b pecified in its RC Data Specification: and actions taken because BPA did n egraded state, as required by IRO-010 nor its actions to resolve them due to 0 AM, when the work permit was iss d Requirements.	004-2 R1, TOP-007-0 R1, and IRO-01 D. For the violation associated with I P-002-2.1b R1; been operating with the incorrect ca by IRO-005-3.1a R9; ot know the correct flow over the bo 0-1a R3; and o the lack of alarms that would have ued, and ended on November 30, 20	0-1a R3 was attributed to RO-005-3.1a R9, the root o lculation, as required by T oundary path, nor did BPA alerted BPA that there wa 016 at 3:59 PM, when the v	the confusion of the cause was attributed OP-002-2.1b R4; report on the actions as an SOL exceedance work permit was rele	Dispatcher as to which to BPA's violation of TOP- as it should have taken to , as required by TOP-007- ased for a total of one		
Risk Assessment			<ul> <li>WECC determined these values</li> <li>a. maintain a set of Transmission Operation as required by TC</li> <li>b. coordinate (wher with its Reliability</li> <li>c. have an Operation</li> <li>d. inform its Reliability</li> <li>e. inform the Reliability</li> <li>that may have an shall be aware of f. provide data and</li> </ul>	violations in aggregate posed current plans that are design erator shall be responsible for )P-002-2.1b R1; re confidentiality agreements / Coordinator, so that normainal Planning Analysis that wility Coordinator when an IRC wility Coordinator of the statute inter-BA, or inter-Transmiss the impact of the operation information, as specified, to	d a moderate risk and did not pose a ned to evaluate options and set proc or using available personnel and syst 's allow) its current-day, next-day, an al Interconnection operation will pro vill allow it to assess whether its plan DL or SOL has been exceeded and th us of the Special Protection System i sion Operator impact (e.g., could por o of that Special Protection System o the Reliability Coordinator(s) with v	a serious and substantial risk to the r cedures for reliable operation throug tem equipment to implement these p and seasonal planning and operations beeed in an orderly and consistent ma ned operations for the next day with e actions being taken to return the s ncluding any degradation or potentia tentially affect transmission flows re- n inter-area flows, as required by IRC which it has a reliability relationship,	enability of the BPS. In the gh a reasonable future tim plans to ensure that interc with neighboring Balancin anner, as required by TOP- nin its TOP Area will exceed ystem to within limits, as r al failure to operate as exp sulting in a SOL or IROL vic D-005-3.1a R9; and as required by IRO-010-1a	ese instances, BPA fail e period. In addition, connected system reling Authorities and Tra -002-2.1b R4; d any of its SOLs, as re required by TOP-007- pected, whenever a Sp plation) is armed, the a R3.	ed to: each BA and ability will be maintained, nsmission Operators and equired by TOP-002-4 R1; 0 R1; Decial Protection System Reliability Coordinators		

Bonneville Power Administration (BPA) – NCR05032	NOC-2657
	In this case, BPA was already operating its system with the RAS in a degraded state. If BPA were to have lost another line, the RAS coul remaining lines entirely. Further, BPA implemented weak preventative controls. However, BPA implemented effective controls, this iss days after the issue occurred, on December 9, 2016. As compensation, instead of setting the correct SOL, BPA instructed the main gen This action by BPA reduced the risk because instead of changing the SOL to address its mistake, it instructed the main generation static path without changing the SOL.
Mitigation	To mitigate this violation, BPA:
	<ol> <li>BPA's Dispatch Manager sent a 10-point message to all dispatchers and its RC specifying the proper implementation of a SLIM to the lack of Protection System documentation; and</li> <li>as of April 1, 2017, with new versions of the Standards, TOPs were no longer required to notify the RC of SOLs on internal path were trained on a new use of SLIMs as part of the transition efforts to the new TOP and IRO Standards including how to impler entities. The additional guidance provided through this training was specifically designed to avoid misunderstandings of when DSO.</li> </ol>
Other Factors	WECC reviewed BPA's internal compliance program (ICP) and considered it to be a neutral factor.
	On August 22, 2014, in Southwestern Power Administration (SWPA) v. Federal Energy Regulatory Commission (FERC), the United State unanimously ruled that FERC, and by extension, the North American Electric Reliability Corporation (NERC) and the Regional Entities it against federal governmental entities such as SWPA. BPA is a federal governmental entity, and WECC is bound to follow SWPA v. FERC no monetary penalty for this violation.
	WECC considered BPA's TOP-002-2.1b R1 compliance history to be an aggravating factor in determining the disposition track, specifica

Id have caused a loss of load and potentially opened the sue was discovered during a routine monitoring activity nine leration station for these lines to limit its generation to 650 MW. on to limit its generation which then lowered the flows on the

for the boundary including the boundary RAS that was related

ns nor status changes in RAS Schemes. As well, the Dispatchers ment them and what to communicate to the RC and other to follow guidance in a SLIM, rather than that provided in a

es Court of Appeals for the District of Columbia Circuit oversees, such as WECC, could not impose monetary penalties in the resolution of this matter. Therefore, WECC has assessed

ally NERC Violation ID WECC2015015074.

Bonneville Power Admin	istration (BPA) – N	NCR05032			NOC-2657				No Penalty
NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation
WECC2017017591	TOP-002-2.1b	R4	Medium	Moderate	11/30/2016 (when the work permit was issued)	11/30/2016 (when the work permit was released)	Self-Report	4/1/2017	12/27/2017
Description of the Viola document, each violati "violation," regardless whether it was a possil	ation (For purpos on at issue is des of its procedural ole, or confirmed	es of this cribed as a posture and violation.)	On May 18, 2017, BPA sub On November 30, 2016, B implement the published	pmitted a Self-Report stating PA was implementing an ou Study Limit Information Me	g, as a Transmission Operator (TOP) utage as a part of the boundary Ren	), it had a potential noncompliance with nedial Action Scheme (RAS), which ent Operating Plan during the outage. The	th TOP-002-2.1b R4. cailed line loss logic for	three separate lines. BP	'A did not correctly
			Operating Limit (SOL) show lower the boundary SOL fi RAS was operated in a deg therefore not reported to	uld be set at the one bound rom 1300 MW to 650 MW. graded state. In addition, BF BPA's RC.	ary's flowgate. The Dispatcher, hov This mistake resulted in BPA operat PA had not included the boundary R	vever, implemented a restricted gener ing a boundary SOL that was 650 MW AS in the list of Special Protection Sys	ration limit of 650 MW higher than the setting tems that were incorpo	at the boundary genera g should have been. As a prated into the Coordina	tion station. BPA did not result, the boundary ated Outage System and
			The outage work that resu the guidance was not app in the control system, the there were SOL exceedan	ulted in the boundary RAS is licable. This misunderstandi alarm monitoring did not a ces.	s usually completed one line at a tin ing between the SLIM and DSO resu lert to three SOL exceedances betw	ne. When the SLIM was issued in this o ulted in BPA not manually entering the veen 2:15 PM and 2:45 PM on Novemb	case, the Dispatcher als SOL into the control so per 30, 2016. Due to th	o reviewed a Dispatch S ystem. Because the low e lack of alarms, the Dis	tanding Order (DSO) but er SOL was not entered spatcher did not realize
			The root cause of the viola operating instructions he 002-2.1b R1. As a result, E a. did not correctly i b. did not provide its c. did not operate w d. did not inform its e. did not provide its i. the corre	ations associated with TOP- should follow during an out SPA: mplement its Operating Pla s neighboring RC and TOPs w ithin the SOLs during this ou RC that the RAS was operat s RC with the following, as s ct boundary SOL;	002-2.1b R1, TOP-002-2.1b R4, TOP ragebetween the SLIM and the DS n using the SLIM, as required by TO with the correct SOL because it had utage, as required by TOP-004-2 R1 red in a degraded state, as required pecified in its RC Data Specification	P-004-2 R1, TOP-007-0 R1 and IRO-010 O. For the violation associated with IR PP-002-2.1b R1; been operating with the incorrect cal- ; by IRO-005-3.1a R9; :	-1a R3 was attributed t RO-005-3.1a R9, the roc culation, as required by	o the confusion of the E ot cause was attributed t 7 TOP-002-2.1b R4;	Dispatcher as to which to BPA's violation of TOP-
			ii. the notific correct th iii. boundary f. did not notify its F 0 R1.	cations of SOL exceedance a e problems; RAS being operated in a de RC of the SOL exceedances r	and actions taken because BPA did r graded state, as required by IRO-01 nor its actions to resolve them due 1	not know the correct flow over the bo LO-1a R3; and to the lack of alarms that would have a	undary path, nor did Bl alerted BPA that there	PA report on the actions was an SOL exceedance	it should have taken to , as required by TOP-007-
			These violations began on day of noncompliance of the second seco	November 30, 2016 at 8:30 each these Standards and Re	O AM, when the work permit was is equirements.	sued, and ended on November 30, 20	16 at 3:59 PM, when th	e work permit was relea	ased for a total of one
Risk Assessment			<ul> <li>WECC determined that th</li> <li>a. maintain a set of a responsible for us R1;</li> <li>b. coordinate (where Coordinator, so th</li> <li>c. have an Operation</li> <li>d. inform its Reliabil</li> <li>e. inform the Reliab</li> <li>that may have an the impact of the</li> </ul>	ese violations in aggregate current plans that are design ing available personnel and e confidentiality agreement hat normal Interconnection hal Planning Analysis that w ity Coordinator when an IRC ility Coordinator of the statu inter-BA, or inter-TOP impa operation of that Special Pr	posed a moderate risk and did not p ned to evaluate options and set pro system equipment to implement t operation will proceed in an orderly ill allow it to assess whether its plan DL or SOL has been exceeded and th us of the Special Protection System of the Special Protection System ot (e.g., could potentially affect tran-	pose a serious and substantial risk to t ocedures for reliable operation throug hese plans to ensure that interconnec nd seasonal planning and operations w y and consistent manner, as required l nned operations for the next day with he actions being taken to return the sy including any degradation or potentia nsmission flows resulting in a SOL or IF s, as required by IRO-005-3.1a R9; and	he reliability of the BPS h a reasonable future t ted system reliability w with neighboring Balan by TOP-002-2.1b R4; in its TOP Area will exco ystem to within limits, a l failure to operate as e ROL violation) is armed	5. In these instances, BP, ime period. In addition, ill be maintained, as rec cing Authorities and TO eed any of its SOLs, as re us required by TOP-007- expected, whenever a Sp , the Reliability Coordina	A failed to: each BA and TOP shall be auired by TOP-002-2.1b Ps and with its Reliability equired by TOP-002-4 R1; 0 R1; pecial Protection System ators shall be aware of

Western Electricity Coordinating Council (WECC)

Bonneville Power Administration (BPA) – NCR05032	NOC-2657
	f. provide data and information, as specified, to the Reliability Coordinator(s) with which it has a reliability relationship, as requir
	In this case, BPA was already operating its system with the RAS in a degraded state. If BPA were to have lost another line, the RAS coul remaining lines entirely. Further, BPA implemented weak preventative controls. However, BPA implemented effective controls, this iss days after the issue occurred, on December 9, 2016. As compensation, instead of setting the correct SOL, BPA instructed the main generation by BPA reduced the risk because instead of changing the SOL to address its mistake, it instructed the main generation static path without changing the SOL.
Mitigation	To mitigate this violation, BPA:
	<ol> <li>BPA's Dispatch Manager sent a 10-point message to all dispatchers and its RC specifying the proper implementation of a SLIM to the lack of Protection System documentation; and</li> <li>as of April 1, 2017, with new versions of the Standards, TOPs were no longer required to notify the RC of SOLs on internal path were trained on a new use of SLIMs as part of the transition efforts to the new TOP and IRO Standards including how to impler entities. The additional guidance provided through this training was specifically designed to avoid misunderstandings of when DSO.</li> </ol>
Other Factors	WECC reviewed BPA's internal compliance program (ICP) and considered it to be a neutral factor.
	On August 22, 2014, in Southwestern Power Administration (SWPA) v. Federal Energy Regulatory Commission (FERC), the United State unanimously ruled that FERC, and by extension, the North American Electric Reliability Corporation (NERC) and the Regional Entities it against federal governmental entities such as SWPA. BPA is a federal governmental entity, and WECC is bound to follow SWPA v. FERC no monetary penalty for this violation.
	WECC considered BPA's TOP-0021b R4 compliance history to be an aggravating factor in determining the disposition track specifically WECC2016015703.

red by IRO-010-1a R3.

Id have caused a loss of load and potentially opened the sue was discovered during a routine monitoring activity nine neration station for these lines to limit its generation to 650 MW. fon to limit its generation which then lowered the flows on the

for the boundary including the boundary RAS that was related

ns nor status changes in RAS Schemes. As well, the Dispatchers ment them and what to communicate to the RC and other to follow guidance in a SLIM, rather than that provided in a

es Court of Appeals for the District of Columbia Circuit oversees, such as WECC, could not impose monetary penalties in the resolution of this matter. Therefore, WECC has assessed

y, NERC Violation IDs WECC2012009943, WECC2012011098 and

Sonneville Power Admi	inistration (BPA) –	NCR05032			NOC-2657				No Penalty
NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation
WECC2017017588	TOP-004-2	R1	Medium	Severe	11/30/2016 (when the work permit was issued)	11/30/2016 (when the work permit was released)	Self-Report	4/1/2017	12/27/2017
Description of the Vio document, each viola "violation," regardles whether it was a poss	blation (For purpos ation at issue is des so of its procedural sible, or confirmed	ses of this scribed as a posture and violation.)	On May 18, 2017, BPA su On November 30, 2016, E implement the published Operating Limit (SOL) sho lower the boundary SOL f RAS was operated in a de therefore not reported to The outage work that res the guidance was not app in the control system, the there were SOL exceedan The root cause of the viol operating instructions he 002-2.1b R1. As a result, I a. did not correctly b. did not provide it c. did not provide it c. did not provide it i. ti ii. ti f. did not notify its 0 R1.	bmitted a Self-Report stating BPA was implementing an ou Study Limit Information Me buld be set at the one bound from 1300 MW to 650 MW. graded state. In addition, BF b BPA's RC. ulted in the boundary RAS is blicable. This misunderstandic a larm monitoring did not a nees. lations associated with TOP- should follow during an out BPA: implement its Operating Pla is neighboring RC and TOPs w vithin the SOLs during this out is RC that the RAS was operat is RC with the following, as s he correct boundary SOL; he notifications of SOL exceed aken to correct the problem boundary RAS being operated RC of the SOL exceedances r	g, as a Transmission Operator (TOP stage as a part of the boundary Rer mo (SLIM), as is required by BPA's ary's flowgate. The Dispatcher, how This mistake resulted in BPA opera 'A had not included the boundary F usually completed one line at a tir ing between the SLIM and DSO resu lert to three SOL exceedances betw 002-2.1b R1, TOP-002-2.1b R4, TOF agebetween the SLIM and the DS n using the SLIM, as required by TC with the correct SOL because it had utage, as required by TOP-004-2 R1 ed in a degraded state, as required pecified in its RC Data Specification edance and actions taken because I s; d in a degraded state, as required by the or its actions to resolve them due	), it had a potential noncompliance w nedial Action Scheme (RAS), which er Operating Plan during the outage. The wever, implemented a restricted gene ting a boundary SOL that was 650 MV RAS in the list of Special Protection Sy ne. When the SLIM was issued in this ulted in BPA not manually entering th veen 2:15 PM and 2:45 PM on Novem P-004-2 R1, TOP-007-0 R1 and IRO-014 O. For the violation associated with I DP-002-2.1b R1; I been operating with the incorrect ca ; I by IRO-005-3.1a R9; :: BPA did not know the correct flow over py IRO-010-1a R3; and to the lack of alarms that would have	vith TOP-004-2 R1. ntailed line loss logic for e SLIM for this outage of eration limit of 650 MW V higher than the settir stems that were incorp case, the Dispatcher allow the SOL into the control solution aber 30, 2016. Due to to 0-1a R3 was attributed IRO-005-3.1a R9, the ro cloulation, as required to alloulation, as required to alloulation as required to alloulation as required to alloulation as required to alloulation as required to the boundary path, ro	three separate lines. BF condition specified that a d' at the boundary genera ag should have been. As orated into the Coordina so reviewed a Dispatch S system. Because the low he lack of alarms, the Dis to the confusion of the I ot cause was attributed y TOP-002-2.1b R4; hor did BPA report on the was an SOL exceedance	A did not correctly 650 MW System tion station. BPA did not result, the boundary ted Outage System and itanding Order (DSO) but rer SOL was not entered patcher did not realize Dispatcher as to which to BPA's violation of TOP-
Risk Assessment			<ul> <li>WECC determined that the a. maintain a set of responsible for us R1;</li> <li>b. coordinate (where Coordinator, so the c. have an Operation d. inform its Reliabiline. inform the Reliability that may have an the impact of the the that may have an the impact of the that the the that the that</li></ul>	each these Standards and Re nese violations in aggregate current plans that are design sing available personnel and re confidentiality agreement hat normal Interconnection nal Planning Analysis that w lity Coordinator when an IRC ility Coordinator of the statu inter-BA, or inter-TOP impa	posed a moderate risk and did not ned to evaluate options and set pro system equipment to implement t s allow) its current-day, next-day, a operation will proceed in an orderl ill allow it to assess whether its pla DL or SOL has been exceeded and t us of the Special Protection System ct (e.g., could potentially affect tra	pose a serious and substantial risk to ocedures for reliable operation throug hese plans to ensure that interconne- and seasonal planning and operations y and consistent manner, as required nned operations for the next day with he actions being taken to return the s including any degradation or potenti- nsmission flows resulting in a SOL or	the reliability of the BP gh a reasonable future cted system reliability v with neighboring Balan by TOP-002-2.1b R4; hin its TOP Area will exc system to within limits, al failure to operate as IROL violation) is armed	S. In these instances, BP time period. In addition, vill be maintained, as rec noting Authorities and TO seed any of its SOLs, as re as required by TOP-007- expected, whenever a S I, the Reliability Coordin	A failed to: each BA and TOP shall be quired by TOP-002-2.1b Ps and with its Reliability equired by TOP-002-4 R1; 0 R1; pecial Protection System ators shall be aware of
			f. provide data and	information, as specified. to	the Reliability Coordinator(s) with	which it has a reliability relationship.	, as required by IRO-01	)-1a R3.	

Bonneville Power Administration (BPA) – NCR05032	NOC-2657
	In this case, BPA was already operating its system with the RAS in a degraded state. If BPA were to have lost another line, the RAS could remaining lines entirely. Fur Further, BPA implemented weak preventative controls. However, BPA implemented effective controls, this days after the issue occurred, on December 9, 2016. As compensation, instead of setting the correct SOL, BPA instructed the main generation static This action by BPA reduced the risk because instead of changing the SOL to address its mistake, it instructed the main generation static path without changing the SOL.
Mitigation	To mitigate this violation, BPA:
	<ol> <li>BPA's Dispatch Manager sent a 10-point message to all dispatchers and its RC specifying the proper implementation of a SLIM to the lack of Protection System documentation; and</li> <li>as of April 1, 2017, with new versions of the Standards, TOPs were no longer required to notify the RC of SOLs on internal path were trained on a new use of SLIMs as part of the transition efforts to the new TOP and IRO Standards including how to impler entities. The additional guidance provided through this training was specifically designed to avoid misunderstandings of when DSO.</li> </ol>
Other Factors	WECC reviewed BPA's internal compliance program (ICP) and considered it to be a neutral factor.
	On August 22, 2014, in Southwestern Power Administration (SWPA) v. Federal Energy Regulatory Commission (FERC), the United State unanimously ruled that FERC, and by extension, the North American Electric Reliability Corporation (NERC) and the Regional Entities it against federal governmental entities such as SWPA. BPA is a federal governmental entity, and WECC is bound to follow SWPA v. FERC no monetary penalty for this violation.
	WECC considered BPA's TOP-004-2 R1 compliance history to be an aggravating factor in determining the disposition track specifically, I

Id have caused a loss of load and potentially opened the is issue was discovered during a routine monitoring activity nine peration station for these lines to limit its generation to 650 MW. on to limit its generation which then lowered the flows on the

for the boundary including the boundary RAS that was related

hs nor status changes in RAS Schemes. As well, the Dispatchers ment them and what to communicate to the RC and other to follow guidance in a SLIM, rather than that provided in a

es Court of Appeals for the District of Columbia Circuit oversees, such as WECC, could not impose monetary penalties in the resolution of this matter. Therefore, WECC has assessed

### NERC Violation IDs WECC2012009942 and WECC2015015075.

Bonneville Power Admi	nistration (BPA) – I	NCR0503	2		NOC-2657				No Penalty
NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation
WECC2017017589	TOP-007-0	R1	High	Severe	11/30/2016 (when the work permit was issued)	11/30/2016 (when the work permit was released)	Self-Report	4/1/2017	12/21/2017
Description of the Viola document, each violati a "violation," regardles posture and whether it confirmed violation.)	ation (For purpose on at issue is desc ss of its procedural : was a possible, o	s of this ribed as r	On May 18, 2017, BPA subr On November 30, 2016, BP the published Study Limit In should be set at the one bo from 1300 MW to 650 MW state. In addition, BPA had The outage work that resul guidance was not applicabl control system, the alarm r SOL exceedances. The root cause of the violar operating instructions he s 2.1b R1. As a result, BPA: a. did not correctly in b. did not provide its c. did not operate wir d. did not inform its F e. did not provide its i. the ii. the f. did not notify its Re	nitted a Self-Report stating, A was implementing an outa nformation Memo (SLIM), as undary's flowgate. The Disp . This mistake resulted in BP not included the boundary F ted in the boundary RAS is u e. This misunderstanding be nonitoring did not alert to th tions associated with TOP-00 hould follow during an outag nplement its Operating Plan neighboring RC and TOPs wi thin the SOLs during this out RC that the RAS was operate RC with the following, as spe e correct boundary SOL; e notifications of SOL exceec correct the problems; undary RAS being operated C of the SOL exceedances nc November 30, 2016 at 8:30.	as a Transmission Operator (TOP), it has age as a part of the boundary Remedial is is required by BPA's Operating Plan du patcher, however, implemented a restrice PA operating a boundary SOL that was 65 RAS in the list of Special Protection Syste usually completed one line at a time. Whether the SLIM and DSO resulted in BP hree SOL exceedances between 2:15 PW D2-2.1b R1, TOP-002-2.1b R4, TOP-004-2 gebetween the SLIM and the DSO. For using the SLIM, as required by TOP-002 ith the correct SOL because it had been cage, as required by TOP-004-2 R1; d in a degraded state, as required by IRO- ecified in its RC Data Specification: dance and actions taken because BPA did in a degraded state, as required by IRO- or its actions to resolve them due to the AM, when the work permit was issued, a ents.	d a potential noncompliance with TOP Action Scheme (RAS), which entailed I ring the outage. The SLIM for this outa sted generation limit of 650 MW at the 50 MW higher than the setting should ems that were incorporated into the C nen the SLIM was issued in this case, th A not manually entering the SOL into the 1 and 2:45 PM on November 30, 2016. 2 R1, TOP-007-0 R1 and IRO-010-1a R3 the violation associated with IRO-005 -2.1b R1; operating with the incorrect calculatio D-005-3.1a R9; d not know the correct flow over the b 010-1a R3; and lack of alarms that would have alerted and ended on November 30, 2016 at 3	P-007-0 R1. ine loss logic for three se age condition specified t e boundary generation si have been. As a result, t oordinated Outage Syste ne Dispatcher also review the control system. Beca Due to the lack of alarr was attributed to the co 5-3.1a R9, the root cause on, as required by TOP-00 boundary path, nor did B d BPA that there was an i s:59 PM, when the work	eparate lines. BPA did hat a 650 MW System tation. BPA did not lov the boundary RAS was em and therefore not wed a Dispatch Standi ause the lower SOL wans, the Dispatcher did onfusion of the Dispat was attributed to BPA D2-2.1b R4; PA report on the action SOL exceedance, as re- permit was released to	not correctly implement of Operating Limit (SOL) wer the boundary SOL is operated in a degraded reported to BPA's RC. Ing Order (DSO) but the as not entered in the inot realize there were incher as to which A's violation of TOP-002-
Risk Assessment			<ul> <li>WECC determined that the</li> <li>a. maintain a set of curesponsible for usin</li> <li>b. coordinate (where Coordinator, so that c. have an Operation d. inform its Reliabilit</li> <li>e. inform the Reliabilit may have an interthe operation of the f. provide data and in</li> <li>In this case, BPA was alread lines entirely. Further BPA</li> </ul>	se violations in aggregate po urrent plans that are designed in available personnel and so confidentiality agreements a it normal Interconnection of al Planning Analysis that will y Coordinator when an IROL ity Coordinator of the status BA, or inter-TOP impact (e.g in Special Protection System information, as specified, to t	besed a moderate risk and did not pose a ed to evaluate options and set procedur ystem equipment to implement these p allow) its current-day, next-day, and sea peration will proceed in an orderly and o allow it to assess whether its planned o or SOL has been exceeded and the acti of the Special Protection System includ c, could potentially affect transmission f n on inter-area flows, as required by IRO the Reliability Coordinator(s) with which the RAS in a degraded state. If BPA wer	serious and substantial risk to the reli es for reliable operation through a rea lans to ensure that interconnected sys isonal planning and operations with ne consistent manner, as required by TOP operations for the next day within its T ons being taken to return the system t ing any degradation or potential failur lows resulting in a SOL or IROL violatio 0-005-3.1a R9; and it has a reliability relationship, as requ e to have lost another line, the RAS co s compensation instead of setting the	ability of the BPS. In the isonable future time per stem reliability will be m eighboring Balancing Aut P-002-2.1b R4; OP Area will exceed any to within limits, as requin re to operate as expected on) is armed, the Reliabil uired by IRO-010-1a R3.	se instances, BPA faile iod. In addition, each aintained, as required thorities and TOPs and of its SOLs, as require red by TOP-007-0 R1; d, whenever a Special ity Coordinators shall	ed to: BA and TOP shall be d by TOP-002-2.1b R1; d with its Reliability ed by TOP-002-4 R1; Protection System that be aware of the impact of opened the remaining ion station for these lines

Bonneville Power Administration (BPA) – NCR05032	NOC-2657
	limit its generation to 650 MW. This action by BPA reduced the risk because instead of changing the SOL to address its mistake, it instructed the lowered the flows on the path without changing the SOL.
Mitigation	To mitigate this violation, BPA:
	1) BPA's Dispatch Manager sent a 10-point message to all dispatchers and its RC specifying the proper implementation of a SLIM for the lack of Protection System documentation; and
	<ol> <li>as of April 1, 2017, with new versions of the Standards, TOPs were no longer required to notify the RC of SOLs on internal paths nor st trained on a new use of SLIMs as part of the transition efforts to the new TOP and IRO Standards including how to implement them ar additional guidance provided through this training was specifically designed to avoid misunderstandings of when to follow guidance ir</li> </ol>
Other Factors	WECC reviewed BPA's internal compliance program (ICP) and considered it to be a neutral factor. On August 22, 2014, in Southwestern Powe Commission (FERC), the United States Court of Appeals for the District of Columbia Circuit unanimously ruled that FERC, and by extension, the the Regional Entities it oversees, such as WECC, could not impose monetary penalties against federal governmental entities such as SWPA. BP follow SWPA v. FERC in the resolution of this matter. Therefore, WECC has assessed no monetary penalty for this violation.
	WECC considered BPA's TOP-007-0 R1 compliance history to be an aggravating factor in determining the disposition track specifically, NERC Vi

he main generation station to limit its generation which then

boundary including the boundary RAS that was related to the

tatus changes in RAS Schemes. As well, the Dispatchers were nd what to communicate to the RC and other entities. The n a SLIM, rather than that provided in a DSO.

er Administration (SWPA) v. Federal Energy Regulatory e North American Electric Reliability Corporation (NERC) and PA is a federal governmental entity, and WECC is bound to

violation ID WECC2012009941.

Bonneville Power Administration	(BPA)	– NCR05032
---------------------------------	-------	------------

Bonneville Power Adminis	stration (BPA) – N	ICR05032			NOC-2657				No Penalty
NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation
WECC2017017584	IRO-005-3.1a	R9	Lower	Severe	11/30/2016 (when the work permit was issued)	11/30/2016 (when the work permit was released)	Self-Report	4/1/2017	12/14/2017
Description of the Violat document, each violatio a "violation," regardless posture and whether it confirmed violation.)	tion (For purpose on at issue is desc s of its procedura was a possible, o	es of this ribed as I or	On May 18, 2017, BPA sub On November 30, 2016, BF the published Study Limit I should be set at the one bo from 1300 MW to 650 MW state. In addition, BPA had The outage work that resu guidance was not applicab control system, the alarm of SOL exceedances. The root cause of the viola operating instructions he s 2.1b R1. As a result, BPA: a. did not correctly in b. did not provide its c. did not operate wi d. did not inform its F e. did not provide its i. the ii. the to iii. bo f. did not notify its R These violations began on noncompliance of each the	mitted a Self-Report stating, PA was implementing an out nformation Memo (SLIM), a pundary's flowgate. The Disp /. This mistake resulted in BF not included the boundary lted in the boundary RAS is o le. This misunderstanding be monitoring did not alert to t tions associated with TOP-0 hould follow during an outa nplement its Operating Plan neighboring RC and TOPs w thin the SOLs during this our RC that the RAS was operate RC with the following, as sp e correct boundary SOL; e notifications of SOL exceed correct the problems; oundary RAS being operated C of the SOL exceedances no November 30, 2016 at 8:30 ese Standards and Requirem	as a Transmission Operator (TOP), it has age as a part of the boundary Remedial s is required by BPA's Operating Plan du patcher, however, implemented a restrice PA operating a boundary SOL that was 65 RAS in the list of Special Protection Syste usually completed one line at a time. Whetween the SLIM and DSO resulted in BP hree SOL exceedances between 2:15 PM 02-2.1b R1, TOP-002-2.1b R4, TOP-004-2 gebetween the SLIM and the DSO. For using the SLIM, as required by TOP-002 ith the correct SOL because it had been of tage, as required by TOP-004-2 R1; ed in a degraded state, as required by IRC ecified in its RC Data Specification: dance and actions taken because BPA dic in a degraded state, as required by IRO- or its actions to resolve them due to the AM, when the work permit was issued, a tents.	d a potential noncompliance with IRO- Action Scheme (RAS), which entailed li ring the outage. The SLIM for this outa sted generation limit of 650 MW at the 50 MW higher than the setting should ems that were incorporated into the Co nen the SLIM was issued in this case, th A not manually entering the SOL into t 1 and 2:45 PM on November 30, 2016. 2 R1, TOP-007-0 R1 and IRO-010-1a R3 the violation associated with IRO-005 -2.1b R1; operating with the incorrect calculatio D-005-3.1a R9; d not know the correct flow over the b 010-1a R3; and lack of alarms that would have alerted and ended on November 30, 2016 at 3	005-3.1a R9. ine loss logic for three se age condition specified the boundary generation st have been. As a result, t oordinated Outage Syste the Dispatcher also review the control system. Beca Due to the lack of alarn was attributed to the co -3.1a R9, the root cause n, as required by TOP-00 boundary path, nor did Bi I BPA that there was an S :59 PM, when the work	eparate lines. BPA did hat a 650 MW System lation. BPA did not lo he boundary RAS was em and therefore not wed a Dispatch Standi ause the lower SOL w hs, the Dispatcher did onfusion of the Dispat was attributed to BP. D2-2.1b R4; PA report on the action SOL exceedance, as re- permit was released to	not correctly implement of Operating Limit (SOL) wer the boundary SOL soperated in a degraded reported to BPA's RC. Ing Order (DSO) but the as not entered in the not realize there were other as to which A's violation of TOP-002-
Kisk Assessment		<ul> <li>WECC determined that the a. maintain a set of c responsible for usi</li> <li>b. coordinate (where Coordinator, so the Coordinator</li></ul>	ese violations in aggregate p urrent plans that are design ng available personnel and s confidentiality agreements at normal Interconnection o al Planning Analysis that wil ty Coordinator when an IROI ity Coordinator of the status BA, or inter-TOP impact (e.g nat Special Protection System nformation, as specified, to dy operating its system with implemented weak prevent	osed a moderate risk and did not pose a ed to evaluate options and set procedur system equipment to implement these p allow) its current-day, next-day, and sea peration will proceed in an orderly and o I allow it to assess whether its planned o L or SOL has been exceeded and the action s of the Special Protection System includ g., could potentially affect transmission f in on inter-area flows, as required by IRO the Reliability Coordinator(s) with which the RAS in a degraded state. If BPA were tative controls. However, BPA implement	serious and substantial risk to the reli- es for reliable operation through a rea- lans to ensure that interconnected sys- isonal planning and operations with ne- consistent manner, as required by TOP operations for the next day within its T- ons being taken to return the system t ing any degradation or potential failur lows resulting in a SOL or IROL violatio 0-005-3.1a R9; and it has a reliability relationship, as requ e to have lost another line, the RAS co ited effective controls, this issue was d	ability of the BPS. In the sonable future time peri stem reliability will be ma eighboring Balancing Aut 2-002-2.1b R4; OP Area will exceed any to within limits, as requir e to operate as expected on) is armed, the Reliabili uired by IRO-010-1a R3. uld have caused a loss of liscovered during a routi	f load and potentially ne monitoring activity	ed to: BA and TOP shall be I by TOP-002-2.1b R1; d with its Reliability ed by TOP-002-4 R1; Protection System that be aware of the impact of opened the remaining y nine days after the issue	

O&P

Bonneville Power Administration (BPA) – NCR05032	NOC-2657
	occurred, on December 9, 2016. As compensation, instead of setting the correct SOL, BPA instructed the main generation station for these li reduced the risk because instead of changing the SOL to address its mistake, it instructed the main generation station to limit its generation SOL.
Mitigation	To mitigate this violation, BPA:
	<ol> <li>BPA's Dispatch Manager sent a 10-point message to all dispatchers and its RC specifying the proper implementation of a SLIM for the lack of Protection System documentation; and</li> <li>as of April 1, 2017, with new versions of the Standards, TOPs were no longer required to notify the RC of SOLs on internal paths nor trained on a new use of SLIMs as part of the transition efforts to the new TOP and IRO Standards including how to implement them additional guidance provided through this training was specifically designed to avoid misunderstandings of when to follow guidance</li> </ol>
Other Factors	WECC reviewed BPA's internal compliance program (ICP) and considered it to be a neutral factor.
	On August 22, 2014, in Southwestern Power Administration (SWPA) v. Federal Energy Regulatory Commission (FERC), the United States Couruled that FERC, and by extension, the North American Electric Reliability Corporation (NERC) and the Regional Entities it oversees, such as V governmental entities such as SWPA. BPA is a federal governmental entity, and WECC is bound to follow SWPA v. FERC in the resolution of the for this violation.
	WECC considered BPA's IRO-005-3.1a R9 compliance history and determined there were no relevant instances of noncompliance.

ines to limit its generation to 650 MW. This action by BPA which then lowered the flows on the path without changing the

e boundary including the boundary RAS that was related to the

status changes in RAS Schemes. As well, the Dispatchers were and what to communicate to the RC and other entities. The in a SLIM, rather than that provided in a DSO.

rrt of Appeals for the District of Columbia Circuit unanimously WECC, could not impose monetary penalties against federal his matter. Therefore, WECC has assessed no monetary penalty

Sonneville Power Adminis	ville Power Administration (BPA) – NCR05032				NOC-2657			No Penalty			
NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation		
WECC2017017585	IRO-010-1a	R3	Medium	Severe	11/30/2016 (when the work permit was issued)	11/30/2016 (when the work permit was released)	Self-Report	4/1/2017	12/21/2017		
Description of the Violat document, each violatio	ion (For purpose n at issue is desc	es of this cribed as	On May 18, 2017, BPA subr	nitted a Self-Report stating,	as a Transmission Operator (TOP), it ha	ad a potential noncompliance with IRO-	010-1a R3.				
a "violation," regardless posture and whether it v confirmed violation.)	of its procedura was a possible, o	ıl or	On November 30, 2016, BP the published Study Limit In should be set at the one bc from 1300 MW to 650 MW state. In addition, BPA had	D16, BPA was implementing an outage as a part of the boundary Remedial Action Scheme (RAS), which entailed line loss logic for three separate lines. BPA did not correctly implement Limit Information Memo (SLIM), as is required by BPA's Operating Plan during the outage. The SLIM for this outage condition specified that a 650 MW System Operating Limit (SOL) one boundary's flowgate. The Dispatcher, however, implemented a restricted generation limit of 650 MW at the boundary generation station. BPA did not lower the boundary SOL 50 MW. This mistake resulted in BPA operating a boundary SOL that was 650 MW higher than the setting should have been. As a result, the boundary RAS was operated in a degraded PA had not included the boundary RAS in the list of Special Protection Systems that were incorporated into the Coordinated Outage System and therefore not reported to BPA's RC.							
			The outage work that resul guidance was not applicabl control system, the alarm r SOL exceedances.	ted in the boundary RAS is u le. This misunderstanding be nonitoring did not alert to th	sually completed one line at a time. Wl tween the SLIM and DSO resulted in BF rree SOL exceedances between 2:15 PN	hen the SLIM was issued in this case, th <sup>3</sup> A not manually entering the SOL into t 1 and 2:45 PM on November 30, 2016.	e Dispatcher also reviev he control system. Beca Due to the lack of alarn	ved a Dispatch Standi ause the lower SOL wa ns, the Dispatcher did	ng Order (DSO) but the as not entered in the not realize there were		
			The root cause of the violat operating instructions he sl 2.1b R1. As a result, BPA: a. did not correctly in	tions associated with TOP-00 hould follow during an outag nplement its Operating Plan	)2-2.1b R1, TOP-002-2.1b R4, TOP-004-7 gebetween the SLIM and the DSO. Fo using the SLIM, as required by TOP-002	2 R1, TOP-007-0 R1 and IRO-010-1a R3 r the violation associated with IRO-005 2-2.1b R1;	was attributed to the co -3.1a R9, the root cause	onfusion of the Dispat was attributed to BP/	cher as to which A's violation of TOP-002-		
			<ul> <li>b. did not provide its</li> <li>c. did not operate wit</li> <li>d. did not inform its F</li> <li>e. did not provide its</li> <li>i. the</li> </ul>	neighboring RC and TOPs wit thin the SOLs during this out IC that the RAS was operated RC with the following, as spe e correct boundary SOL;	th the correct SOL because it had been age, as required by TOP-004-2 R1; d in a degraded state, as required by IR <sup>i</sup> ecified in its RC Data Specification:	Operating with the incorrect calculation	n, as required by TOP-ou	J2-2.1b K4;			
			ii. the to	ii. the notifications of SOL exceedance and actions taken because BPA did not know the correct flow over the boundary path, nor did BPA report on the actions it should have taken to correct the problems;							
			iii. bo f. did not notify its R(	iii. boundary RAS being operated in a degraded state, as required by IRO-010-1a R3; and f. did not notify its RC of the SOL exceedances nor its actions to resolve them due to the lack of alarms that would have alerted BPA that there was an SOL exceedance, as required by TOP-007-0 R1.							
			These violations began on I noncompliance of each the	November 30, 2016 at 8:30 / ese Standards and Requirem	AM, when the work permit was issued, ents.	and ended on November 30, 2016 at 3	:59 PM, when the work	permit was released f	<sup>i</sup> or a total of one day of		
Risk AssessmentWECC determined that these violations in aggregate posed a moderate risk and did not pose as g. maintain a set of current plans that are designed to evaluate options and set procedures responsible for using available personnel and system equipment to implement these plane. h. coordinate (where confidentiality agreements allow) its current-day, next-day, and seas Coordinator, so that normal Interconnection operation will proceed in an orderly and complexity of the second process whether its planned op j. inform its Reliability Coordinator when an IROL or SOL has been exceeded and the action k. inform the Reliability Coordinator of the status of the Special Protection System includir may have an inter-BA, or inter-TOP impact (e.g., could potentially affect transmission floc the operation of that Special Protection System on inter-area flows, as required by IRO- l. provide data and information, as specified, to the Reliability Coordinator(s) with which i						serious and substantial risk to the relia res for reliable operation through a reas plans to ensure that interconnected sys asonal planning and operations with ne consistent manner, as required by TOP operations for the next day within its To ions being taken to return the system t ding any degradation or potential failure flows resulting in a SOL or IROL violatio D-005-3.1a R9; and h it has a reliability relationship, as requ	ability of the BPS. In thes sonable future time peri item reliability will be ma ighboring Balancing Aut -002-2.1b R4; OP Area will exceed any to within limits, as requir e to operate as expected on) is armed, the Reliability uired by IRO-010-1a R3.	se instances, BPA faile iod. In addition, each aintained, as required chorities and TOPs and of its SOLs, as require red by TOP-007-0 R1; d, whenever a Special ity Coordinators shall	ed to: BA and TOP shall be by TOP-002-2.1b R1; d with its Reliability ed by TOP-002-4 R1; Protection System that be aware of the impact of		
			In this case, BPA was alread lines entirely. Further, BPA limit its generation to 650 I lowered the flows on the p	ly operating its system with implemented weak prevent MW. This action by BPA redu wath without changing the SC	the RAS in a degraded state. If BPA wer ative or detective controls. However, a uced the risk because instead of changiu DL.	re to have lost another line, the RAS coust of setting the source of setting the ng the SOL to address its mistake, it instates its mistake.	uld have caused a loss of correct SOL, BPA instruc tructed the main genera	f load and potentially ted the main generat tion station to limit it	opened the remaining ion station for these lines is generation which then		

### Bonneville Power Administration (BPA) – NCR05032

NOC-2657

Mitigation	To mitigate this violation, BPA:
	<ol> <li>BPA's Dispatch Manager sent a 10-point message to all dispatchers and its RC specifying the proper implementation of a SLIM for the lack of Protection System documentation;</li> </ol>
	2) as of April 1, 2017, with new versions of the Standards, TOPs were no longer required to notify the RC of SOLs on internal paths nor s
	3) the Dispatchers were trained on a new use of SLIMs as part of the transition efforts to the new TOP and IRO Standards including how other entities. The additional guidance provided through this training was specifically designed avoid misunderstandings of when to
Other Factors	On August 22, 2014, in Southwestern Power Administration (SWPA) v. Federal Energy Regulatory Commission (FERC), the United States Couruled that FERC, and by extension, the North American Electric Reliability Corporation (NERC) and the Regional Entities it oversees, such as V governmental entities such as SWPA. BPA is a federal governmental entity, and WECC is bound to follow SWPA v. FERC in the resolution of the for this violation.
	WECC considered BPA's compliance history and determined there were no relevant instances of noncompliance.

he boundary including the boundary RAS that was related to the

status changes in RAS Schemes; and w to implement them and what to communicate to the RC and ofollow guidance in a SLIM, rather than that provided in a DSO. urt of Appeals for the District of Columbia Circuit unanimously WECC, could not impose monetary penalties against federal chis matter. Therefore, WECC has assessed no monetary penalty

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation
WECC2018020114	PRC-005-2(i)	R3	High	Lower	1/1/2016 (when IPCO missed the first 18-month maintenance interval)	7/14/2017 (when IPCO completed maintenance activities for the VLA battery)	Self-Report	7/2/2018	3/1/2019
Description of the Viola document, each violatio "violation," regardless o whether it was a possib	tion (For purpos on at issue is des of its procedural le, or confirmed	es of this cribed as a posture and l violation.)	On July 24, 2018, IPCO sul Specifically, IPCO did not a at a 230 kV substation for when IPCO missed the firs the issue was attributed t understood that the Com Communications group, r system had been inadvert	bmitted a Self-Report stating maintain one Protection Sys two 18-month intervals, as at 18-month maintenance in o a miscommunication betw munications group was resp esulting in a miscommunica cently disabled, thus removi	g, as a Transmission Owner, it was in p stem Station Vented Lead-Acid (VLA) b required by PRC-005-2(i) R3, Table 1- nterval and ended on July 14, 2017, wh ween different departments. Specifica bonsible for tracking the maintenance tion about the final responsibility for t ng the VLA battery from tracking.	potential noncompliance with PRC-00 pattery used for emergency situations 4(a). The VLA battery was maintained hen IPCO completed maintenance act Ily, a Transmission and Distribution E and testing activites. However, the cl the maintenance of this VLA battery.	5-2(i) R3. to power communicat on June 30, 2014, how ivities for the VLA batten ngineer disabled the bat hange in responsibility v As well, the secondary i	ions equipment durin ever this issue began ery, for a total of 561 ttery maintenance tri was not communicate maintenance trigger i	ng an emergency outage on January 1, 2016, days. The root cause of gger because he ed to the n IPCO's management
Risk Assessment			This violation posed a mir maintenance program in a result in local service inte However, as compensation during an outage, the Syst	nimal risk and did not pose a accordance with the minimu rruption and possibly increa on, the VLA battery voltage w tem Operators would have u	a serious and substantial risk to the rel um maintenance activities and maxim used restoration time during an emerg was continuously monitored by the en received a generalized summary alarm	liability of the BPS. In this instance, IP um maintenance intervals prescribed gency at the substation. nergy management system (EMS) duri n and a technician would have been s	CO failed to maintain o within Table 1-4(a), as ing the timeframe of the	ne VLA battery includ required by the Stand e violation. Had a bat he reason for the ala	ed within the time-based dard. Such failure could tery failure occurred
Mitigation			<ol> <li>I o mitigate this violation, IPCO:</li> <li>completed maintenance activities on one affected VLA battery;</li> <li>requested staff to identify and report to leadership gaps in maintenance at the time issues of noncompliance are discovered;</li> <li>implemented new policy that any changes to maintenance activity testing were to be reviewed monthly by the Communications Engineer to prevent inadvertent responsibility changes that caused these maintenance triggers for the VLA battery to be disabled; and</li> <li>the Protection System Maintenance Program (PSMP) was updated to reflect a new review of changes to maintenance settings.</li> </ol>						
Other Factors			WECC reviewed IPCO's int WECC considered IPCO's I WECC201102886 and WE	ernal compliance program ( PRC-005 compliance history CC2017017203.	(ICP) and considered it to be a neutral to be an aggravating factor in determ	l factor in the penalty determination. nining the disposition track specifically	y NERC Violation IDs Wf	ECC200800628, WECC	200901452,

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation	
TRE2016015849	FAC-008-3	R1	Lower	Severe	11/19/2013 (noncompliance started when the Entity's registration became effective)	11/27/2018 (noncompliance ended when the Entity's documented process was adopted)	Audit	6/4/2019	9/19/2019	
Description of the Vi document, each violat "violation," regardless whether it was a possib	olation (For pu ion at issue is of its procedur le, or confirmed	rposes of this described as a al posture and violation.)	During a Compliance Aud Specifically, during the Co The root cause of this issu not document or impleme	it conducted from February mpliance Audit, the Entity v ie is that the Entity did not ent processes necessary for	y 16, 2016 through June 16, 2016, Tex was unable to provide any documenta have any documented process for cor compliance with FAC-008-3 R1.	xas RE determined that the Entity, as to be consistent to the the construction described by FAC-008-3 R1 for d npliance with FAC-008-3 beginning fr	s a Generator Owner (G etermining the Facility f om the date when it wa	O), was in noncomp Ratings of its generat Is registered as a GO.	liance with FAC-008-3 R1. or Facilities. As a result, the Entity did	
			The noncompliance started on November 19, 2013, when the Entity was registered as a GO, and ended on November 27, 2018, when the Entity implemented a documented process that includes a documented methodology, Facility Ratings, and relevant documentation necessary for compliance with FAC-008-3 R1, R2, and R6.							
Risk Assessment			This issue posed a modera could result in overloadin lasting from November 19 R2, and R6. In addition, du resource through 2015. N	ate risk and did not pose a s og on equipment, potential 9, 2013, when the Entity wa uring the noncompliance, th either Facility is designated	erious or substantial risk to the bulk p ly damaging the affected Facilities, ar as registered as a GO, until November ne Entity's Amistad Facility was design in the 2018 Black Start plan.	ower system (BPS) based on the follo nd resulting in unanticipated outages 727, 2018, when the Entity created a nated as a Black Start resource throug	wing factors. A lack of a . In addition, the durat process and document h 2017, and the Entity's	ccurate Facility Ratin ion of this issue was is sufficient for comp is Falcon Facility was c	gs and Equipment Ratings approximately five years, liance with FAC-008-3 R1, lesignated as a Black Start	
			However, the risk posed b comprising two 31.556 M Facility was approximately for reliability or capacity p cause a loss of load or int consistent with the Facility	by this issue was reduced by W generating units at the A y 9.5 MW per hour and for t purposes during peak summ cerfere with Transmission fl y Ratings documentation cr	the following factors. First, the Entity Amistad Facility and three 11 MW gen he Falcon Facility was approximately 5 er conditions. These Facilities are also lows. Finally, the unit information in t reated by the Entity to end this noncom	y's Facilities have limited impact on of lerating units at the Falcon Facility. D 5.5 MW per hour. The Entity's Facilitie o not located inside a major load center the Resource Asset Registration Form mpliance. No harm is known to have o	ther portions of the BPS uring the noncompliance is produce power intern er, and the potential unit in already on file with the occurred.	and are limited to tw e, the average net p nittently and are not availability of the Fac e Electric Reliability	vo hydroelectric Facilities, roduction for the Amistad relied on in planning cases ilities would be unlikely to Council of Texas, Inc. was	
Mitigation			To mitigate the noncompl	iance, the Entity:						
			<ol> <li>implemented a docun compliance with FAC-</li> <li>approved a document</li> <li>established a complia process for identifying</li> <li>conducted training re</li> </ol>	nented process that was dra 008-3 R1, R2, and R6; ted internal compliance pro nce committee, as describe g applicable Reliability Stan garding the Entity's process	afted by a compliance consultant and ogram, which includes a process for ide ed in the documented internal complia dards; and s for compliance with FAC-008-3 and r	that includes a documented method entifying applicable current and new ance program, which determines upco regarding the Entity's overall complian	ology, Facility Ratings, a NERC Reliability Standa oming deadlines at regunce program.	nd relevant documer rds; Ilar meetings and imp	itation necessary for plements the Entity's	
Other Factors			On August 22, 2014, in Sou ruled that FERC, and by e federal governmental ent assessed no monetary per	uthwestern Power Administ xtension, the North Americ tities such as SWPA. The Er nalty for this violation.	ration (SWPA) v. Federal Energy Regula can Electric Reliability Corporation (NI ntity is a federal governmental entity,	atory Commission (FERC), the United S ERC) and the Regional Entities it over , and Texas RE is bound to follow SV	States Court of Appeals rsees, such as Texas RE, VPA v. FERC in the reso	for the District of Colu , could not impose m lution of this matter	Imbia Circuit unanimously Ionetary penalties against Therefore, Texas RE has	
			Texas RE reviewed the En	tity's compliance history an	d determined that there were no rele	vant instances of noncompliance.				

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation	
TRE2016015850	FAC-008-3	R2	Medium	Severe	11/19/2013 (noncompliance started when the Entity's registration became effective)	11/27/2018 (noncompliance ended when the Entity's documented process was adopted)	Audit	6/4/2019	9/19/2019	
Description of the Vi document, each violat "violation," regardless whether it was a possib	olation (For pu ion at issue is of its procedura le, or confirmed	rposes of this described as a al posture and violation.)	During a Compliance Aud Specifically, the Entity did The root cause of this issund not document or implement The noncompliance started documented methodolog	lit conducted from February I not have a documented me ue is that the Entity did not I ent processes necessary for ed on November 19, 2013, v cy, Facility Ratings, and relev	y 16, 2016 through June 16, 2016, Te ethodology for determining the Facilit have any documented process for cor compliance with FAC-008-3 R2. when the Entity was registered as a G vant documentation necessary for com	xas RE determined that the Entity, as y Ratings of its generator Facilities as ppliance with FAC-008-3 beginning fr O, and ended on November 27, 2018 ppliance with FAC-008-3 R1, R2, and F	s a Generator Owner (G required by FAC-008-3 om the date when it wa , when the Entity imple 86.	iO), was in noncomp R2. Is registered as a GO. mented a documente	iance with FAC-008-3 R2. As a result, the Entity did ed process that includes a	
Risk Assessment			This issue posed a modera could result in overloadin from November 19, 2013 R6. In addition, during the through 2015. Neither Fac	ate risk and did not pose a s g on equipment, potentially , when the Entity was regist e noncompliance, the Entity cility is designated in the 20	erious or substantial risk to the bulk p damaging the affected Facilities, and cered as a GO, until November 27, 202 's Amistad Facility was designated as a 18 Black Start plan.	ower system (BPS) based on the follo resulting in unanticipated outages. In 18, when the Entity created a process a Black Start resource through 2017, a	wing factors. A lack of a addition, the duration and documents sufficion and the Entity's Falcon F	ccurate Facility Ratin of this issue was app ent for compliance w acility was designated	gs and Equipment Ratings oximately 5 years, lasting ith FAC-008-3 R1, R2, and d as a Black Start resource	
	However, the risk posed by this issue was reduced by the following factors. First, the Entity's Facilities have limited impact on other portions of the BPS and are limited to two hydroelectric Faci comprising two 31.556 MW generating units at the Amistad Facility and three 11 MW generating units at the Falcon Facility. During the noncompliance, the average net production for the Am Facility was approximately 9.5 MW per hour and for the Falcon Facility was approximately 5.5 MW per hour. The Entity's Facilities produce power intermittently and are not relied on in planning for reliability or capacity purposes during peak summer conditions. These Facilities are also not located inside a major load center, and the potential unavailability of the Facilities would be unlik cause a loss of load or interfere with Transmission flows. Finally, the unit information in the Resource Asset Registration Form already on file with the Electric Reliability Council of Texas, Inc consistent with the Facility Ratings documentation created by the Entity to end this noncompliance. No harm is known to have occurred.							<i>i</i> o hydroelectric Facilities, oduction for the Amistad elied on in planning cases lities would be unlikely to Council of Texas, Inc. was		
Mitigation			<ol> <li>To mitigate the noncomp</li> <li>implemented a docur compliance with FAC-</li> <li>approved a documen</li> <li>established a complia process for identifying</li> <li>conducted training re</li> </ol>	<ol> <li>To mitigate the noncompliance, the Entity:</li> <li>implemented a documented process that was drafted by a compliance consultant and that includes a documented methodology, Facility Ratings, and relevant documentation necessary for compliance with FAC-008-3 R1, R2, and R6;</li> <li>approved a documented internal compliance program, which includes a process for identifying applicable current and new NERC Reliability Standards;</li> <li>established a compliance committee, as described in the documented internal compliance program, which determines upcoming deadlines at regular meetings and implements the Entity's process for identifying applicable Reliability Standards; and</li> <li>conducted training regarding the Entity's process for compliance with FAC-008-3 and regarding the Entity's overall compliance program.</li> </ol>						
Other Factors			On August 22, 2014, in Sou ruled that FERC, and by e federal governmental ent assessed no monetary pe Texas RE reviewed the En	uthwestern Power Administ extension, the North Americ tities such as SWPA. The Er nalty for this violation. tity's compliance history an	ration (SWPA) v. Federal Energy Regula can Electric Reliability Corporation (NI ntity is a federal governmental entity, d determined that there were no rele	atory Commission (FERC), the United S ERC) and the Regional Entities it over , and Texas RE is bound to follow SW evant instances of noncompliance.	States Court of Appeals rsees, such as Texas RE, VPA v. FERC in the reso	for the District of Colu could not impose m lution of this matter	mbia Circuit unanimously onetary penalties against . Therefore, Texas RE has	

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation
TRE2016015851	FAC-008-3	R6	Medium	Severe	11/19/2013 (noncompliance started when the Entity's registration became effective)	11/27/2018 (noncompliance ended when a documented process was adopted)	Audit	6/4/2019	9/19/2019
Description of the Vi document, each violat "violation," regardless whether it was a possib	blation (For pu on at issue is of its procedur le, or confirmed	rposes of this described as a al posture and violation.)	During a Compliance Audi Specifically, the Entity did 3 R6.	it conducted from February not have Facility Ratings th	y 16, 2016 through June 16, 2016, Tex hat are consistent with the associated	xas RE determined that the Entity, as Facility Ratings methodology or docu	s a Generator Owner (G Imentation for determin	iO), was in noncompl ning its Facility Rating	iance with FAC-008-3 R6. s as required by FAC-008-
			During the noncompliance a documented methodolog Council of Texas, Inc. that methodology or with asso	e, the Entity did not retain o gy for determining the Facil included capacity ratings f ciated documentation.	documentation necessary for determinity Ratings of its generator Facilities. A or its generating units, the Entity was	ning Facility Ratings that accounted f ccordingly, although the Entity had pr unable to demonstrate that it had F	or all of the Entity's app eviously submitted facil acility Ratings that were	licable equipment, an ity ratings informatio e consistent with an a	nd the Entity did not have n to the Electric Reliability associated Facility Ratings
			The root cause of this issu not document or impleme	e is that the Entity did not ant processes necessary for	have any documented process for con compliance with FAC-008-3 R6.	npliance with FAC-008-3 beginning fr	om the date when it wa	is registered as a GO.	As a result, the Entity did
			The noncompliance starte documented methodology	d on November 19, 2013, v y, Facility Ratings, and relev	when the Entity was registered as a Go rant documentation necessary for com	O, and ended on November 27, 2018 opliance with FAC-008-3 R1, R2, and F	, when the Entity imple R6.	mented a documente	ed process that includes a
Risk Assessment			This issue posed a modera could result in overloading from November 19, 2013, R6. In addition, during the through 2015. Neither Fac However, the risk posed b comprising two 31.556 MV Facility was approximately	te risk and did not pose a so g on equipment, potentially when the Entity was regist noncompliance, the Entity cility is designated in the 20 y this issue was reduced by W generating units at the A y 9.5 MW per hour and for t	erious or substantial risk to the bulk po damaging the affected Facilities, and cered as a GO, until November 27, 201 's Amistad Facility was designated as a 18 Black Start plan. The following factors. First, the Entity Amistad Facility and three 11 MW gen he Falcon Facility was approximately 5	ower system (BPS) based on the follo resulting in unanticipated outages. In 18, when the Entity created a process a Black Start resource through 2017, a r's Facilities have limited impact on of erating units at the Falcon Facility. D 5.5 MW per hour. The Entity's Facilitie	wing factors. A lack of a addition, the duration and documents suffici- and the Entity's Falcon F ther portions of the BPS uring the noncompliances produce power intern	ccurate Facility Rating of this issue was appr ent for compliance w acility was designated and are limited to tw se, the average net pr nittently and are not r	gs and Equipment Ratings roximately 5 years, lasting ith FAC-008-3 R1, R2, and d as a Black Start resource vo hydroelectric Facilities, roduction for the Amistad relied on in planning cases
			for reliability or capacity p cause a loss of load or int consistent with the Facility	urposes during peak summ erfere with Transmission fl y Ratings documentation cr	er conditions. These Facilities are also ows. Finally, the unit information in t eated by the Entity to end this noncor	not located inside a major load cente he Resource Asset Registration Forn mpliance. No harm is known to have	er, and the potential una n already on file with th occurred.	availability of the Faci ne Electric Reliability (	lities would be unlikely to Council of Texas, Inc. was
Mitigation			To mitigate the noncompl	iance, the Entity:					
			<ol> <li>implemented a docum compliance with FAC-0</li> <li>approved a document</li> <li>established a complia process for identifying</li> <li>conducted training reg</li> </ol>	nented process that was dra 008-3 R1, R2, and R6; ted internal compliance pro nce committee, as describe g applicable Reliability Stan garding the Entity's process	afted by a compliance consultant and ogram, which includes a process for ide ed in the documented internal complia dards; and for compliance with FAC-008-3 and re	that includes a documented method entifying applicable current and new ance program, which determines upc egarding the Entity's overall compliar	ology, Facility Ratings, a NERC Reliability Standa oming deadlines at regunce program.	nd relevant documer rds; ılar meetings and imp	itation necessary for
Other Factors			On August 22, 2014, in Sou ruled that FERC, and by ex federal governmental ent assessed no monetary per	ithwestern Power Administ xtension, the North Americ ities such as SWPA. The Er nalty for this violation.	ration (SWPA) v. Federal Energy Regula can Electric Reliability Corporation (NE ntity is a federal governmental entity,	atory Commission (FERC), the United ERC) and the Regional Entities it over and Texas RE is bound to follow SV	States Court of Appeals rsees, such as Texas RE, VPA v. FERC in the resc	for the District of Colu , could not impose m lution of this matter	imbia Circuit unanimously onetary penalties against . Therefore, Texas RE has
			Texas RE reviewed the Ent	tity's compliance history an	d determined that there were no rele	vant instances of noncompliance.			

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation
TRE2016015852	PRC-005-1b	R1	High	Severe	11/19/2013 (noncompliance started when the Entity's registration became effective)	10/05/2018 (noncompliance ended when the Entity adopted version 1.0 of its PSMP)	Audit	6/4/2019	9/19/2019
Description of the Violation (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, or confirmed violation.)			During a Compliance Audi Specifically, IBWC did not implementation of a PSMF PRC-005-2, PRC-005-2(i), a	t conducted from February have a Protection System as required by PRC-005-1 hnd PRC-005-6 were effective	v 16, 2016 through June 16, 2016, Tex n Maintenance and Testing Program b R2. This noncompliance began on No ve.	(as RE determined that the Entity, as (PSMP), as required by PRC-005-1b ovember 19, 2013, when PRC-005-1b	a Generator Owner (GC R1, and was unable to was effective, and conti	), was in noncomplia provide documenta nued through the pe	ance with PRC-005-1b R1. tion of a PSMP or of the riods when PRC-005-1.1b,
			The root cause of the none for compliance with this R	compliance is the failure to eliability Standard.	have a sufficient process for complian	nce with PRC-005-1b. The Entity did no	ot have a documented p	rocess and did not re	tain documents sufficient
			This noncompliance starte	d on November 19, 2013, v	when the Entity was first registered as	a GO, and ended on October 5, 2018	, when the Entity adopt	ed a PSMP.	
Risk Assessment			This issue posed a modera evidence of the implemen lasting from November 19 the noncompliance, the Er Facility is designated in the However, the risk posed b settings for certain protect limited to two hydroelectr average net production for and are not relied on in p Protection System Misope	Ite risk and did not pose a s tation of a PSMP, the Entity 2013, when the Entity was ntity's Amistad Facility was 2018 Black Start plan. y this issue was reduced by tive relays during 2012, and ric Facilities, comprising tw r the Amistad Facility was a planning cases for reliability ration or similar event wou	serious or substantial risk to the bulk p y will not know whether its Protection is registered as a GO, until October 5, designated as a Black Start resource th y the following factors. First, the Entit d these activities included devices that to 31.556 MW generating units at the pproximately 9.6 MW per hour and for y or capacity purposes during peak su ald be unlikely to cause a loss of load of	bower system (BPS) based on the follo a System devices will function as inter 2018, when the Entity adopted a PSM hrough 2017, and the Entity's Falcon F y had verified the voltage and specific twould have been included in a PSMP e Amistad Facility and three 11 MW g r the Falcon Facility was approximately ummer conditions. These Facilities ar or interfere with Transmission flows. I	owing factors. This risk p ided. In addition, the du MP consistent with the p Facility was designated a c gravity of certain dc su P. Second, the Entity's Fa enerating units at the F y 5.6 MW per hour. The e also not located insid No harm is known to ha	posed by this issue is ration of this issue w requirements of PRC- as a Black Start resour upply devices during acilities have limited i alcon Facility. Durin Entity's Facilities proo le a major load cente we occurred.	that, without a PSMP and as approximately 5 years, 005-6 R1. Further, during ce through 2015. Neither 2016 and had verified the mpact on the BPS and are g the noncompliance, the duce power intermittently er, and a trip caused by a
Mitigation			To mitigate the noncompli	iance, the Entity:					
			<ol> <li>adopted a PSMP that i</li> <li>approved a document</li> <li>established a compliar process for identifying</li> <li>conducted training reg</li> </ol>	is consistent with the requi ed internal compliance pro nce committee, as describe applicable Reliability Stand garding the Entity's process	rements of PRC-005-6; gram, which includes a process for ide d in the documented internal complia dards; and s for compliance with PRC-005-6 and r	entifying applicable current and new I ince program, which determines upco regarding the Entity's overall compliar	NERC Reliability Standar oming deadlines at regu nce program.	ds; ar meetings and imp	lements the Entity's
Other Factors			On August 22, 2014, in Sou ruled that FERC, and by ex federal governmental ent assessed no monetary per	thwestern Power Administ xtension, the North Americ ities such as SWPA. The Er nalty for this violation.	ration (SWPA) v. Federal Energy Regula can Electric Reliability Corporation (NI ntity is a federal governmental entity,	atory Commission (FERC), the United S ERC) and the Regional Entities it over , and Texas RE is bound to follow SW	States Court of Appeals f sees, such as Texas RE, VPA v. FERC in the reso	for the District of Colu could not impose m lution of this matter	mbia Circuit unanimously onetary penalties against . Therefore, Texas RE has
			Texas RE reviewed the Ent	ity's compliance history an	d determined that there were no rele	want instances of noncompliance.			

NOC-2647

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation
TRE2016015853	PRC-005-1b	R2	High	Severe	11/19/2013 (when IBWC's registration became effective)	10/05/2018 (when IBWC adopted version 1.0 of its PSMP)	Audit	12/1/2019 (approved completion date)	TBD
Description of the V document, each viola "violation," regardless whether it was a possil	iolation (For pu tion at issue is of its procedur ble, or confirmed	rposes of this described as a al posture and violation.)	During a Compliance Aud Specifically, the Entity die implementation of a PSM PRC-005-2, PRC-005-2(i),	it conducted from February d not have a Protection Sys P, as required by PRC-005-1 and PRC-005-6 were effectiv	16, 2016 through June 16, 2016, Tex stem Maintenance and Testing Progr b R2. This noncompliance began on No re.	as RE determined that the Entity, as am (PSMP), as required by PRC-005- ovember 19, 2013, when PRC-005-1b	a Generator Owne 1b R1, and was ur was effective, and o	r (GO), was in noncompli able to provide docume continued through the pe	ance with PRC-005-1b R2. ntation of a PSMP or the riods when PRC-005-1.1b,
			During the Compliance Au Entity did not have evider relays and batteries assoc indicated that, at the time	udit, the Entity stated that it nce that it had implemented iated with the Entity's two F e of the Compliance Audit, n	did not have a documented PSMP, a a PSMP or conducted maintenance a acilities. However, the documents pro- ine relays associated with the Falcon	nd the Entity was unable to provide a activities for all its Protection System ovided by the Entity do not address cu Facility had never been calibrated.	in inventory of its in devices. Specifically rrent or voltage ser	n-scope Protection Syster <i>t</i> , the Entity provided test nsing devices or control ci	n devices. In addition, the ing records for protective rcuitry. Further, the Entity
			To address the noncomp However, the noncomplia	liance, the Entity engaged a ance regarding PRC-005-1b F	a consultant to assist with drafting th R2 remains ongoing, as the Entity requ	e required documented process to i uires additional time to conduct and c	mplement a PSMP. locument the requi	. On October 5, 2018, the red maintenance activitie	e Entity adopted a PSMP. 25.
			The root cause of the non for compliance with this F	compliance is the failure to Reliability Standard.	have a sufficient process for complian	ice with PRC-005-1b. The Entity did no	ot have a document	ed process and did not re	tain documents sufficient
			This noncompliance starte	ed on November 19, 2013, v	vhen the Entity was first registered as	a GO and is currently ongoing.			
Risk Assessment			This issue posed a modera evidence of the implement from November 19, 2013 through 2017, and the En	ate risk and did not pose a s ntation of a PSMP, the Entit 8, when the Entity was regis tity's Falcon Facility was des	erious or substantial risk to the bulk p y will not know whether its Protectio tered as a GO, until the present. In a signated as a Black Start resource thro	oower system (BPS) based on the follo on System devices will function as into addition, during the noncompliance, ough 2015. Neither Facility is designat	owing factors. This ended. In addition, the Entity's Amista ed in the 2018 Blac	risk posed by this issue is the duration of this issue d Facility was designated k Start plan.	that, without a PSMP and was over 5 years, lasting as a Black Start resource
			However, the risk posed I PSMP. Second, the Entity MW generating units at th and for the Falcon Facility peak summer conditions. load or interfere with Tra	by this issue was reduced by 's Facilities have limited imp he Falcon Facility. From the y was approximately 5.6 MW These Facilities are also not nsmission flows. No harm is	y the following factors. First, the Entit bact on the BPS and are limited to two beginning of the noncompliance thro V per hour. The Entity's Facilities proc t located inside a major load center, a known to have occurred.	ty was performing testing for several o hydroelectric Facilities, comprising ugh April 30, 2019, the average net p luce power intermittently and are no and a trip caused by a Protection Syst	of the Protection S two 31.556 MW ge roduction for the Ar t relied on in plann em Misoperation o	System devices that woul enerating units at the Am mistad Facility was approx ing cases for reliability or r similar event would be	d have been included in a stad Facility and three 11 kimately 9.7 MW per hour capacity purposes during unlikely to cause a loss of
Mitigation			To mitigate the noncomp	liance, the Entity:					
			<ol> <li>adopted a PSMP that</li> <li>approved a document</li> <li>established a complian</li> <li>process for identifying</li> <li>conducted training responses</li> </ol>	is consistent with the requir ted internal compliance pro- ince committee, as describe g applicable Reliability Stance garding the Entity's process	rements of PRC-005-6; gram, which includes a process for ide d in the documented internal complia lards; and for compliance with PRC-005-6 and r	entifying applicable current and new l ince program, which determines upco egarding the Entity's overall compliar	NERC Reliability Sta oming deadlines at nce program.	ndards; regular meetings and imp	lements the Entity's
			Furthermore, the Entity s	ubmitted a Mitigation Plan t	to address the following actions that w	vill be completed by December 1, 202	19.		
			<ol> <li>complete a list of asse</li> <li>perform Protection Sy</li> <li>perform Protection Sy</li> <li>document and review</li> </ol>	ets that need to be tested po ystem maintenance activitie ystem maintenance activitie v documentation of the com	ursuant to the PSMP for the Falcon ar s for the Falcon Facility; s for the Amistad Facility; and pletion of the maintenance activities	nd Amistad Facilities; for Amistad and Falcon Facilities.			
			The Entity requires until E obtaining maintenance se	December 1, 2019, because i ervices from a vendor.	t is still in the process of developing t	he list of Protection System devices t	hat require mainter	nance activities, which wi	ll be necessary before
Other Factors			On August 22, 2014, in Sou ruled that FERC, and by e	uthwestern Power Administr extension, the North Americ	ration (SWPA) v. Federal Energy Regula an Electric Reliability Corporation (NI	atory Commission (FERC), the United S ERC) and the Regional Entities it over	States Court of Apporters States Court of Apporters States and States and States States and States States and	eals for the District of Colu s RE, could not impose m	Imbia Circuit unanimously Ionetary penalties against

Texas Reliability Entity, Inc. (Texas RE)

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation
TRE2016015853	PRC-005-1b	R2	High	Severe	11/19/2013 (when IBWC's registration became effective)	10/05/2018 (when IBWC adopted version 1.0 of its PSMP)	Audit	12/1/2019 (approved completion date)	TBD
			federal governmental ent assessed no monetary per Texas RE reviewed the En	ities such as SWPA. The Er nalty for this violation. tity's compliance history an	tity is a federal governmental entity d determined that there were no rele	, and Texas RE is bound to follow SW evant instances of noncompliance.	/PA v. FERC in the	resolution of this matter	. Therefore, Texas RE has

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation
WECC2016016377	EOP-008-1	R1., R1.1, 1.5, 1.2.4, 1.2.5, 1.6.2,	Medium	Severe	11/22/2013	12/28/2017	Compliance Audit	12/28/2017	3/1/2018
Description of the Viola document, each violatio "violation," regardless whether it was a possib	ition (For purpos on at issue is des of its procedural le, or confirmed	es of this cribed as a posture and violation.)	During a Compliance Audit WECC found several issues a. it def to a s to an b. the la c. it did d. the e whic Cont e. for th prim wher	t conducted from Septembers s with the entity's Operatin fined the backup functional specific backup facility. The maiternate" Control Center aptop batteries were listed anot include physical or cyb entity did not include a tran whas used for low probab crol Center were two and a has hese reasons, the entity did ary or backup functionality never required (R1.6.2).	er 26, 2016 through October 7, 2016, g Plan: ity as being provided by remotely acc entity incorporated an incorrect def r, which did not meet the criteria of k as the backup power supply to the h ber security in the hotel lobbies (R1.2 isition period between the loss of pri ility high impact events, such as hur half hours away from each other by o d not include actions to manage the because the entity assumed that it	WECC determined that the entity, as a cessing the BA functionality from spec finition of facility, citing the use of lap backup functionality provided by FERC otel building power for use from the h .5); imary control center functionality and cricanes requiring evacuation of Hous car resulting in a period over the two-h risk to the BES during the transition s operators would be able to gain ful	Balancing Authority (BA ified hotel lobbies and u tops in a hotel lobby as 's directives in Order 69 notel lobbies (R1.2.4); the time to transition t ton, Texas. Specifically, nour limit (R1.5); from primary to backup I operational functional	A), had a violation of I using laptops instead implementing backu 3 (R1.1); to the alternate cont the primary Control o functionality as wel lity in under two hou	OP-008-1 R1. Specifically, of transferring operations p functionality in addition rol center in Austin, Texas Center and the alternate I as during outages of the urs from the hotel lobbies
			After reviewing all relevant to the reliable operations The root cause of the viola specific sub-requirements This violation began on No	nt information, WECC deter of the BES in the event that ation was the entity's incor of EOP-008-1 R1 nor FERC' ovember 22, 2013, when GR	mined that the entity failed to have a t its primary control center functiona rect assumptions regarding the crite s directives when it designed and cre RID registered as a BA and ended on I	an Operating Plan describing the man lity is lost that meets the requirement ria for its Operating Plan and previous eated its Operating Plan. December 28, 2017, when GRID establ	ner in which it continues is of EOP-008-1 R1, spec implementation of its ( ished its new Operating	s to meet its functior ifically R1.1, R1.2.4, I Operating Plan. The e Plan and designated	al obligations with regard 1.2.5, R1.5, and R1.6.2. entity did not consider the a new backup Facility, for
Risk Assessment			This violation posed a mode which it continues to mee EOP-008-1 R1, specifically The entity did not have eff 6, 2016, due to a false fire training and testing of rem a moderate likelihood of c	derate risk and did not pose et its functional obligations R1.1, R1.2.4, R1.2.5, R1.5, a fective internal controls to d e alarm, and on December note functionality verifying a causing intermediate harm t	e a serious and substantial risk to the with regard to the reliable operation and R1.6.2. letect or prevent this issue. However, 14, 2012, due to a bomb threat. In all functions could be performed usin to the BPS. No harm is known to have	e reliability of the BPS. In this instance as of the BPS in the event that its prim the entity's EOP-008 Operating Plan w addition, the Operating Plan was use ag remote access functionality from 20 e occurred.	e, the entity failed to ha ary control center funct vas used successfully for d successfully during hu 12 through 2016. For th	ve an Operating Plan tionality is lost that n backup control cente urricane evacuation o nese reasons, WECC o	describing the manner in neets the requirements of er functionality on January conditions and for routine determined that there was
Mitigation			To mitigate this violation, a. engaged a b. visited spa c. modified t requireme	the entity: a real estate firm to assist w aces that have been identifi the Operating Plan to incluc ents of the Standard;	ith identification of a space that will ed by the real estate firm as potentia le a summary of the risk assessment	be the entity-managed facility that is al entity facilities; for power supply needs during a loss o	accessible in approxima of primary control cente	tely 90 minutes or le r condition based on	ss; new understanding of the

Western Electricity Coordinating Council, Inc. (WECC)

Gridforce Energy Management, LLC (GRID) – NCR11393	NOC-2616
	<ul> <li>d. negotiated the lease and build-out requirements;</li> <li>e. established the new EOP-008 Operating Plan that is inclusive of the entity-managed designated facility;</li> <li>f. established a new Operating Plan inclusive of the new entity-managed facility; and</li> <li>g. built out the leased space to meet requirements for backup functionality established in the EOP-008 risk-based asse</li> </ul>
Other Factors	WECC considered the entity's compliance history with EOP-008-1 R1 and determined the entity did not have any relevant compliance

essment.

nce history.

Gridforce Energy Management, LLC (GRID) – NCR11393

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation
WECC2016016323	INT-006-4	R1.1,	Lower	Severe	7/5/2016	7/5/2016	Self-Report	3/29/2017	5/24/2017
Description of the Violat document, each violatio a "violation," regardless posture and whether it confirmed violation.)	ion (For purpose n at issue is desci of its procedural vas a possible, o	s of this ribed as r	On October 5, 2016, the entity submitted a Self-Report stating that, as a Balancing Authority (BA), it was in violation of INT-006-4 R1. Specifically, the entity reported that on July 5, 2016 at 1:40 PM, its scheduling software automatically approved a downward modification to a Confirmed Interchange (CI) even though it was not capab supporting the magnitude including ramping throughout the duration of the AI. The entity should have denied or curtailed the request for the AI. The downward modification or curtailment resulted i AI that was below the low operating limit of the generating Facility. At 1:50 PM, the modified CI resulted in an over-generation condition in which the entity was producing more than the expected magni of Interchange and ramp because of the minimum generation levels at the generating Facility. The entity then directed the generating Facility to reconfigure its generation blocks to achieve the magni of the interchange. The interchange value remained constant into the next hour. In the absence of directing the generator offline the entity returned to compliance when the schedules ramped in to m the output of the generating facility at 2:56 PM. After reviewing all relevant information, WECC determined that the entity failed to deny an AI or curtail CI for which it did not expect to be capable of supporting the magnitude of the Interchange, inclu ramping, throughout the duration of the AI, as required by INT-006-4 R1, R1.1. The root cause of the violation was a lack of controls around the protocol and configuration of the entity's electronic tagging system, which automatically accepted an AI, even though the entity could support the magnitude of the Interchange. This violation began on July 5, 2016 at 1:50 pm, when the entity automatically accepted the Arranged Interchange (AI) request and ended on July 5, 2016, when the entity directed the generating Facili						
Risk Assessment			WECC determined that this it did not expect to be capa inadvertent energy, an out- Requirement, WECC201601 +40MW) during the event. BPS as intermediate. However, this over-frequer determined that there was	violation posed a moderate ble of supporting the magn of-balance condition on the 16013, BAL-001-2 R2. The ris The entity provides intercha ncy (outside of BAAL limits) a moderate likelihood of ca	e risk and did not pose a serious and sub itude of the Interchange, including ramp e system, and incorrect Net Scheduled Ir sk was reduced because the amount of o ange authority services for 4,800 MW of asted a total of 66 minutes and the enti- using intermediate harm to the BPS. No	ostantial risk to the reliability of the BPS bing, throughout the duration of the AI nterchange (NSI) information to the Int over-generation relative to the Wester generation for seven BAs. Therefore, Y ity was in communication with its Relia o harm is known to have occurred.	5. In this instance, the en as required by INT-006- erconnection and BAAL on Interconnection was su WECC assessed the pote bility Coordinator during	ntity failed to deny ar 4 R1, R1.1. Such failu deviations which affe nall (Entity 2 ACE +10 ntial harm to the secu the entire event. Bas	Al or curtail CI for which re could result in cted another 00 MWs, the entity ACE urity and reliability of the sed on this, WECC
Mitigation			To remediate and mitigate a. directe b. develoj related c. develoj d. implem operat before	this violation, the entity: d the generating Facility to ped a lessons learned docur violations; ped the entity System Oper- nented changes in the electr ing limit. The software now approving the request.	reconfigure its generation blocks to ach ment to help the entity System Operato ator Guidance documents to provide gu onic scheduling software to provide the delays automatically approving Interch	ieve the magnitude of the interchange rs identify and prevent such an issue ir idance in a BAAL event for what steps entity System Operators additional tim nange requests, so the entity System C	; n the future and improve they might consider for r e to evaluate adjustmen Operators can determine	e their situational awa nitigation; and ts which may result in if the modified Inte	areness for potential BAAL a NSI below the minimum rchange can be supported
Other Factors			WECC considered the entity	y's compliance history with	INT-006-4 R1 and determined the entity	/ did not have any relevant compliance	history.		

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation				
WECC2017017742	VAR-002-4	R3	Medium	Severe	2/10/2017	2/11/2017	Self-Report	12/11/2017	1/31/2018				
Description of the Violat document, each violatio a "violation," regardless posture and whether it v confirmed violation.)	ion (For purpose n at issue is desc of its procedural vas a possible or	s of this ribed as	On June 12, 2017, the enti and Requirement. Specific same day, the plant opera later verbally informed his following morning. After reviewing all relevan within 30 minutes of the c The root cause of the issue	On June 12, 2017, the entity submitted a Self-Report stating, as a Generator Operator (GOP), it was in violation of VAR-002-4 R3. The entity is vertically integrated and serves as the TOP for this Standard and Requirement. Specifically, on February 10, 2017 at 4:19 PM, the entity placed a 37 MW unit online but did not place the power system stabilizer (PSS) online. During a shift change at 11:26 PM that same day, the plant operator realized that the PSS had not been placed online and did so immediately, allowing him until 11:56 PM to notify the TOP of the change, per the Standard. The plant operator later verbally informed his supervisor of the status change but not the TOP control center load dispatcher directly. The supervisor later notified the TOP control center load dispatcher at 9:05 AM the following morning. After reviewing all relevant information, WECC determined the entity failed to notify its associated TOP of a PSS status change within 30 minutes of the change, when the status had not been restored within 30 minutes of the change, as required by VAR-002-4 R3. The root cause of the issue was a lack of comprehensive training and clear understanding of the procedures for all plant operators.									
			nine hours and nine minut	es of noncompliance.	minutes after the PSS status change, ar	id ended February 11, 2017 at 9:05 AN	1, when the TOP was not	ified of the PSS status	s change, for a total of				
Risk Assessment			WECC determined this vio TOP of a PSS status change However, the entity imple assuming duties, which is compensating controls. Sp that the unit was prepared generation reserves to me	TOP of a PSS status change within 30 minutes of the change, when the status had not been restored within 30 minutes of the change, as required by VAR-002-4 R3. However, the entity implemented good detective controls to identify this issue. Specifically, every shift change for plant operators started with a station and equipment status check immediately after assuming duties, which is how this issue was identified. Additionally, the entity reviewed all PSS logs quarterly to identify potential issues of noncompliance. The entity also implemented good compensating controls. Specifically, the plant operators at the control desk maintained visibility of the Facility to monitor voltage and ensured it was maintained within the specified range. This ensured that the unit was prepared to respond to any unexpected voltage excursions. Lastly, the AVR maintained the generator output voltage. Had this 37 MW generation tripped offline, the entity had sufficient									
Mitigation			To remediate and mitigate this violation, the entity has: a. notified its TOP control center dispatcher of the PSS status change; b. required all system operators to review and sign that they understand the voltage monitoring and reporting requirements outlined within the internal documented procedures; c. reminded system operators via email to log AVR/PSS status even if it is not offline whenever they report the generating unit is on to the ECC. Requiring the plant operator in issue to both acknowledge via a sign-in sheet and to send a confirmation response to an email sent by the Facility Managers; d. the compliance officer and compliance group, control center management, and key SMEs performed a comprehensive in-person VAR-002-4 R3 training at the unit in issue, and all plant operators and traveling relief operators were required to attend; e. placed small laminated signs next to the AVR auto/manual buttons and on monitors as a reminder of the appropriate procedures pertaining to all plant operators; and f required operators who were absent at the in person training to watch a recorded wideo of the training of VAP.002.4 R3 and to review internal documents until all applicable personnel were trainers										
Other Factors			<ul> <li>WECC determined that the proposed penalty of \$59,000 within this Expedited Settlement Agreement is appropriate for the following reasons: <ul> <li>a. Base penalty factors:</li> <li>i. The Violation Risk Factor is Medium, and the Violation Severity Level is Severe for this violation.</li> <li>ii. This violation posed a Minimal risk to the reliability of the BPS.</li> <li>iii. This violation duration was nine hours and nine minutes as described above.</li> <li>iv. This Requirement has a Real-time Operations violation time horizon expectation for remediation of the Requirement within one hour or less to preserve the reliability of the BPS.</li> <li>b. WECC applied a mitigating credit for the following reasons:</li> <li>i. The entity was cooperative throughout the process.</li> <li>ii. The entity agreed to settle this violation and penalty.</li> <li>iv. The entity self-reported this violation.</li> <li>c. WECC considered the following as aggravating factors:</li> <li>i. NERC Violation IDS WECC201102819 and WECC201002387 to be relevant noncompliance history to this violation and therefore supports the expedited settlement disposition option and penalty.</li> <li>d. Other Considerations:</li> <li>i. WECC did not apply mitigating credit for the entity's Internal Compliance Program (ICP). Although the entity does have a documented ICP, WECC determined that the entity did not implement its ICP</li> </ul> </li> </ul>										

Western Electricity Coordinating Council (WECC)

# Los Angeles Department of Water and Power (LDWP) – NCR05223

NOC-2644

ii. The entity did not fail to complete any applicable compliance directives. There was no evidence of any attempt by the entity to concea
intentional. The entity submitted all requested documentation and/or mitigation plans timely.
iii. WECC determined there were no other aggravating factors warranting a penalty higher than the proposed penalty.

eal the violation. There was no evidence that the violation was

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation				
FRCC2018019629	FAC-003-4	R3. 3.1.	Lower	Moderate	10/01/2016	3/22/2018	Self-Report	6/1/2022 (approved completion date)	TBD				
Description of the Violat document, each violatio a "violation," regardless posture and whether it confirmed violation.)	document, each violation at issue is described as a "violation," regardless of its procedural posture and whether it was a possible or confirmed violation.)		On May 4, 2018, TAL subm During a review on Deceml replicate the maximum blc	itted a Self-Report stating th ber 7, 2017, TAL discovered wout calculations previousl	nat, as a Generator Owner and Transmis that it could not reproduce the data su y used to determine trim distances.	ssion Owner, it was in noncompliance	with FAC-003-4 R3.1.	under FAC-003-4 R3.1	1. TAL was unable to				
			The assumption data required to replicate the previous calculations made and used for compliance with this Standard has been lost, deleted, or was never originally documented. Only the summary results of the calculations were stored, and those results could not be replicated. This noncompliance started on October 1, 2016, when TAL's documented maintenance procedures to prevent encroachment of vegetation into the Minimum Vegetation Clearance Distance (MVCD) of its										
			applicable lines became en noncompliance ended on N TAL began performing incr	pplicable lines became effective and the specifications used to account for the movement of applicable line conductors under their Rating and all Rated Electrical Operations were not retained. The oncompliance ended on March 22, 2018, when TAL updated its documented maintenance procedures to reflect new trim calculations documenting the known system information and assumptions. AL began performing increased trimming in 2018 based on the new trim calculations.									
			retention requirements sur any manual backups of the	retention requirements surrounding NERC compliance, and therefore, had not stored the assumptions used in the previous calculations in a location that was routinely backed up, nor had he completed any manual backups of the assumptions used.									
Risk Assessment			This noncompliance posed appropriate assumptions re The risk was moderate bec did any vegetation present	This noncompliance posed a moderate risk and did not pose a serious or substantial risk to the reliability of the bulk power system. The recalculation using known system information and other appropriate assumptions resulted in numbers with enough variance to affect trim distances in the field. The risk was moderate because TAL maintained its mowing, trimming, and visual inspection schedules appropriately in accordance with its vegetation management program. At no time during this period did any vegetation present a threat to a transmission line, nor were there any vegetation-related outages on any applicable lines.									
			No harm is known to have occurred.										
Mitigation			To mitigate this violation, T 1) recalculated maxin 2) revised its Standard 3) re-assigned respon 4) reinforced with approximated and that 5) stored assumption 6) implemented an includitions. This d 7) implemented a wc To mitigate this violation, T 1) perform clearing a	AL: num blowout for all applicate d Operating Procedure (SOP isibility for the oversight, pe plicable staff that corporate t calculations must be thoro s and calculations performe iternal control to require an letermination will be made a ork plan. FAL will: nd maintenance work for ap	ple lines using known, verified, and reco ) to reflect the new trim distances, whi rformance, and documentation of the e regulatory or operational information of ughly documented; d across different applications including annual internal determination of whet annually by Power Delivery supervisory pplicable lines and report status of effor	orded assumptions; ch will be the baseline upon which anr engineering component of this complia cannot be stored on an individual lapto g those routinely backed up to a server her sufficient regulatory, environment 'staff and the TAL compliance division; rt completed to the Region on a quarte	nual trimming work plans ance obligation; op or in any software app r; al, or system conditions ; erly basis (6/1/2022).	s will be based; plication that is not a warrant a recalculatio	ccessible by one's chain of on of maximum blowout				
Other Factors			The Region determined that the Entity's compliance history should not serve as a basis for applying a penalty. FRCC considered the Entity's ICP to be a neutral factor in the penalty determination. This noncompliance is being processed as a \$0 SNOP due to the extended duration of the mitigation.										

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation			
NPCC2018020344	EOP-004-2	R1	Lower	Severe	3/29/2017	11/1/2017	Self-Report	4/8/2019	4/11/2019			
Description of the Violation (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, or confirmed violation.)			On September 5, 2018, Greenidge Generation LLC (the Entity) submitted a Self-Report stating that, as a Generator Owner (GO) and Generator Operator (GOP), it was in violation of EOP-004-3 R1. Specifically, the Entity did not have an event report Operating Plan in place in accordance with EOP-004-3 Attachment 1. This violation began on March 29, 2017 and spans multiple versions of the Standard. NPCC applied the violation to EOP-004-2 which was the earliest applicable version of the Standard. The violation started on March 29, 2017, when the Entity first synchronized with the grid and was registered with NERC after recommissioning, and concluded on November 1, 2017, when the Entity developed an event reporting Operating Plan. The violation was discovered after the entity hired a third-party company to help them evaluate and implement a compliance program.									
			The root cause of this violation was a lack of awareness of several NERC Reliability Standard requirement obligations as the plant was being recommissioned. In particular, the Entity did not incorporate amendments to the NERC Reliability Standards into its compliance program. Therefore, certain requirements were not reviewed, assessed, or implemented when the Entity recommissioned the Facility.									
NISK ASSESSMENT			The failure to have an Ope MW, only two of the 18 Ev incident has occurred and 112.5 MW which intercor Balancing Authority (NYIS occurred at the Facility an No harm is known to have	erating Plan in place could r vent Types are applicable to the Entity's ability to recov nect with the host Transmi O) required Operating Rese of the notification was not p	result in the failure to timely o the entity: Damage or destr ver from an event would not ission Owner's BES substation erve (1965 MW). In addition, provided, it is unlikely to have	submit Reportable Events to the correct entiti uction of a Facility or Physical threats to a Fac nave been impacted. The Entity owns and ope ovia two 65 MVA generator step-up transform the generator operated at capacity factors of 2 a negative impact on BPS reliability.	ies. However, as a GO ar ility. This requirement r erates a single steam tu ners. The rated capabili 23.23% in 2017 and 20.8	nd GOP with a namep refers specifically to e rbinegenerator with i ty of the generator is ! 32% in 2018. Therefo	late capability of 112.5 vent reporting after an nameplate capabilities of 5.7% of the Entity's re, even if an event			
Mitigation			To mitigate this violation, the Entity: 1) developed an event reporting Operating Plan including protocols for reporting to the Reliability Organization and Reliability Coordinator and a training interval for all plant staff; 2) developed a facility-specific procedure to ensure maintained compliance with EOP-004-3 R1; 3) developed an ongoing contract with a third-party consulting firm to provide continual NERC compliance services and support. This includes quarterly meetings and monthly phone calls betweer the consultant and plant staff; 4) provided training to all plant staff on the Operating Plan and other compliance responsibilities; and 5) implemented Gensuite software to function as a compliance calendar to track periodic compliance activities									
Other Factors			NPCC reviewed the entity NPCC considered the enti	's internal compliance prog ty's compliance history and	ram (ICP) and considered it t I determined there were no r	b be a neutral factor in the penalty determinate elevant instances of noncompliance.	ition.					
			Although the violation posed a minimal risk to the reliability of the bulk power system, NPCC determined that Compliance Exception treatment was not appropriate and that a sanction was appropriate based on the lack of due diligence and overall lack of NERC compliance awareness to ensure NERC Reliability Standard requirements were considered and implemented as the entity was recommissioning the facility.									

NOC-2637

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation				
NPCC2018020343	EOP-004-2	R3	Medium	Severe	3/29/2017	11/1/2017	Self-Report	4/8/2019	4/11/2019				
Description of the Violat document, each violatio a "violation," regardless posture and whether it v confirmed violation.)	ion (For purpose n at issue is desc of its procedura vas a possible, o	es of this cribed as l or	On September 5, 2018, Gre Specifically, the Entity did This violation began on Ma The violation started on M developed an event report implement a compliance p The root cause of this viola	In September 5, 2018, Greenidge Generation LLC (the Entity) submitted a Self-Report stating that, as a Generator Owner (GO) and Generator Operator (GOP), it was in violation with EOP-004-3 R3. pecifically, the Entity did not have an event report Operating Plan in accordance with EOP-004-3 Attachment 1, and therefore had not validated all contact information contained in the Operating Plan. his violation began on March 29, 2017 and spans multiple versions of the Standard. NPCC applied the violation to EOP-004-2 which was the earliest applicable version of the Standard. he violation started on March 29, 2017, when the Entity first synchronized with the grid and was registered with NERC after recommissioning, and concluded on November 1, 2017, when the Entity leveloped an event reporting Operating Plan and validated all contact information in the Plan. The violation was discovered after the entity hired a third-party company to help them evaluate and mplement a compliance program. The root cause of this violation was a lack of awareness of several NERC Reliability Standard requirement obligations as the plant was being recommissioned. In particular, the Entity did not incorporate									
			amendments to the NERC	nendments to the NERC Reliability Standards into its compliance program. Therefore, certain requirements were not reviewed, assessed, or implemented when the Entity recommissioned the Facility.									
			The failure to validate com nameplate capability of 11 event reporting after an in would not have been impa Owner's BES substation via addition, the generator op generating capability.	tact information contained i 2.5 MW, only two of the 18 cident has occurred, and the acted. The Entity owns and o a two 65 MVA generator step erated at capacity factors of	n an Operating Plan in place could result Event Types are applicable to the entity impact would have been reduced to lir perates a single steam turbine generato o-up transformers. The rated capability 23.23% in 2017 and 20.82% in 2018. Th	t in the failure to submit Reportable Ev r: Damage or destruction of a Facility o mited information available to analyze or with nameplate capabilities of 112.5 of the generator is 5.7% of the Entity's erefore, the capacity of this unit can be	vents to the correct conta r Physical threats to a Fa an event on the BPS. The MW and 132.4 MVA, wh Balancing Authority (NY e replaced by the NYISO	acts. However, as a G cility. This requirem e Entity's ability to rec nich interconnect wit ISO) required Operat in the event of an un	D and GOP with a ent refers specifically to cover from an event in the host Transmission ing Reserve (1965 MW). In necessary trip or loss of				
Mitigation			<ol> <li>Io mitigate this violation, the Entity:</li> <li>1) developed an event reporting Operating Plan and validated all contact information in the Plan;</li> <li>2) developed a facility-specific procedure to ensure maintained compliance with EOP-004-3;</li> <li>3) developed an ongoing contract with a third party consulting firm to provide continual NERC compliance services and support This includes quarterly meetings and monthly phone calls between the consultant and plant staff;</li> <li>4) provided training to relevant staff on validating all contact information; and</li> </ol>										
Other Factors			NPCC reviewed the entity' NPCC considered the entit Although the violation pos based on the lack of due di the facility.	s internal compliance progra y's compliance history and d ed a minimal risk to the relia ligence and overall lack of N	am (ICP) and considered it to be a neutra etermined there were no relevant insta ability of the bulk power system, NPCC d IERC compliance awareness to ensure N	al factor in the penalty determination. Inces of noncompliance. letermined that Compliance Exception ERC Reliability Standard requirements	treatment was not appr were considered and im	opriate and that a sar plemented as the en	nction was appropriate Sity was recommissioning				

Last Updated 7/31/2019

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation				
NPCC2018020342	FAC-008-3	R1	Lower	Severe	3/29/2017	11/1/2017	Self-Report	4/8/2019	4/11/2019				
Description of the Viola	ation (For purpose	es of this	On September 5, 2018, Gre	enidge Generation LLC (the	e Entity) submitted a Self-Report stating	that, as a Generator Owner (GO), it wa	s in violation with FAC-	008-3R1. Specifically,	the Entity did not have a				
document, each violatio	on at issue is desc	ribed as	documented methodology	for determining facility rati	ings for its generator equipment.								
a "violation," regardles	ss of its procedura	I											
posture and whether it	posture and whether it was a possible, or			The violation started on March 29, 2017, when the Entity first synchronized with the grid and was registered with NERC after recommissioning, and concluded on November 1, 2017, when the Entity									
confirmed violation.)			developed and documented a facility rating methodology in accordance with FAC-008-3 R1. The violation was discovered after the entity hired a third-party company to help them evaluate and implement a compliance program.										
			The root cause of this violation was a lack of awareness of several NERC Reliability Standard requirement obligations as the plant was being recommissioned. In particular, the Entity did not incorporate amendments to the NERC Reliability Standards into its compliance program. Therefore, certain requirements were not reviewed, assessed, or implemented when the Entity recommissioned the Facility.										
Risk Assessment			This violation posed a mini	mal risk and did not pose a	serious or substantial risk to the reliabil	ity of the bulk power system (BPS).							
			An entity with an undocum nameplate capabilities of 1 generator is 5.7% of the En Therefore, the capacity of t equipment capabilities, an No harm is known to have a	nented facility ratings meth 12.5 MW and 132.4 MVA, w tity's Balancing Authority (I chis unit can be replaced by d the Entity operated accor occurred as a result of this y	odology could result in equipment dama which interconnect with the host Transm NYISO) required Operating Reserve (1969 the NYISO in the event of an unnecessa ding to interconnection agreements wit violation.	nge and/or loss of equipment life. The E nission Owner's BES substation via two 5 MW). In addition, the generator oper nry trip or loss of generating capability. h its interconnection Transmission Own	ntity owns and operate 65 MVA generator step rated at capacity factors There were no issues du ner that identified the ca	s a single steam turbin -up transformers. The of 23.23% in 2017 and rring the violation per apabilities of the facili	ne generator with rated capability of the d 20.82% in 2018. iod due to exceeding ty.				
Mitigation			To mitigate this violation, the Entity: 1) developed a facility rating methodology in accordance with the requirements of FAC-008-3 R1 and documented facility ratings according to the methodology;										
			2) developed a facility specific procedure to ensure maintained compliance with FAC-008-3 R1;										
			3) developed an ongoing co	ontract with a third party co	onsulting firm to provide continual NERC	C compliance services and support This	includes quarterly meet	ings and monthly pho	one calls between the				
			consultant and plant staff;										
			5) implemented Gensuites	oftware to function as a co	acility ratings; and mpliance calendar to track periodic com	unliance activities							
Other Factors			NPCC reviewed the entity's	s internal compliance progr	am (ICP) and considered it to be a neutra	al factor in the penalty determination.							
			NPCC considered the entit	NPCC reviewed the entity's internal compliance program (ICP) and considered it to be a neutral factor in the penalty determination. NPCC considered the entity's compliance history and determined there were no relevant instances of noncompliance.									
			Although the violation pos based on the lack of due di the facility.	ed a minimal risk to the reli ligence and overall lack of N	ability of the bulk power system, NPCC c NERC compliance awareness to ensure N	determined that Compliance Exception IERC Reliability Standard requirements	treatment was not appr were considered and in	opriate and that a sar plemented as the en	nction was appropriate tity was recommissioning				

NOC-2637

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation				
NPCC2018020341	FAC-008-3	R2	Medium	Severe	3/29/2017	11/1/2017	Self-Report	4/8/2019	4/11/2019				
Description of the Violat	ion (For purpose	s of this	On September 5, 2018, Gre	enidge Generation LLC (the	e Entity) submitted a Self-Rep	ort stating that, as a Generator Owner (GO), it	was in violation with FAC-	008-3R2. Specifically,	the Entity did not have a				
document, each violatio	n at issue is desc	ribed as	documented methodology	for determining facility rati	ngs for its equipment to the p	point of interconnection with the Transmission	Owner.						
a "violation," regardless of its procedural													
posture and whether it v	was a possible, o	r	The violation started on March 29, 2017, when the Entity first synchronized with the grid and was registered with NERC after recommissioning, and concluded on November 1, 2017, when the Entity										
confirmed violation.)			developed and documented a facility rating methodology in accordance with FAC-008-3 R2. The violation was discovered after the entity hired a third-party company to help them evaluate and implement a compliance program.										
			The root cause of this violation was a lack of awareness of several NERC Reliability Standard requirement obligations as the plant was being recommissioned. In particular, the Entity did not incorporate amendments to the NERC Reliability Standards into its compliance program. Therefore, certain requirements were not reviewed, assessed, or implemented when the Entity recommissioned the Facility.										
Risk Assessment			This violation posed a minimal risk and did not pose a serious or substantial risk to the reliability of the bulk power system (BPS).										
Mitigation			An entity with an undocum nameplate capabilities of 1 generator is 5.7% of the En Therefore, the capacity of t equipment capabilities, an No harm is known to have To mitigate this violation, t	nented facility ratings metho 12.5 MW and 132.4 MVA, w tity's Balancing Authority (N this unit can be replaced by d the Entity operated accord occurred as a result of this w the Entity:	odology could result in equips which interconnect with the h NYISO) required Operating Re the NYISO in the event of an ding to interconnection agree violation.	ment damage and/or loss of equipment life. Th nost Transmission Owner's BES substation via tw serve (1965 MW). In addition, the generator of unnecessary trip or loss of generating capabilit ements with its interconnection Transmission C	e Entity owns and operate vo 65 MVA generator step perated at capacity factors y. There were no issues du wner that identified the c	s a single steam turbin -up transformers. The of 23.23% in 2017 an uring the violation per apabilities of the facili	ne generator with rated capability of the d 20.82% in 2018. iod due to exceeding ty.				
			1) developed a facility ratir	a methodology in accordan	ice with the requirements of	FAC-008-3 R2·							
			2) developed a facility specific procedure to ensure maintained compliance with EAC-008-3 R <sup>2</sup> .										
			<ol> <li>a) developed a nongoing contract with a third party consulting firm to provide continual NERC compliance services and support This includes quarterly meetings and monthly phone calls between the consultant and plant staff:</li> </ol>										
			4) provided training to rele	evant staff on determining fa	acility ratings; and								
			5) implemented Gensuites	software to function as a cor	mpliance calendar to track pe	riodic compliance activities.							
Other Factors			NPCC reviewed the entity's	s internal compliance progra	am (ICP) and considered it to	be a neutral factor in the penalty determinatic	n.						
			NPCC considered the entit	NPCC considered the entity's compliance history and determined there were no relevant instances of noncompliance.									
			Although the violation posed a minimal risk to the reliability of the bulk power system, NPCC determined that Compliance Exception treatment was not appropriate and that a sanction was appropriate based on the lack of due diligence and overall lack of NERC compliance awareness to ensure NERC Reliability Standard requirements were considered and implemented as the entity was recommissioning the facility.										

Last Updated 7/31/2019

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation				
NPCC2018020340	PRC-019-2	R1	Medium	Lower	3/29/2017	6/25/2018	Self-Report	4/8/2019	4/11/2019				
Description of the Viola	tion (For purpose	s of this	On September 5, 2018, Gre	enidge Generation LLC (the	e Entity) submitted a Self-Rep	ort stating that, as a Generator Owner (GC	D), it was in violation with PRC-0	019-2R1. Specifically t	he Entity did not have				
document, each violatio	n at issue is desc	ribed as	documentation that it coor	rdinated voltage regulating	controls with applicable Prot	ection System devices.							
a "violation," regardless	of its procedural												
posture and whether it	was a possible, o	r	The violation started on Ma	arch 29, 2017, when the En	tity first synchronized with th	e grid and was registered with NERC after	recommissioning, and conclude	ed on June 25, 2018, w	when the final report for				
confirmed violation.)			the coordination study was completed. The report indicated that there were not any coordination changes that were needed. The violation was discovered after the entity hired a third-party company to										
			neip them evaluate and im	iplement a compliance prog	gram.								
			The root cause of this viola	ition was a lack of awarene	ss of several NFRC Reliability	Standard requirement obligations as the pl	lant was being recommissioned	In particular the Ent	ity did not incorporate				
			amendments to the NERC Reliability Standards into its compliance program. Therefore, certain requirements were not reviewed, assessed, or implemented when the Entity recommissioned the Facility.										
Risk Assessment			This violation posed a minimal risk and did not pose a serious or substantial risk to the reliability of the bulk power system (BPS).										
			The Entity's failure to coord	dinate the Protection Syste	m could cause an unnecessar	y trip, or failure to trip of the unit. The Enti	ity owns and operates a single s	team turbine generat	tor with nameplate				
			capabilities of 112.5 MW a	nd 132.4 MVA, which inter	connect with the host Transm	ission Owner's BES substation via two 65 N	MVA generator step-up transfo	rmers. The rated capa	bility of the generator is				
			5.7% of the Entity's Balanci	ing Authority (NYISO) requi	ired Operating Reserve (1965	MW). In addition, the generator operated	at capacity factors of 23.23% in	2017 and 20.82% in 2	018. Therefore, the				
			019 and that no changes needed to be made.										
			019 and that no changes no										
			No harm is known to have	occurred as a result of this	violation.								
Mitigation			To mitigate this violation, t	he Entity:									
			1) contracted an engineeri	ng firm to perform the PRC-	-019-2 R1 coordination study	and completed the study, determining no	changes were necessary;						
			2) developed a facility-spe	cific procedure to ensure m	aintained compliance with PF	C-019-2R1;							
			3) developed an ongoing co	ontract with a third party co	onsulting firm to provide cont	inual NERC compliance services and suppo	ort This includes quarterly meet	ings and monthly pho	ne calls between the				
			A) provided training to rele	want staff on coordinating	voltage regulating controls: a	ad							
			5) implemented Gensuites	software to function as a co	mpliance calendar to track pe	riodic compliance activities							
Other Factors			NPCC reviewed the entity's	s internal compliance progr	ram (ICP) and considered it to	be a neutral factor in the penalty determi	nation.						
			NPCC considered the entit	y's compliance history and o	determined there were no re	evant instances of noncompliance.							
			Although the violation pos	ed a minimal risk to the reli	lability of the bulk power syst	em, NPCC determined that Compliance Ex	ception treatment was not appr	opriate and that a sar	iction was appropriate				
			based on the lack of due di	ligence and overall lack of l	NERC compliance awareness t	o ensure NEKC Reliability Standard require	ements were considered and in	ipiemented as the en	ity was recommissioning				
			the facility.										

NOC-2637

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation			
NPCC2018020563	MOD-025-2	R1	Medium	Severe	4/1/2018	3/29/2019	Self-Report	4/8/2019	4/11/2019			
Description of the Viola document, each violatio a "violation," regardless posture and whether it confirmed violation.)	tion (For purpose on at issue is desc s of its procedural was a possible, o	s of this ribed as I r	On October 22, 2018, Greenidge Generation LLC (the Entity) submitted a Self-Report stating that, as a Generator Owner (GO), it was in noncompliance with MOD-025-2 R1. Specifically, the Entity did not perform the necessary Real Power capability testing required by MOD-025-2 R1 at its plant within twelve calendar months of commercial operation, and therefore was unable to provide its Transmission Planner with verification of its Real Power capability. The plant became commercial on March 27, 2017. The noncompliance started on April 1, 2018, twelve calendar months after the Entity's commercial operation date, and concluded on March 29, 2019 when the Entity provided its Real Power capability									
			The root cause of this violation was a lack of awareness of several NERC Reliability Standard requirement obligations as the plant was being recommissioned. In particular, the Entity did not incorporate amendments to the NERC Reliability Standards into its compliance program. Therefore, certain requirements were not reviewed, assessed, or implemented when the Entity recommissioned the Facility.									
Risk Assessment			This noncompliance posed The potential risk due to no reliability. However, the er same value provided by the host Transmission Owner's Reserve (1965 MW). In add unnecessary trip or loss of No harm is known to have o	a minimal risk and did not p oncompliance with MOD-02 tity synchronized the Facili e June 6, 2018 power test. T BES substation via two 65 N ition, the generator operat generating capability due to occurred as a result of this r	25-2 R1 is the Transmission Planner have ty on March 29, 2017 and the net active the Entity owns and operates a single st MVA generator step-up transformers. T and at capacity factors of 23.23% in 2017 to inaccurate information.	reliability of the bulk power system (Bl ing inaccurate information about the ge power output identified during comm ceam turbine generator with nameplate he rated capability of the generator is 5 and 20.82% in 2018. Therefore, the ca	PS). enerating units when de issioning testing was app e capabilities of 112.5 MN 5.7% of the Entity's Balar apacity of this unit can be	veloping planning mo proximately equal to t N and 132.4 MVA, wh ncing Authority (NYIS) e replaced by the NYIS	dels to assess BPS the 106 MWs, which is the hich interconnect with the O) required Operating SO in the event of an			
Mitigation			To mitigate this noncompli 1) contracted an engineeri 2) developed a facility spec 3) developed an ongoing co consultant and plant staff; 4) provided training to rele 5) implemented Gensuites	ance, the Entity: ng firm to perform Real Pow ific procedure to ensure ma ontract with a third party co vant employees on real pow oftware to function as a cor	ver capability testing and provided its Tr aintained compliance with MOD-025-2 F nsulting firm to provide continual NER wer capability testing; and mpliance calendar to track periodic com	ransmission Planner with the results; {1; C compliance services and support This npliance activities.	includes quarterly meet	ings and monthly pho	one calls between the			
Other Factors			NPCC reviewed the entity's NPCC considered the entit Although the violation pos- based on the lack of due di the facility.	s internal compliance progra y's compliance history and c ed a minimal risk to the reli- ligence and overall lack of N	am (ICP) and considered it to be a neutr letermined there were no relevant inst ability of the bulk power system, NPCC IERC compliance awareness to ensure N	al factor in the penalty determination. ances of noncompliance. determined that Compliance Exceptior NERC Reliability Standard requirements	n treatment was not appr swere considered and in	opriate and that a sai pplemented as the en	nction was appropriate tity was recommissioning			

Last Updated 7/31/2019

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation				
NPCC2018020564	MOD-025-2	R2	Medium	Severe	4/1/2018	3/29/2019	Self-Report	4/8/2019	4/11/2019				
Description of the Viola	tion (For purpose	s of this	On October 22, 2018, Gree	nidge Generation LLC (the I	Entity) submitted a Self-Repo	t stating that, as a Generator Owner (GO),	it was in noncompliance with	MOD-025-2R2. Speci	fically, the Entity did not				
document, each violatio	n at issue is desc	ribed as	perform the necessary Rea	active Power capability testi	ing required by MOD-025-2 R2	at its plant within twelve calendar months	of commercial operation, and	d therefore was unabl	e to provide its				
a "violation," regardles	s of its procedural		Transmission Planner with	verification of its Reactive I	Power capability. The plant be	came commercial on March 27, 2017.							
posture and whether it	was a possible, o	r											
confirmed violation.)			The noncompliance started on April 1, 2018, twelve calendar months after the Entity's commercial operation date, and concluded on March 29, 2019, when the Entity provided its Reactive Power										
			capability test results to its Transmission Planner. The actual Reactive Power capability testing took place on June 6, 2018. There was a delay in acquiring the test report from the electrical contractor.										
			The rest serves of this visit			too doud to cuito to out obligations of the pla		In north order the Fre	litu di duo tin como voto				
			amendments to the NERC Reliability Standards into its compliance program. Therefore, certain requirements were not reviewed, assessed, or implemented when the Entity recommissioned the Eacility										
Pick Accossment			This noncompliance posed	la minimal rick and did not u	pose a serious or substantial	isk to the reliability of the bulk power syste	ed, assessed, of implemented		minissioned the Facility.				
NISK ASSESSMENT						isk to the reliability of the bulk power syste							
			The potential risk due to no	oncompliance with MOD-02	25-2 R2 is the Transmission Pla	anner having inaccurate information about	the generating units when de	veloping planning mo	dels to assess BPS				
			reliability. The Entity owns	and operates a single stear	m turbine generator with nam	eplate capabilities of 112.5 MW and 132.4	MVA. which interconnect wit	the host Transmissic	on Owner's BES substation				
			via two 65 MVA generator	step-up transformers. The	rated capability of the genera	tor is 5.7% of the Entity's Balancing Authori	ty (NYISO) required Operating	Reserve (1965 MW).	In addition, the generator				
			operated at capacity factor	rs of 23.23% in 2017 and 20.	.82% in 2018. Therefore, the	capacity of this unit can be replaced by the	NYISO in the event of an unne	cessary trip or loss of	generating capability due				
			to inaccurate information.										
			No harm is known to have	occurred as a result of this i	noncompliance.								
Mitigation			To mitigate this noncompli	iance, the Entity:									
			1)	un finne to un aforme Doorting		e no vide dite Trene en insien Die en envitte the							
			1) contracted an engineer	ng inni to perform Reactive	e Power capability testing and	provided its fransmission Planner with the	results;						
			2) developed an oppoing of	ontract with a third party co	annamed compliance with M	JD-025-2, inual NEPC compliance services and suppor	t This includes quarterly meet	ings and monthly pho	one calls between the				
			consultant and plant staff	ontract with a time party co			t mismerudes quarterry meet						
			4) provided training to rele	evant employees on reactive	e power capability testing: and	1							
			5) implemented Gensuites	software to function as a co	mpliance calendar to track pe	riodic compliance activities.							
			, ,										
Other Factors			NPCC reviewed the entity's	s internal compliance progr	am (ICP) and considered it to	pe a neutral factor in the penalty determin	ation.						
			NPCC considered the entit	y's compliance history and o	determined there were no rel	evant instances of noncompliance.							
			Although the violation pos	ed a minimal risk to the reli	ability of the bulk power syste	em, NPCC determined that Compliance Exce	eption treatment was not app	opriate and that a sai	nction was appropriate				
			based on the lack of due di	ligence and overall lack of N	NERC compliance awareness t	o ensure NERC Reliability Standard require	ments were considered and in	plemented as the en	tity was recommissioning				
			the facility.										

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation			
FRCC2018020484	BAL-001-2	R2.	Medium	Lower	9/24/2018	9/24/2018	Self-Report	2/21/2019	3/13/2019			
Description of the Violat document, each violation a "violation," regardless posture and whether it v confirmed violation.)	ion (For purpose n at issue is desc of its procedural vas a possible or	s of this ribed as	On October 4, 2018, HST su This violation started on Se within limits after one addi HST exceeded the BAAL hig The System Operator was r (< 1 year) and a series of pr any additional actions, such The System Operator adjus	This violation started on September 24, 2018, when HST's Balancing Authority ACE Limit (BAAL) High alarm exceeded 30 consecutive minutes and ended on September 24, 2018, when BAAL returned to within limits after one additional minute. HST exceeded the BAAL high limit for 31 consecutive minutes (one (1) minute beyond the allowable 30 consecutive clock-minutes), over-generating by approximately eight (8) MWs during this period. The System Operator was monitoring the BAAL High Limit Exceeded Alarms on the Alarm Summary, which were occurring every five (5) minutes as designed. The System Operator's relative inexperience (< 1 year) and a series of prior alarms received earlier in the morning that cleared by themselves, resulted in the operator expecting the BAAL High Limit exceedance to return within limits without taking any additional actions, such as curtailing transactions, as required by HST's BAAL Alarm procedure. The System Operator adjusted the next hour schedule lower. The BAAL high limit exceedance cleared at 08:02, for a total of 31 minutes.								
			he cause for this violation was the System Operator's misjudgment and relative inexperience (< 1 year) paired with a lack of management oversight.									
RISK Assessment			HST's failure to take action generation, impacting the This risk was reduced beca FRCC Region summer load. No harm is known to have	mainsk and did not pose a solution of pose a solution of the BAAL back votential stability of the BPS use HST only exceeded the occurred.	vithin limits could lead to further high fr S. BAAL High limit by one (1) minute and th	equency excursion with the over-gene he excursion was only for eight (8) MW	eration and cause neight	boring BA entities to u ST's 107 MW system	nnecessarily reduce is less than 0.2% of the			
Mitigation			To mitigate this violation, H 1) identified the issue 2) provided the Syste 3) performed an exte 4) created a cause an 5) revised the BAAL A procedure revision 6) completed training 7) executed revised B include: a. Starting th b. Modifying c. Requiring o d. Providing f 8) provided reinforce 9) started exporting E 20, 25, 26, 27, 28, a Director. The design	IST: and provided reinforcement m Operator a written perfo- nt-of-condition review to ch d effect diagram and perfor larm Procedure and update version 7; on the revised BAAL proce AAL procedure, version 8, t e use of the check list when the check list to allow the S completion of the check list or management review of co- ment training on the revised AAL supervisory control an and 29 minutes. These notified gnated additional personnel	nt training to the involved System Opera rmance letter, emphasizing the importa neck for other occurrences since the qua med root cause analysis; ed to include actions to be taken with the dure version 7 for all System Operators; o clarify System Operators required acti the alarms first start to occur, ystem Operator to record the date/time by the System Operator at the 20 minut completed check lists with feedback to the d BAAL Alarm procedure, version 8, and d data aquistion (SCADA) alarms to key fications include the Sr. Manager of Syste will contact the System Operator to dis	ator; nce of taking action on BAAL alarms, e arterly review and no additional instan e addition of HST generation now back ons and to provide for the inclusion of e for actions taken as well as a section te mark and greater, he System Operator to improve future revised check list to all applicable Syst personnel once the first alarm occurs a tem Operations, Senior System Operat scuss required actions needed to bring	especially at the 20 minutes were found; con line, in addition to contain a distribution to contain a distribution to contain a distribution to contain a distribution and the second se	ed by subsequent ala prector, and others as	rtailment; BAAL preventative controls rm notifications after 15, s designated by the			
Other Factors			This instant issue is a repeat of FRCC2016015952 and FRCC2017018469, which are considered an aggravating factor. Since the enforcement date of July 1, 2016, HST has violated this standard on several occasions. After each instance management has put additional safeguards in place; however, these actions have been insufficient to correct the situation and management oversight was considered an aggravating factor. The Internal Compliance Program was considered a neutral factor and no credit was granted as the program has not corrected the issue. Minimal credit was granted for the Self-Report and cooperation.									

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation			
NPCC2018019020	IRO-010-2	R3	Medium	Lower	10/9/17	10/10/17	Self-Report	2/28/2018	1/11/2019			
Description of the Viola	tion (For nurnos	es of this	On January 23, 2018, Cons	l solidated Edison Co. of NY 1	L	stating that as a Transmission Own	er (TO) it was in violati	n of IBO-010-2 B3 (	FCONY did not use the			
document, each violatio	on at issue is des	cribed as a	mutually agreed format be	etween itself and its Reliabi	lity Coordinator (NYISO) for data spec	ifications related to NYISO's Real-Tim	e monitoring.					
"violation," regardless	of its procedural	posture and										
whether it was a possib	le, or confirmed	violation.)	Specifically, CECONY failed to observe the NYISO's communication protocol and provision of Real Time data protocol associated with the Scheduled derate of two 345 kV Transmission Facilities: Feeders 41 and 42. CECONY scheduled the derates for pipe-type Underground Feeders 41 and 42 (associated with Feeder 41 and 42 cooling plant work) in advance through the NYISO outage scheduling process for the derates to begin at 7:00 am on October 9, 2017. However, and in violation of CECONY's internal procedure, substation field personnel made status changes to the cooling plant at 11:21 am on October 9, 2017 without asking permission from the CECONY System Operator. As a result, both feeders were derated in Real Time to a Summer Normal rating of 554 MW without the knowledge of the CECONY System Operator or the NYISO. The CECONY EMS carried an incorrect Summer Normal Rating of 649 MW for both Feeders. The CECONY EMS communicates via ICCP with the NYISO EMS. The NYISO's protocol associated with Real Time monitoring required CECONY's System Operator to contact the NYISO via phone prior to the scheduled start time to acquire an additional verbal approval for the scheduled derates to begin. Only upon NYISO's approval would the CECONY System Operator have normally changed both Feeder ratings in the EMS and provided permission to the CECONY substation field personnel to begin the cooling plant work. The violation started at 11:21 am on October 9, 2017, when substation personnel made the cooling plant adjustments that began the derates, and ended at 5:33 pm on October 10, 2017 when the CECONY System Operator notified the NYISO of the derates and adjusted the Summer Normal ratings in the EMS.									
Disk Assessment			substation that affects equipment ratings. This violation posed a minimal risk and did not pose a serious or substantial risk to the reliability of the bulk power system									
Risk Assessment			This violation posed a minimal risk and did not pose a serious of substantial risk to the reliability of the bulk power system.									
			The existence of incorrect ratings in the EMS could negatively impact the reliability of the BPS under stressed system conditions if the operating authority is unknowingly operating to a higher rationant the equipment can accommodate. In this case, however, pre-outage studies were performed by CECONY and the NYISO as part of the NYISO's scheduling and approval process. The scheduling process allows the opportunity for the CECONY or NYISO to study and possibly deny the outage request one week in advance and then an opportunity to study again and possibly deny the outage as the October 9, 2017 operational day was beginning. On October 9, 2017, the NYISO and/or CECONY System Operator would have cancelled the job before the scheduled 7:00 am start time had system conditions warranted such cancellation. At no time during the approximate 30-hour duration of the violation did the system configuration change to cause an increase in loading on either feeder that exceeded the 554 MW reduced ratings.									
Mitigation			To mitigate this violation, 1) Conducted an Ope 2) Provided addition 3) Directed the Subst Operator outage s 4) Updated its Subst approval from the	CECONY: erating Incident investigatio al training to its Substation tation Planner responsible f switching card; and ation procedure 0900-0002	on upon the discovery of the violation Shift Managers and operators on the for making future outage requests for – Operation and Maintenance of High	through CECONY's Substation Operat derate notification and approval prod scheduled dielectric cooling plant wo h Pressure Dielectric Fluid Cooling Pla	tions and System Opera cess and its importance ork at substations to ad <i>nts (PURS)</i> - with the de	ations staff; to the reliability of th d a distinct notificatio ocumentation of the r	e Bulk Power System; n step to the System equirement to request			
Other Factors			NPCC reviewed CECONY's internal compliance program (ICP) and considered it to be a mitigating factor in the penalty determination. CECONY's ICP is documented in procedure TP-7560-18 Management of the Compliance Process for NERC and NPCC Reliability Standards. CECONY's internal compliance function is managed by the NERC Reliability Compliance Section (NRC). The NRC Section consists of a manager and a staff of six engineers. The function of the NRC Section is to manage the NERC compliance process for CECONY. Through its ICP, the NRC Section has identified all NERC Standards applicable to CECONY and assigned each to the appropriate corporate organization. The NRC Section manages the NERC CMEP for CECONY and is responsible for the submittal of all required periodic documentation such as guided self-certification evidence and forms. The NRC Section also coordinates audit responses to NPCC. The NRC Section manages a documented process									

for evaluating issues of possible noncompliance. As part of the ICP, the NRC Section maintains archives of CECONY compliance docume and NPCC Standards development process and represents Con Edison on the NPCC Compliance Committee and Regional Standards Cor
In recognition of its extensive ICP and robust culture of compliance, CECONY was qualified for self-logging by NPCC in 2016. As a self-log assess and correct issues of possible noncompliance. CECONY has effectively implemented its self-logging authority and has limited its
NPCC considered CECONY's compliance history and determined there were no relevant instances of noncompliance.

nentation. The NRC Section actively participates in the NERC permittee.

ogging entity, CECONY has demonstrated its ability to identify, suse of self-logging to instances of minimal risk noncompliance.

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation	
NPCC2018019446	FAC-009-1	R1	Medium	Moderate	6/18/2007	1/30/2018	Self-Report	12/26/2018	1/10/2019	
NPCC2018019446 Description of the Violat document, each violatio a "violation," regardless posture and whether it confirmed violation.)	ion (For purpose n at issue is desc of its procedura was a possible, o	RI es of this ribed as I or	On March 28, 2018, Consol Ratings consistent with its I violation of FAC-009-1 R1 fr of this violation, there was CECONY's FRM requires the that the ratings used in CEC element of the feeders. Sul affected nine (9) of its twer do not utilize the DFR syste real-time Facility Ratings ex automatically uploads the F STE rating on the cable por feeder. In the case of these series piece of equipment of three 138 kV transmission f	idated Edison Co. of NY, Inc Facility Rating Methodology rom June 18, 2007 until Dec no substantive change in CE e use of the most-limiting el- CONY's Energy Management osequently, the issue was de nty-four (24) BES pipe type f m. These 9 feeders represent clusively for underground t Facility Ratings into CECONY tion for each mode, and the 9 feeders, the Facility Ratin feeders, all of which are location feeders, all of which are location of the DEP. CECONY reverted	(CECONY) submitted a Self-F (FRM) for nine Facilities. NP ember 31, 2012 and then was CONY's compliance obligatio ement (MLE) as the Facility R System (EMS) for two Bulk E etermined to be with the DFR luid filled transmission feede int 5.1% (9/175) of CECONY's ransmission cable portion of 's EMS. There are 3 different in also considers the Summer ag being used by the EMS that pumping mode scenarios or of ated within CECONY's New Yo	Report stating that, as a Transmission Owner (TO) CC later determined that the violation began und is in violation of FAC-008-3 R6 from January 1, 202 ns under the two applicable Standard Requirement ating for its Facilities. CECONY initially discovered lectric System (BES) feeders that utilized the Dyn feeders and CECONY performed an extent of cor rs that utilize the DFR system. CECONY has a tota BES feeders. The DFR is an advanced software to the feeder by considering the load history and die modes of dielectric fluid circulation through the p and Winter ratings of all series connected equip t had been calculated by the DFR did not take into due to recent loading history on the feeder. The r ork City Transmission Load Area.	), it was in violation of FA ler FAC-009-1 R1. Accord 13 until January 30, 2018 ents. d this violation through a amic Feeder Ratings (DF ndition review on all 24 I l of 175 BES transmission ol that allows for greater electric fluid temperatur pipe type fluid filled feed ment. As a result, there a o account that certain di noncompliant Facilities c	AC-008-3 R6. CECON lingly, NPCC determin 3. NPCC further determ an on-watch System C R) system did not res DFR feeders and disco n feeders. The other 3 r real-time operationa e during real-time op ders and the DFR calculater are 18 different rating sconnect switches we onsisted of six 345 kV	<ul> <li>I/10/2019</li> <li>' did not establish Facility red that CECONY was in mined that, for purposes</li> <li>Operator who discovered pect the most limiting overed this violation</li> <li>151 transmission feeders al flexibility by calculating reration and then ulates a Normal, LTE, and gs possible for each ere the most limiting in- / transmission feeders and</li> <li>g the completion of an</li> </ul>	
Risk Assessment			The root cause of this violation is inadequate oversight and controls over the coordination between the DFR software and the Energy Control Center (ECC) SCADA server. Prior to FAC-009-1 coming into effect in 2007, CECONY had a facility ratings methodology that followed the accepted utility practices of the time. After the effective date of FAC-009-1, CECONY's methodology for establishing feeder ratings included identifying the most limiting element. However, CECONY did not ensure that the pre-2007 Facility Ratings calculated by DFR software respected the MLE and that that correct ratings were displayed on the SCADA system to the System Operator. This violation posed a minimal risk and did not pose a serious or substantial risk to the reliability of the bulk power system.							
			<ul> <li>The use of the inaccurate DFR ratings in the EMS could affect the reliability of the BPS under stressed real-time system conditions if the operating authority is unknowingly operating to a higher rating the the equipment can accommodate. Advance planning studies that involved these 24 feeders that have DFR was performed using the more conservative book ratings, not the dynamic rating.</li> <li>The three 138 kV feeders became BES elements on 7/1/2016. The historical data for 2016 and 2017 shows that, for the majority of hours where any rating exceeded the MLE, the only rating that exceeded MLE was the Short Term Emergency (STE) rating. There were minimal instances where the EMS had an inaccurate rating for the Long Term Emergency (LTE) and NORMAL ratings. In Re Time, there were no occurrences where power flows exceeded any of the rating levels (NORMAL, LTE, STE) that should have shown in the EMS had the MLE been properly considered in developing the Facility Rating.</li> <li>The six 345 kV feeders became BES elements on 6/18/2007. The historical data for 2010 through 2017 shows that, for the majority of hours where any rating exceeded the MLE, the only rating that was inaccurate was the Short Term Emergency (STE) rating. There were minimal instances where the EMS had an inaccurate rating for the LTE and NORMAL ratings. In real time, there were occurrences where power flows exceeded any of the rating levels (NORMAL, LTE, STE) that should have shown in the EMS had the MLE been properly considered in developing the facility Rating.</li> </ul>							
			<ul> <li>However, the risk of this noncompliance was reduced by the following factors: <ol> <li>CECONY operates the transmission system on an N-2 basis secured to NORMAL ratings.</li> <li>The violation consisted, largely, of the EMS showing an incorrect STE Rating to the Operator, which are rarely reached even after a contingency occurs.</li> <li>The violation consisted, largely for operating the power system keeps real time power system flows under the NORMAL rating under normal operating conditions and obligates the System Operator to return facilities back to under NORMAL ratings in response to any contingency as soon as possible. The methodology also does not allow for an STE contingency alarm that results from the Real Time Contingency Analysis program to remain; the System Operator must adjust the system immediately to clear the STE contingency alarm.</li> </ol> </li> <li>When real-time issues occur, the CECONY System Operator operates in a conservative fashion to prolong the life of BES elements. The System Operator must clear an Over Normal alarm within 3 hours instead of the Planning allowance of 24 hours. The System Operator must clear an Over LTE alarm within 15 minutes instead of the Planning allowance of 15 minutes.</li> </ul>							

Northeast Power Coordinating Council, Inc. (NPCC)

Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation		
FAC-009-1	R1	Medium	Moderate	6/18/2007	1/30/2018	Self-Report	12/26/2018	1/10/2019		
5) Based on a review of historical data, there were no instances during the period of noncompliance where the nine feeders experienced real time flows that exceeded any of the correct level (Normal, LTE, STE) of the MLE. No harm is known to have occurred.										
Mitigation       To mitigate this violation, CECONY:         1)       Suspended the use of its DFR tool and began using the book ratings from the Engineering department and performed an extent of condition review;         2)       Implemented and tested equipment book rating limits for all series transmission equipment in its EMS system for all DFR-rated feeders in accordance with its documented FRM         3)       Enhanced the coordination between the DFR server and ECC SCADA server so that the ECC SCADA server provides the most limiting series element rating to the EMS for the Operator's										
Other Factors Although this was a minimal risk issue, NPCC aggravated this violation to an SNOP with a penalty. FAC-008-3 R6 has been identified as an area of focus in the ERO Enterprise CMEP Implementation P from 2016 through 2019. For a large TO such as CECONY, it is expected that Facility Ratings discrepancies be identified and addressed through detective controls and not discovered as part of anoth capital project or incidentally by an on-watch system operator.										
Additionally, NPCC reviewed CECONY's internal compliance program (ICP) and considered it to be a mitigating factor in the penalty determination. CECONY's ICP is documented in procedure TP <i>Management of the Compliance Process for NERC and NPCC Reliability Standards</i> . CECONY's internal compliance function is managed by the NERC Reliability Compliance Section (NRC). The NR consists of a manager and a staff of six engineers. The function of the NRC Section is to manage the NERC compliance process for CECONY. Through its ICP, the NRC Section has identified all NE Standards applicable to CECONY and assigned each to the appropriate corporate organization. The NRC Section manages the NERC CMEP for CECONY and is responsible for the submittal of all periodic documentation such as guided self-certification evidence and forms. The NRC Section also coordinates audit responses to NPCC. The NRC Section manages a documented process for e issues of possible non-compliance. As part of the ICP, the NRC Section maintains archives of CECONY compliance documentation. The NRC Section actively participates in the NERC and NPCC S development process and represents Con Edison on the NPCC Compliance Committee and Regional Standards Committee.										
		In recognition of its extens and correct issues of possi	ive ICP and robust culture of ble noncompliance. CECONY	compliance, CECONY was qualified for has effectively implemented its self-log	self-logging by NPCC in 2016. As a self- gging authority and has limited its use o	logging entity, CECONY of self-logging to minima	has demonstrated its Il risk noncompliance.	ability to identify, assess		
The violation duration was 3,879 days. CECONY did not have any detective controls in place that could have helped identify the issue sooner to lessen the violation duration and thereby lessen the river in the violation duration and thereby lessen the river in the violation duration and thereby lessen the river in the violation duration and thereby lessen the river in the violation duration and thereby lessen the violation duration duratid duration duratid duration duration								thereby lessen the risk.		
	Reliability Standard FAC-009-1	Reliability Standard       Req.         FAC-009-1       R1	Reliability Standard       Req.       Violation Risk Factor         FAC-009-1       R1       Medium         5)       Based on a review level (Normal, LTE, No harm is known to have         To mitigate this violation, O         1)       Suspended the use         2)       Implemented and         3)       Enhanced the coor         Although this was a minim from 2016 through 2019.         capital project or incidenta         Additionally, NPCC reviewed Management of the Compu- consists of a manager and Standards applicable to CE periodic documentation su issues of possible non-com development process and         In recognition of its extens and correct issues of possil         The violation duration was         NPCC considered CECONY	Reliability Standard         Req.         Violation Risk Factor         Violation Severity Level           FAC-009-1         R1         Medium         Moderate           5)         Based on a review of historical data, there were level (Normal, LTE, STE) of the MLE.         No harm is known to have occurred.           No harm is known to have occurred.         To mitigate this violation, CECONY:         1)           1)         Suspended the use of its DFR tool and began use.         2)           2)         Implemented and tested equipment book ratir         3)           3)         Enhanced the coordination between the DFR s           Although this was a minimal risk issue, NPCC aggravate from 2016 through 2019. For a large TO such as CECOI capital project or incidentally by an on-watch system o           Additionally, NPCC reviewed CECONY's internal complin Management of the Compliance Process for NERC and consists of a manager and a staff of six engineers. The Standards applicable to CECONY and assigned each to to periodic documentation such as guided self-certification issues of possible non-compliance. As part of the ICP, to development process and represents Con Edison on the In recognition of its extensive ICP and robust culture of and correct issues of possible noncompliance. CECONY The violation duration was 3,879 days. CECONY did not NPCC considered CECONY's compliance history and det	Reliability Standard         Req.         Violation Risk Factor         Violation Severity Level         Violation Start Date           FAC-009-1         R1         Medium         Moderate         6/18/2007           5)         Based on a review of historical data, there were no instances during the period of non level (Normal, LTE, STE) of the MLE.         No harm is known to have occurred.           To mitigate this violation, CECONY:         1)         Suspended the use of its DFR tool and began using the book ratings from the Engineer 2)           1)         Suspended the use of its DFR tool and began using the book ratings from the Engineer 2)         Implemented and tested equipment book rating limits for all series transmission equil 3)           1)         Suspended the use of its DFR tool and began using the book ratings from the Engineer 2)         Implemented and tested equipment book rating limits for all series transmission equil 3)           2)         Implemented and tested equipment book rating limits for all series transmission equil 3)         Enhanced the coordination between the DFR server and ECC SCADA server so that the 3)           Although this was a minimal risk issue, NPCC aggravated this violation to an SNOP with a pena from 2016 through 2019. For a large TO such as CECONY, it is expected that Facility Ratings di capital project or incidentally by an on-watch system operator.           Additionally, NPCC reviewed CECONY and assigned each to the appropriate corporate organization periodic documentation such as guided self-certification evidence and forms. The NRC Section issues of possible non-compli	Reliability Standard         Req.         Violation Risk Factor         Violation Severity Level         Violation Start Date         Violation End Date           FAC-009-1         R1         Medium         Moderate         6/18/2007         1/30/2018           5)         Based on a review of historical data, there were no instances during the period of noncompliance where the nine feeders ex level (Normal, LTE, STE) of the MLE.         No harm is known to have occurred.           To mitigate this violation, CECONY:         1         Suspended the use of its DFR tool and began using the book ratings from the Engineering department and performed an extt 2)         Implemented and texet equipment book rating limits for all series transmission equipment in its EMS system for all DFR-rat 3)         Enhanced the coordination between the DFR server and ECC SCADA server so that the ECC SCADA server provides the most I from 2016 through 2019. For a large TO such as CECONY, it is expected that Facility Ratings discrepancies be identified and addresse capital project or incidentally by an on-watch system operator.           Additionally, NPCC reviewed CECONY's internal compliance program (ICP) and considered it to be a mitigating factor in the penalty of Management of the Compliance Process for NERC and NPCC Reliability Standards. CECONY is internal compliance process for Standards applicable to CECONY is neglineers. The function of the NRC Section anaage the NERC compliance process for Standards applicable to CECONY as regineers. The function of the NRC Section manages the NERC Standards applicable to CECONY and assigned each to the appropriate corporate organization. The NRC Section anaageset the NERC issues of possible non-compliance. As part of the IC	Retain         Req.         Violation Risk Factor         Violation Severity Level         Violation Start Date         Violation End Date         Method of Discovery           FAC-009-1         R1         Medium         Moderate         6/18/2007         1/30/2018         Self-Report           FAC-009-1         R1         Medium         Moderate         6/18/2007         1/30/2018         Self-Report           FAC-009-1         S         Based on a review of historical data, there were no instances during the period of noncompliance where the nine feeders experienced real time flow level (Normal, LTE, STE) of the MLE.         No harm is known to have occurred.           No harm is known to have occurred.         To mitigate this violation, CECONY:         1         Suspended the use of its DFR tool and began using the book rating limits for all series transmission equipment in its EMS system for all DFR-rated feeders in accordance         3)         Enhanced the coordination between the DFR server and ECC SCADA server so that the ECC SCADA server provides the most limiting series element re           Although this was a minimal risk issue, NPCC aggravated this violation to a SNOP with a penalty. FAC-008-3 R6 has been identified and addressed through detective cor capital project or incidentally by an on-watch system operator.           Additionally, NPCC reviewed EECONY's internal compliance program (ICP) and considered it to be a mitigating factor in the penalty determination. CECONY Monogement of the Compliance Process for NERC and NPCC RelioBility Stondards. CECONY is internal compliance proceses for N	Relability Standard         Req.         Violation Risk Factor         Violation Severity Level         Violation Start Date         Violation End Date         Method of Discovery         Mitigation Completion Date           FAC-009-1         R1         Medium         Moderate         6/18/2007         1/30/2018         Self-Report         12/26/2018           S         Based on a review of historical data, there were no instances during the period of noncompliance where the nine feeders experienced real time flows that exceeded any of level (Normal, LTE, STE) of the MLE.         No harm is known to have occurred.         To mitigate this violation, CECONY:         1         Suspended the use of its DFR tool and began using the book ratings from the Engineering department in the EMS system for all DFR-rated feeders in accordance with its documenter.         1         Suspended the use of its DFR tool and began using the book rating limits for all series transmission equipment in its EMS system for all DFR-rated feeders in accordance with its documenter.         1           3         Enhanced the coordination between the DFR server and ECC SCADA server so that the ECC S		

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of		
NDCC2010020745		DC	Madium	Louver	7/1/2010	11/0/2019	Colf Depart		Mitigation		
NPCC2018020745	FAC-008-3	Rb		Lower		11/9/2018		11/15/2018	1/11/2019		
document, each violatio	ion (For purposes n at issue is descr of its procedural	ibed as	On November 30, 2018, Co Facility Ratings consistent v	nsolidated Edison Co. of NY, vith its Facility Rating Methc	dology (FRM) for eight Facilities.	stating that, as a Transmission Owner	(TO), it was in violation	of FAC-008-3 R6. CE	JONY did not establish		
posture and whether it confirmed violation.)	vas a possible, o	r	CECONY's FRM requires the 138 kV disconnect switches discovered this violation aff being in the DFR system. In noncompliant Facilities con became BES elements on Ju	e use of the most-limiting ele when it discovered the the fected eight (8) of its one hu the case of these 8 feeders sisted of two 345 kV transm Ily 1, 2016.	ement (MLE) as the Facility Rating for its rmal ratings of a 138 kV intra-substatior ndred and fifty-one (151) BES transmiss that represent 4.6% of CECONY's BES fe ission feeders and six 138 kV transmissi	Facilities. CECONY initially discovered feeder did not respect the most MLE sion feeders that are non-DFR feeders. eeders, the Facility Rating did not respe on feeders, all of which are located wi	d this violation as part of of the Facility. CECONY CECONY has a total of 1 ect the most limiting in-s thin CECONY's New York	f the planning for a ca performed an extent 75 BES transmission series piece of equipn c City Transmission Lo	pital project to replace of condition review and eeders with 24 of them nent or MLE. The ad Area and all of which		
			This violation started on July 1, 2016, the date when all eight Facilities were identified as BES Elements under the revised Bulk Electric System definition and ended on November 9, 2018, when CECONY corrected the Facility Ratings to be consistent with its FRM for all eight feeders. In particular, CECONY corrected the ratings for the eight Facilities in its "Tie Feeder Rating Tabulation" (a.k.a the "book" rating) that is developed by Transmission Engineering and entered the correct ratings into its EMS/SCADA system.								
			Since the time that NERC st the newly identified BES ele CECONY's verification of the	nce the time that NERC standards came into effect in 2007, CECONY has had a mature methodology for establishing facility ratings that included identifying the MLE. However, a review of the ratings of ne newly identified BES elements conducted prior to the effective date of the BES definition (7/1/2016) was not fully effective. These are all non-DFR feeders. The root cause of this violation is that ECONY's verification of the ratings of new BES transmission elements was not fully effective prior to providing the ratings to the System Operation Department.							
Risk Assessment			The eight feeders are not p This violation posed a minir	art of CECONY's Dynamic Fe nal risk and did not pose a s	eder Rating (DFR) software and thus, we erious or substantial risk to the reliabilit	ere not part of the review that took pla ty of the bulk power system.	ace under NPCC201801	9446, FAC-009-1 R1.			
			The use of incorrect book ratings in the EMS could affect the reliability of the BPS under stressed system conditions if the operating authority is unknowingly operating to a higher rating than the equipment can accommodate. Planning and operating studies depend on the use of accurate book ratings such that the BES can withstand a variety of predetermined contingencies.								
			All eight of the feeders (2 - 345 kV and 6 – 138 kV) became BES elements on July 1, 2016.								
			The first 345 kV feeder has three modes of dielectric fluid circulation and CECONY develops three different ratings (Normal, LTE, STE) for both the summer and winter period. As a result, the 345 kV feed had 18 different possible ratings levels. The only rating of the 18 that was incorrect was the Summer STE rating. In addition, the feeder is operated in series with another 345 kV feeder that was rated correctly and that was more limiting than the 345 kV feeder with the ratings issue. However, both of those 345 kV feeders were monitored by the System Operator and had alarms points for flows (Normal, LTE, STE) in the EMS. As such, there was no operational risk because the System Operator would have seen, and reacted to, the EMS alarms on the more limiting feeder first.								
			The second 345 feeder served the high side of a 345/138 kV autotransformer and does not have circulating dielectric fluid. It was discovered that all six ratings (Normal, LTE, STE for Summer and Winter) on the 345 kV feeder needed adjustment to take into account that the 345 kV side of the autotransformer was limiting. The Summer Normal rating was 28% higher than the correct Summer Normal rating. However, the 138 kV feeders on the low side of the autotransformer had the correct ratings, were more limiting than the 345 kV feeder, and were equal to the rating of the low side of the transformer. The 138 kV feeders also had alarm points for flows (Normal, LTE, STE for Summer and Winter) in the EMS. As such, there was no operational risk because the System Operator would have seen, and reacted to, the EMS alarms on the more limiting feeders first.								
			<ul> <li>With regard to the six 138 kV feeders:</li> <li>The initial discovery of the limiting disconnect switch that led to the CECONY extent of condition review resulted in the corrected ratings for one intra-substation 138 kV feeder for all six ratings (Normal, LTE, STE for both Summer and Winter). The Summer Normal rating was 36% higher than the correct Summer Normal rating.</li> <li>One 138 kV feeder has two modes of dielectric fluid circulation and has a switchable reactor connected to it. The feeder has 24 possible different ratings and only the Winter STE rating was incorrect in one mode. The other 23 ratings were correct.</li> <li>By the strict implementation of the CECONY ratings methodology, four electrically equivalent and parallel 138 kV BES feeders needed the Summer and Winter Normal ratings adjusted due to the discovery that the high side transformer winding on each corresponding 138 kV to 69 kV transformer was incorrect.</li> </ul>								

	was 16% higher than the correct Summer Normal rating. The transformer is the limiting series element in all cases; however, the 4 tr and STE for both Summer and Winter) did not change on all 4 feeders.
	<ul> <li>However, the risk of this noncompliance was lessened by the following factors: <ol> <li>CECONY operates the transmission system to an N-2 basis secured to Normal ratings.</li> <li>The CECONY methodology for operating the power system keeps real time power system flows under the NORMAL rating under norreturn facilities back to under NORMAL ratings in response to any contingency as soon as possible. The methodology also does not al Time Contingency Analysis program to remain; the System Operator must adjust the system immediately to clear the STE contingence.</li> <li>When real-time issues occur, the CECONY System Operator operates in a conservative fashion to prolong the life of BES elements. The hours instead of the Planning allowance of 24 hours. The System Operator must clear an LTE alarm within 15 minutes instead of the Planning allowance of 15 minutes.</li> <li>None of the four parallel 138 kV BES feeders were ever operated over the rating of the BES cable portion. It was only the non-BES 138 ratings.</li> </ol></li></ul>
	No harm is known to have occurred.
Mitigation	<ul> <li>To mitigate this violation, CECONY:</li> <li>1) Performed an extent of condition review on all non-DFR BES transmission Facilities and determined that a total of eight (8) feeders w respect the associated most limiting series element for those feeders;</li> <li>2) Published corrected ratings for the eight noncompliant (8) feeders in its "Tie Feeder Rating Tabulation" document and implemented t</li> <li>3) Enhanced an existing software database tool to automatically identify the limiting element of non-DFR BES transmission facilities in o and made this tool the central repository for non-DFR BES feeder ratings and associated equipment ratings.</li> </ul>
Other Factors	Although this was a minimal risk issue, NPCC aggravated this violation to an SNOP with a penalty. FAC-008-3 R6 has been identified as an area from 2016 through 2019. For a large TO such as CECONY, it is expected that Facility Ratings discrepancies be identified and addressed throug capital project or incidentally by an on-watch system operator.
	Additionally, NPCC reviewed CECONY's internal compliance program (ICP) and considered it to be a mitigating factor in the penalty determina <i>Management of the Compliance Process for NERC and NPCC Reliability Standards</i> . CECONY's internal compliance function is managed by the consists of a manager and a staff of six engineers. The function of the NRC Section is to manage the NERC compliance process for CECONY. T Standards applicable to CECONY and assigned each to the appropriate corporate organization. The NRC Section manages the NERC CMEP for periodic documentation such as guided self-certification evidence and forms. The NRC Section also coordinates audit responses to NPCC. The issues of possible non-compliance. As part of the ICP, the NRC Section maintains archives of CECONY compliance documentation. The NRC Section maintains archives of CECONY compliance documentation. The NRC Section process and represents Con Edison on the NPCC Compliance Committee and Regional Standards Committee.
	In recognition of its extensive ICP and robust culture of compliance, CECONY was qualified for self-logging by NPCC in 2016. As a self-logging e and correct issues of possible noncompliance. CECONY has effectively implemented its self-logging authority and has limited its use of self-log
	NPCC considered CECONY's compliance history and determined there were no relevant instances of noncompliance.

ransformers are non-BES elements. The other four ratings (LTE

mal operating conditions and obligates the System Operator to low for an STE contingency alarm that results from the Real y alarm.

e System Operator must clear an Over Normal alarm within 3 Planning allowance of 3 hours. The System Operator must clear

8/69 kV series transformers that were exposed to the incorrect

vere noncompliant with the requirement due to a failure to

them in its EMS/SCADA system; and order to determine ratings that comply with the requirement

ea of focus in the ERO Enterprise CMEP Implementation Plans gh detective controls and not discovered as part of another

ation. CECONY's ICP is documented in procedure TP-7560-18 NERC Reliability Compliance Section (NRC). The NRC Section Through its ICP, the NRC Section has identified all NERC r CECONY and is responsible for the submittal of all required e NRC Section manages a documented process for evaluating ection actively participates in the NERC and NPCC Standards

entity, CECONY has demonstrated its ability to identify, assess gging to minimal risk noncompliance.

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation	
WECC2017017976	PRC-005-6	R3	High	Lower	4/2/2017	7/18/2017	Self-Report	7/20/2017	6/14/2018	
Description of the Viola document, each violatio "violation," regardless whether it was a possib	L Ition (For purpo on at issue is de of its procedura Ile, or confirme	ses of this scribed as a l posture and d violation.)	On July 21, 2017, the entity submitted a Self-Report stating, as a Transmission Owner, it was in violation of PRC-005-6 R3. Specifically, the entity reported that the 18-month testing for one volts direct current (VDC) battery bank had not been completed, per Table 1-4(a) of the Standard, due to errors with entry of maintenance milestones in the tracking software. In particular, the battery continuity, battery terminal connection resistance, and battery intercell connection resistance activities had not been completed in accordance with the maintenance entervals stated in the entity's Protection System Maintenance Program (PSMP). The float voltage of battery conditions, and physical condition of the battery rack maintenance activities had been completed quarterly. The 18-month testing period requirement for the switchyard VDC battery been completed prior to the required date of April 1, 2017. 100% of Protection System devices that adhere to a one to two calendar year testing and maintenance intervals must be maintenance intervals prescribed on July 18, 2017. After reviewing all relevant information, WECC determined the entity failed to maintain one VDC battery bank that is included within the time-based maintenance program in accorda maximum maintenance intervals prescribed within Table 1-4(a), as required by PRC-005-6 R3. The root cause of the violation was inadequate tracking of testing and maintenance activities in the software tracking system for testing and maintenance dates of the switchyard VDC b This violation began April 2, 2017, when the entity was required to have 100% Protection System device test completion, and ended on July 18, 2017, when the entity completed all rec for the VDC battery bank, for a total of 108 days of noncompliance.							
Risk Assessment			This violation posed a minimal risk and did not pose a serious and substantial risk to the reliability of the Bulk Power System. In this instance, DOPD failed to maintain one VDC battery bank that is included within the time-based maintenance program in accordance with the maximum maintenance intervals prescribed within Table 1-4(a), as required by PRC-005-6 R3. The entity did not have effective preventative or detective controls to prevent or detect this violation. However, the entity did maintain all testing and maintenance for the other VDC battery bank applicable to the Standard and Implementation Plan. Furthermore, as a compensating measure, the entity completed float voltage of battery charger, cell conditions, and physical condition maintenance for all VDC battery banks on a quarterly basis which would have alerted entity personnel with issues with the batteries. In addition, the switchyard subject to this violation has AC power coming from multiple sources outside of the switchyard itself, which lessens the risk.							
Mitigation			To mitigate this violation, a. completed b. updated i c. added ba	the entity: d battery continuity, batter ts PSMP to provide better c tteries to the PSMP tracking	y terminal connection resistar clarity on battery testing respc g software.	nce, and battery intercell connection re insibilities; and	sistance testing for the switcl	nyard VDC battery ba	nk;	
Other Factors			WECC determined that the Expedited Settlement Agreement disposition option without a penalty is appropriate for the following reasons: WECC did not apply mitigating credit for the entity's Internal Compliance Program (ICP) as WECC has not reviewed a documented ICP for this entity. WECC considered the entity's PRC-005 compliance history in determining the disposition track. WECC considered the entity's PRC-005 compliance history to be an aggravating factor in the penalty determination (WECC200800997 and WECC2014014179).							

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation		
WECC2017017041	VAR-002-2b	R2	Medium	Severe	This violation began on 7/14/2014, when CATA registered as a Generator Operator.	This violation ended on 7/28/2017 when CATA began using an Operations Control Center to monitor and alarm voltage.	Self-Report	10/17/2017	11/2/2017		
Description of the Violat document, each violatio "violation," regardless o whether it was a possib	tion (For purpose n at issue is dese f its procedural e or confirmed v	es of this cribed as a posture and /iolation.)	Specifically, CATA reported that, for its 110 MW photovoltaic power stating that, as a Generator Operator, it was in violation with VAR-002-20 R2. Specifically, CATA reported that, for its 110 MW photovoltaic power station, it had not consistently monitored voltage and therefore had not maintained or made notifications to the Transmission Operator (TOP) when the generator voltage had traversed outside the voltage schedule. However, during the time in which voltages were not monitored, the interconnecting utility would make requests when the need arose to control voltage and CATA would respond accordingly. CATA failed to maintain the generator voltage schedule directed by the TOP as required by VAR-002-2b R2. The root cause of the violation was CATA's lack of controls to ensure its Facility's voltage monitoring, alarming, and communication equipment support and comply with the TOP's generator volta schedule. WECC determined that this violation began on July 14, 2014, when CATA registered as a Generator Operator and ended on July 28, 2017, when CATA began using an Operations Control Center to monitor and alarm voltage for a total of 1110 days of noncompliance.								
Risk Assessment			This violation posed a minimal risk and did not pose a serious and substantial risk to the reliability of the Bulk Power System (BPS). In this instance, CATA failed to maintain the generator voltage schedule directed by the TOP as required by VAR-002-2b R2. Such failure could potentially result in undamped voltage oscillations and the unplanned tripping of the Facility. CATA owns and operates 110 MW of generation that was applicable to this issue.								
Mitigation			To mitigate this violation, 1) implemented controls a 2) transmitted voltage dat 3) set up alarms and starte 4) refreshed VAR-002-4 cc 5) purchased the webCom 6) increased required skills	CATA: and telemetry so the Operation a from the facility to the Of ed monitoring voltage and a communication training with apliance tool from OATI; an s for new OCC employees.	tions Control Center (OCC) can monito CC; alarms on voltage deviations 24/7 on t OCC staff; d	or and control the facility to the poir the Monarch Energy Management S	nt of interconnection; ystem at the OCC;				
Other Factors			WECC considered CATA's and its affiliates' VAR-002 R2 compliance history in determining the penalty. WECC considered CATA's and its affiliates' VAR-002 R2 compliance history to be an aggravatin factor in the penalty determination (NERC Violation ID WECC2016015506 and WECC2016015507). WECC also considered that the violation duration is 1110 days as described above. CATA did not have sufficient controls in place that could have helped identify the issue sooner to lessen the violation duration and thereby lessen the risk. WECC did not give credit for CATA's Internal Compliance Program (ICP). Although CATA does have a documented ICP, WECC determined that it did not aid in the discovery of this noncompliance or mitigate the risk while noncompliant.								

# Gila Bend Operations Company –NCR11372

Gila Bend Operations (	Company – NCR:	1372			NOC-2621				\$0		
NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation		
WECC2018019603	PRC-001-1	R1	High	Severe	6/18/2007 when the Standard and Requirement became mandatory and enforceable	5/29/2018 when GBOC completed its Protection Systems Training documentation in accordance with the Standard and Requirement	Self-Report	11/14/2018	12/18/2018		
Description of the Viola document, each violati "violation," regardless whether it was a possil	ation (For purpos on at issue is des of its procedural ble or confirmed	es of this cribed as a posture and violation.)	On April 30, 2018, GBOC review in March of 2018 of the protection system Lead Operator and/or a the 10 plant operators o activities. After reviewing all relev system schemes appliec The root cause of the viewith R1.	On April 30, 2018, GBOC submitted a Self-Report stating that, as a Generator Operator, it was in noncompliance with PRC-001-1 R1. Specifically, GBOC reported that during an internal compliance review in March of 2018, it discovered that it had not maintained adequate evidence to demonstrate that 10 plant operators at one generating station were familiar with the purpose and limitation of the protection system schemes that GBOC had applied in the plant area. The GBOC plant operating personnel team each had more than 5 years of experience working at this plant as either a Lead Operator and/or a Control Room operator. As part of normal operations, GBOC assigned more than one of these individuals to be present on-site at all times. Additionally, GBOC had trained the 10 plant operators on the plant area's protection system schemes through on-the-job knowledge transfer and hands on learning, although it had never had a formal training program for such activities. After reviewing all relevant information, WECC determined that GBOC failed to demonstrate with evidence that its operating personnel were familiar with the purpose and limitations of protection system schemes applied to one of its generating stations, as required by PRC-001-1 R1. The root cause of the violation was the lack of a formalized training program for the R1 activities and therefore GBOC was not able to demonstrate through evidence that it had ensured compliance with R1.							
Risk Assessment			WECC determined that this violation posed a minimal risk and did not pose a serious and substantial risk to the reliability of the BPS. In this instance, GBOC failed to demonstrate with evidence that its operating personnel were familiar with the purpose and limitations of protection system schemes applied to one of its generating stations, as required by PRC-001-1 R1. GBOC owned and operated approximately 2,200 MW of generation located at this plant and also operated and maintained one Protection System scheme on a 230 kV transmission line to a substation with 836 MVA of generation. Such failure could result in an unintended loss of the 836 MVA of generation, 2,200 MW of generation, or impact the 230 kV transmission elements if the operating personnel were unfamiliar with the Protection System scheme. Therefore, WECC assessed the potential harm to the security and reliability of the BPS as intermediate. However, GBOC had controls in place that required at least one experienced generating operator was on staff at all times at the generating station in scope. Additionally, this violation was related to maintaining proper training evidence rather than a true lack of familiarity or understanding of protection system schemes. Based on this, WECC determined that there was a low likelihood of causing intermediate harm to the BPS. No harm is known to have occurred.								
Mitigation			To remediate and mitiga 1) created a training do 2) executed training on 3) identified a team at ( changes as well as how 4) developed a compute	ite this violation, GBOC: cument on protection system protection system schemes f GBOC to determine if the con the changes will be communi er based training on protectio	n schemes for operating personnel and for the required personnel and captur nputer based training program needs icated with the rest of the required pe on system schemes as a required part	d established that the training should ed the evidence to demonstrate com to be updated for changes in protecti ersonnel; and to f the operator onboarding.	l be repeated at a minim pliance; ion system schemes, wh	າum of every 36 mon າo will be responsible	ths; for coordinating the		
Other Factors			WECC applied an aggravating factor for the following reason:         i.       WECC escalated the disposition option to an expedited settlement due to the significant violation duration, which is 3,999 days as described above.         Other Considerations:       .         i.       WECC did not apply a credit for GBOC's Internal Compliance Program because it did not have any detective controls in place that could have helped identify the violation sooner to lessen the violation duration.         ii.       WECC considered GBOC's compliance history and determined GBOC did not have any relevant compliance history.								

									Date Regional Entity
NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Verified Completion of Mitigation
WECC2017017203	PRC-005-1.1b	R2	High	High	1/1/2015, when IPCO failed to provide documentation of the implementation of maintenance and testing the metering devices that send signals to one relay (Current Transformers and Potential Transformers)	2/24/2017, when IPCO completed and documented a Relay Meter Calibration Check for the Protection System relay	Self-Report	4/20/2017	8/17/2017
Description of the Viola document, each violatic	tion (For purpose on at issue is desc	es of this cribed as a	On January 30, 2017, IPCC for a Self-Log due to the vi	) submitted a Self-Log statir iolation duration supported	ng that, as a Generator Owner, it was i by the original evidence for the repor	n violation of PRC-005-2 R3. On Febru rted scope in addition to compliance	uary 15, 2017, IPCO was history with PRC-005, O	notified that the vio March 7, 2017, WF	lation does not qualify CC created the Self-
"violation," regardless of	of its procedural	posture and	Report stating that, as a G	enerator Owner, IPCO was	in violation with PRC-005-1.1b R2.				
whether it was a possib	le or confirmed v	violation.)	Specifically, IPCO reported have been completed on J	I that during an internal cor anuary 1, 2015, but was no	npliance review in December 2016, it t completed until February 24, 2017.	identified missing maintenance and t	esting records for ten P	rotection System rela	ays. The testing should
			After reviewing all relevan Protection System mainte Transformers), as required	it information, WECC detern nance and testing program by PRC-005-1.1b R2.	mined that there was a change in scop and the implementation of that progr	be from what IPCO originally reported ram for the metering devices that sen	l. WECC found that IPCC d signals to one relay (C	) failed to provide do Current Transformers	cumentation of its and Potential
			The root cause of the viola	ation was not having formal	lly documented controls to verify that	relay testing and maintenance were	performed within the re	equired timeframe.	
			WECC determined that thi signals to one relay (Curre days of noncompliance.	is violation began on Januar nt Transformers and Poten	ry 1, 2015, when IPCO failed to provide tial Transformers) and ended on Febru	e documentation of the implementat uary 24, 2017, when IPCO completed	ion of maintenance and and documented a Rela	l testing the metering ay Meter Calibration (	g devices that send Check, for a total of 786
Risk Assessment			WECC determined this vio documentation of its Prote	lation posed a minimal risk ection System maintenance	and did not pose a serious or substane and testing program and the impleme	tial risk to the reliability of the Bulk P entation of that program for only one	ower System (BPS). In t Protection System rela	his instance, IPCO fail ay, as required by PRC	ed to provide C-005-1.1b R2.
			However, the Protection S during a typical year, and t	system relay is associated w the IPCO grid is operated to	rith IPCO's 12 kV – 4.16 kV generator b remain stable should that amount of	ous and could only have tripped the 1 generation trip off.	.75 MVA generator. Thi	s generator runs less	than 15% of the time
Mitigation			To mitigate this violation,	IPCO:					
			1) completed testing and r	maintenance for the Protec	tion System relay;	orformed by the area Constation Tech	nician Loadors by impl	monting two SharoD	oint workflows and
			associated reminders; and		maintenance and testing activities pe				
			3) improved a checklist of	required items for mainten	ance and testing and incorporated the	e checklist into the workflow reminde	ers and distributed it to	key staff.	
Other Factors			WECC considered IPCO's P determination (NERC Viola	RC-005 R2 compliance historiation IDs WECC200800628,	ory in determining the disposition trac WECC200901452, and WECC2011028	ck. WECC considered IPCO's PRC-005 86).	R2 compliance history t	o be an aggravating f	actor in the disposition
			WECC did not apply mitiga preventing the above viola	ating credit for the entity's I ation.	nternal Compliance Program (ICP). Alt	though the entity does have a docum	ented ICP, WECC deter	nined that it was not	effective in detecting or

# Duquesne Light Company (Duquesne) – NCR00762

NOC-2615

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation	
RFC2017018162	FAC-008-3	R6	Medium	Lower	4/28/2015 (when the first incorrect substation conductor rating was entered into the Tool)	7/31/2017 (Mitigation Plan completion)	Self-Report	7/31/2017	5/11/2018	
Description of the Violat document, each violatio a "violation," regardless posture and whether it v confirmed violation.)	ion (For purposes n at issue is descr of its procedural vas a possible, o	s of this ribed as r	On August 4, 2017, the enti- ratings. Correcting these in not indicative of a systemic undertook an extensive ext More specifically, as backg discovery, the entity condu- sheets for substation condu- Substation Bus Rating Task The entity adopted use of t Electronic Engineers (IEEE) The entity determined that conductor types. The equa- that error quickly. Once the entity identified t industry standards. During accordance with accepted for all substation conducto Correcting these inconsister conductor types, and a con- comprehensive field review conductors were the most all input assumptions and p reductions), the entity deter not the most limiting element The entity operates 108 BE three transformers. This m where each temperature se normal, emergency, and lo	ity submitted a Self-Report s iconsistencies led to ratings of clissue with Duquesne's FAC- tent of condition review as p round, during a proactive rev icted a deeper dive into the uctor's types. (The Tool, which Force, which was a task ford the Tool in 2012 in advance of standards and other docume the inconsistencies with cer ations in the Tool were corre these inconsistencies, the en- its review, the entity verified industry standards or metho r types, which the entity util encies in input parameters le nbination of increases and dev performed as part of the en- limiting elements for three en- barameters, the entity discover ermined that the conductor f ents.) S Transmission Facilities (wh heans that approximately 3% et contains a normal, emerge ad dump rating reductions for	entered into the Tool) stating that, as a Transmission Owner, it changes for 30 substation conductor typ 008 program. Only approximately three part of its mitigation for this violation an view of the entity's System Ratings Data calculations used in the Substation Cond ch is used to calculate the ratings and cr ce of the PJM Transmission and Substati of the implementation date for FAC-008 ented sources to calculate parameters f rtain substation conductor ratings it disc ct, but an input value to one of the equa tity began a review of all input assumpt d approximately 700 input parameters a ods. (For each of the entity's eight tempo izes.) d to ratings changes for 30 substation c ecreases of the various ratings sets for 3 ntity's RFC2014013430 self-report and r entity Facilities: Carson No. 1 - 345/138k vered that these three conductors were for the Carson No. 1 – 345/138 kV autot	was in violation of FAC-008-3 R6. The best of this resulted in a reduction experient (3%) of Duquesne's Bulk Elect d that extent of condition did not revelopses, the entity discovered possible ductor Ratings Determination Tool (Treate the ratings sheets for substation on Design Committee.) -3. The Tool uses user-based assumptor the equations and ultimately the accovered arose from a data input error ations was entered incorrectly, and the ions and parameters used within the and 568 ratings for 71 substation com- erature sets, the entity subsequently onductor types. The changes resulted acconductor types. The changes resulted acconductor types. (Three of the 30 st mitigation. When the conductors wer actions was the most limiting elec- perature sets and capacitor banks es were affected by this violation. For each transmission Facility has a total was 23 out of a possible 72.	the entity discovered incom on of the overall Facility R extric System (BES) transmine real any other Facility Rations inconsistencies with certatool). The Tool is used to on the conductor's types, was on the conductor's types, was on the entity lacked an effection model to ensure that the p ductors. The majority of to recalculated the normal, d in lower ratings for 24 B ubject conductors were action to added in 2015, the enti- it 1A & 1B Generator Step 2015. After rerating these ement, but the conductors s). This violation resulted for each transmission Facilit of 24 normal, emergency	sistences with certain sistences with certain hission Facilities were ings inconsistencies. An substation conduct calculate the ratings a developed in Novemb s from various Institu- ings of the desired sub calculate the ratings of the desired sub calculate the ratings of the verification control warameters were in all these parameters were emergency, and load ES conductor types, r dded to the Tool in 20 ty initially determined of Up transformers. Du three conductors (wh s for two Cheswick Ste in a reduction of the of ty, the entity maintain y, and load dump ratio	a substation conductor ormers. This violation is affected. Duquesne tor ratings. Following this and create the ratings are 2010 by the PJM te of Electrical and ostation conductor types. f new substation d to detect and correct gnment with the accepted re verified to be in dump conductor ratings atings increases for 3 015 following a d that the three ring the current review of hich resulted in ratings ep Up transformers were overall Facility Rating for ns eight temperature sets ngs. The total number of	
			conductor types. The equa conductor types leading to place to verify that all input	ations in the Tool were corre an incorrect calculation of the t values were correct. That i	the entity det ct but an input value to one of the equa he conductivity of the conductor types. input error is a root cause of this violation	ermined one cause to be a data inpu- itions was entered in error. The user This error was compounded by the f on.	entered an incorrect valu act that the entity did not	ie for the material pro t have a validation an	operties of the same d verification control in	
Risk Assessment			This violation posed a moderate risk and did not pose a serious or substantial risk to the reliability of the bulk power system (BPS) based on the following factors. The risk posed by this violation is that incorrect and inconsistent substation conductor ratings could negatively affect the reliable operation of the BPS by allowing inconsistent Facility Ratings to exist for an entity's solely and jointly owned facilities that could lead to equipment failure. The risk is increased because of the long multi-year duration of the violation but the risk is lessened (and not serious) because only one of the incorrect substation conductor ratings were the most limiting factor for these Facilities. (Historical data was gathered and verified against the most limiting rating of each Facility which had an overall Facility rating change. None of these Facilities experienced current flows at or above the updated overall rating of each Facility.) The changes that did result in a Facility Ratings change did not impact the load dump ratings at any ambient temperature set but did impact the normal and emergency ratings. Only 3% of the entity's BES Transmission Facilities were affected by this violation. Additionally, none of the							

ReliabilityFirst Corporation (ReliabilityFirst)

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation			
RFC2017018162	FAC-008-3	R6	Medium	Lower	4/28/2015 (when the first incorrect substation conductor rating was entered into the Tool)	7/31/2017 (Mitigation Plan completion)	Self-Report	7/31/2017	5/11/2018			
			equipment changes were associated with Facilities which have Interconnection Reliability Operating Limits (IROLs). Lastly, ReliabilityFirst notes that no harm to BES Facilities occurred due to these errors.									
Mitigation			<ol> <li>To mitigate this violation, f</li> <li>reviewed, validated, at eliminate the need for</li> <li>re-rated and peer revie</li> <li>updated the entity's Ti</li> <li>developed a procedure</li> </ol>	<ul> <li>To mitigate this violation, the entity:</li> <li>1) reviewed, validated, and implemented logic to the calculations within the Tool to reduce future data entry errors. A drop-down menu has been implemented in the Excel-based tool which will eliminate the need for the user to type in material parameters, such as conductivity, within the data entry page;</li> <li>2) re-rated and peer reviewed all conductors with ratings calculated using the Tool and any changes were then updated in the Ratings Database;</li> <li>3) updated the entity's Transmission Planning Manual to include the changes of all new conductor rating additions within the Tool that will require a peer review; and</li> <li>4) developed a procedure to explain in detail how to use the Tool and correctly apply the entity's assumptions and the material properties.</li> </ul>								
Other Factors			compliance program and awarded mitigating credit. Although this violation contains a number of instances, the entity's compliance program still deserved mitigating credit because of the aggressive and thorough mitigation that the entity undertook and completed for this violation which is indicative of its strong compliance culture. In the past several years, the entity has made many improvements to its processes, procedures, and training which support its FAC-008 program. These enhancements have resulted in increased awareness and collaboration between groups as well as a more sustainable Facilit Ratings process. (Duquesne estimates that the total cost of performing the extensive reviews and field inspections was approximately \$296,000, which includes nearly \$200,000 in equipment rental costs with the remaining costs associated with labor.) ReliabilityFirst recognizes that this violation is a remnant of the entity's less mature FAC-008 program and not an appropriate reflection of the entity's current FAC-008 practices. The entity's compliance program has significant support from its Board of Directors and Executive leadership. The entity's dedicated internal compliance program (Corporate Compliance) operates unde the overall direction and guidance of the Vice President, Rates and Regulatory Affairs, General Counsel and Corporate Secretary who is a member of the executive leadership team and reports directly t the entity's internal compliance efforts. The Chief Compliance Officer is a key member of the entity's management team, and has full access to all officers and the Board of Directors, and provides an independent oversight and advisory function for the entity's senior management is active in compliance with NERC Reliability Standards, as evidenced by the entity Executive Compliance Committee's monthl meetings to review compliance matters and discuss any necessary changes to the entity's internal compliance program. Furthermore, the entity emphasizes compliance training for its employees that						aspects of the entity's use of the aggressive and nany improvements to its a more sustainable Facility n equipment rental costs lection of the entity's ompliance) operates under that and reports directly to d is the core of the entity's I provides periodic updates ance Committee's monthly ng for its employees that is			
			ReliabilityFirst considered process. The entity met an process, the entity volunta information with accurate ReliabilityFirst considered aggravating factor in the p	the entity's cooperation dur ad communicated with Reliak arily provided ReliabilityFirst and relevant information. Th the entity's relevant FAC-008 renalty determination.	ing the Settlement Agreement process pilityFirst on a regular basis, including m with an abundance of information rega he entity's cooperation is deserving of n 8/FAC-009 compliance history in determ	and awarded mitigating credit. The en- oonthly calls, to discuss the violation, th arding the violation in a manner that w nitigating credit. nining the penalty and disposition tracl	tity has been extremely one mitigation, and the states and the states detailed and timely. T k. ReliabilityFirst conside	cooperative throughc atus of mitigation. Th The entity also timely ered entity's compliar	but the entire enforcement roughout the enforcement responded to requests for nce history to be an			

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation		
RFC2017018903	FAC-008-3	R6	Medium	Lower	8/13/2014 (when the corrected Facility Rating in the revision of the Clairton-West Mifflin (Z-14) circuit map was not communicated to Transmission Planning)	11/14/2017 (when the entity finished adjusting all of the necessary Facility Ratings)	Compliance Audit	3/31/2018	5/30/2018		
Description of the Violat document, each violatio a "violation," regardless posture and whether it v confirmed violation.)	ion (For purpose n at issue is descu of its procedural vas a possible, o	s of this ribed as r	On December 21, 2017, the entity, as a Transmission Owner, discovered a violation with FAC-008-3 R6 identified during a Compliance Audit conducted from December 4, 2017 through December 13, 2017. Duquesne discovered an incorrect rating for a 138 kV circuit where a section of overhead 795 Aluminum Conductor Steel Reinforced (ACSR) 45/7 stranded conductor was not shown in Duquesne's circuit map, but was determined to be installed on that Facility upon a physical inspection. This was the result of the stranding of the conductor not being labeled. Duquesne also undertook a thorough extent of condition review as part of its mitigation for this violation and that extent of condition revealed only two other instances where the 795 ACSR overhead stranded conductor was mislabeled and the overall facility ratings were incorrect. More specifically, as background, during the Compliance Audit, the entity discovered that its Ratings Database was in error for the Clairton-West Mifflin (Z-14) 138kV circuit, where a section of overhead 795 ACSR 45/7 stranded conductor was not shown, but upon completion of a physical inspection, the entity determined to be installed on this Facility. (The entity utilizes two different stranding ratios for 795 ACSR - 45/7 and 26/7. These stranding ratios refer to the number of aluminum strands and number of steel strands which comprise the conductor. This is the only overhead transmission conductor was utilized until the 1960s at which point the entity transitioned to the 795 ACSR 45/7 conductor. All recent construction has been with the 795 ACSR 45/7 conductor.) The error began in August of 2014.								
<ul> <li>Were being used. The source documentation did not contain the appropriate amount of detailed stranding information to fully describe certain sections of overhile equipment ratings within the Ratings Database. As such, Transmission Planning was not aware that a new circuit map had been issued. The new revision of the cross of overhile equipment ratings within the Ratings Database. As such, Transmission Planning was not aware that a new circuit map had been issued. The new revision of the cross of overhile equipment ratings within the Ratings Database. As such, Transmission Planning was not aware that a new circuit map had been issued. The new revision of the cross of overhile equipment ratings within the Ratings Database. As such, Transmission Planning conducted a new analysis which resulted in the entity reducing the or summer 95°F (35°C) continuous rating was reduced from 932 amperes (A) to 919A; a difference of 13A. The entity subsequently updated its Ratings Database and October 18, 2017.</li> <li>The entity operates 85 Bulk Electric System (BES) transmission circuits. This violation resulted in a reduction of the overall Facility Rating for three BES transmission circuits were affected by this violation. The entity operates 108 solely and jointly owned bulk power system (B transmission circuits, transformers, reactors, and capacitor banks. As such, this violation resulted in a reduction of the overall Facility Rating for approximately 39 BPS Facilities.</li> </ul>					the circuit map ident the overall Facility Rat a and appropriate op mission circuits, which m (BPS) Facilities whi ely 3% of the entity's s	ified all the variations of ting for the Facility. The perational models on n means that ch the entity defines as solely and jointly owned					
			This violation involves the management practice of asset and configuration management because the entity failed to include a section of overhead 795 ACSR stranded conductor in its ratings database. The entity did not have an effective control in place to ensure that all relevant conductors were included in its Ratings Database and then communicated to Transmission Planning. That lack of an effective control is a root cause of this violation.								
Risk Assessment	This violation posed a minimal risk and did not pose a serious or substantial risk to the reliability of the bulk power system (BPS) based on the following factors. The risk posed by this violatio incorrect rating for a 138 kV circuit could negatively affect the reliable operation of the BPS by allowing an inconsistent Facility Rating to exist for an entity's solely and jointly owned facilities, lead to equipment failure. The risk is increased because of the long multi-year duration of the violation, but the risk is lessened (and still minimal) because the change in rating on the 138 kV minimal: just 13 amperes. The rating changed from 932 amperes to 919 amperes. The other two ratings changes were also minimal. (After a reduction of 3 amperes to correct the rating, (a 0.3% change), the Dravosburg-Wilmerding (Z-76) 138 kV circuit historically did not exceed 52% of its new normal current rating. After a reduction of 3 amperes to correct the rating, (a 0.3% change), the Dravosburg-Wilmerding (Z-77) 138 kV circuit historically did not exceed 49% of its new normal current rating.) Additionally, the entity confirmed that during the violation, all impacted 138 kV lines were loaded so the potential for failure was correspondingly low. (In order to evaluate risk to the entity transmission system, the entity performed a comprehensive review of historical data to sur loading of potentially affected circuits under the most conservative assumption of conductor rating. Based on over eight million hourly measurements from the entity's PI historian from Nov to November 2018, for all of the applicable circuits.) No harm is known to have occurred.					this violation is that the red facilities, which could in the 138 kV circuit was ne rating, (a 0.3% change), nge), the Dravosburg- / lines were rarely heavily I data to summarize the an from November 2010 f the normal rating, which					
Mitigation			To mitigate this violation, t	he entity:							

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation
RFC2017018903	FAC-008-3	R6	Medium	Lower	8/13/2014 (when the corrected Facility Rating in the revision of the Clairton-West Mifflin (Z-14) circuit map was not communicated to Transmission Planning)	11/14/2017 (when the entity finished adjusting all of the necessary Facility Ratings)	Compliance Audit	3/31/2018	5/30/2018
			<ol> <li>conservatively chose to until the conductor cound documentation [e.g., supdated the Facility Ra difference in the rating</li> <li>verified that the 795 A</li> <li>reviewed each circuit reverified that the conduction verified that the conduction of the scheduled and instances contain an overhead of Facilities which utilized voltages of 69 kV, 138</li> <li>corroborated the conduction then scheduled Facility precautionary measure could be performed. (If that the lower rated 795 continuous rating. All a approximately 2010 are Facility Rating or the Rating for the ratings for the ratings for the scheduled to formalize a these ratings changes to the schedules of the ratings for the schedules of the ratings for the ratings changes to the schedules of the ratings for the schedules of the ratings changes to the schedules of the schedules of the ratings for the schedules of the ratings changes to the schedules of the schedules of the schedules of the ratings changes to the schedules of the schedu</li></ol>	<ul> <li>until the conductor could be field verified. (When the possible error was discovered, the entity took immediate action to perform an exhaustive search of its drawing repository to find documentation [e.g., sag data sheets, construction drawings, etc.] that could verify the stranding of the installed 795 ACSR conductor. While the investigation was pending, the entity updated the Facility Rating in the Database with the more conservative of the two possible rating sets for the 795 stranded conductors until the conductor type could be field verified. difference in the rating sets was minimal, all operational models were updated and the ratings reduction was communicated to PJM.);</li> <li>verified that the 795 ACSR 45/7 conductor was installed through a physical inspection and hand counting the number of outside strands;</li> <li>reviewed each circuit map that has been updated since January 1, 2014, in order to confirm all circuit map revisions were appropriately incorporated into the Ratings Databases ince the verified that the conductors shown on these circuit maps matched the equipment contained within the Ratings Database. This review did not result in any changes to the Ratings Database ince the verified that the conductors underground conductor. In order to prevent errors, each circuit map was independently reviewed by two separate engineers. Through this review, the entity visites with utilize either variation of the 795 ACSR onductor. (The entity has not used either version of the 795 ACSR conductor on any of its 345 kV circuits. The entity utilizes tries which utilize either variation of the 795 ACSR onductor in order to verify its ty voltages of 69 kV, 138 kV, and 345 kV.) For these 34 BPS Facilities, the entity negineers performed an exhaustive search of its drawing repository to locate drawings that document circuit corroborated the conductor stranding shown in the Ratings Database. The review found 13 instances where sufficient drawing information could not be obtained to validate conductos t</li></ul>					atings reduction to PJM bry to find supporting he entity proactively I verified. Although the se since the review, and tings Database; and y's 84 BPS circuits which he entity identified 34 BPS utilizes transmission ument circuit changes and conductor type. Duquesne erify its type. As a M until the inspections vative approach to assume for the summer 95°F (35°C) ur circuits reaches back to ult in a change to the in minor reductions to the ase; procedure has been equired notifications of
Other Factors		ReliabilityFirst reviewed th compliance program and a thorough mitigation that th processes, procedures, and Ratings process. (Duquesne with the remaining costs as current FAC-008 practices. The entity's compliance pr the overall direction and g the entity's President and Q NERC and PJM compliance directly to the Audit Comm meetings to review compli customized based on job for	e entity's internal compliance warded mitigating credit. All he entity undertook and com d training which support its I e estimates that the total co ssociated with labor.) Reliak rogram has significant suppor guidance of the Vice Presider Chief Executive Officer. Corp efforts. The Chief Compliance hittee of the Board. The entit iance matters and discuss an unction and self-assessment	ce program (ICP) and considered it to be though this violation contains a number npleted for this violation which is indica FAC-008 program. These enhancements ost of performing the extensive reviews a polityFirst recognizes that this violation is port from its Board of Directors and Exect nt, Rates and Regulatory Affairs, Genera porate Compliance provides an independ the Officer is a key member of the entity's ry's senior management is active in com- ny necessary changes to the entity's int is to identify compliance issues.	e a mitigating factor in the penalty deter r of instances, the entity's compliance tive of its strong compliance culture. In a have resulted in increased awareness and field inspections was approximate s a remnant of the entity's less mature utive leadership. The entity's dedicate al Counsel and Corporate Secretary wh dent oversight and advisory function fo s management team, and has full acces pliance with NERC Reliability Standards ternal compliance program. Furthermo	ermination. ReliabilityFir program still deserved m in the past several years, and collaboration betwo ly \$296,000, which inclu- FAC-008 program and m ed internal compliance p no is a member of the ex- pr the entity's internal co s to all officers and the B s, as evidenced by the en ore, the entity emphasiz	st considered certain nitigating credit becau the entity has made n een groups as well as des nearly \$200,000 i ot an appropriate ref rogram (Corporate Co ecutive leadership te mpliance program an oard of Directors, and tity Executive Compli res compliance trainin	aspects of the entity's use of the aggressive and many improvements to its a more sustainable Facility n equipment rental costs flection of the entity's ompliance) operates under eam and reports directly to id is the core of the entity's d provides periodic updates ance Committee's monthly ng for its employees that is	

NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation
RFC2017018903	FAC-008-3	R6	Medium	Lower	8/13/2014 (when the corrected Facility Rating in the revision of the Clairton-West Mifflin (Z-14) circuit map was not communicated to Transmission Planning)	11/14/2017 (when the entity finished adjusting all of the necessary Facility Ratings)	Compliance Audit	3/31/2018	5/30/2018
			ReliabilityFirst considered to process. The entity met and process, the entity volunta information with accurate ReliabilityFirst considered to aggravating factor in the pe	the entity's cooperation duri d communicated with Reliab rily provided ReliabilityFirst v and relevant information. Th he entity's relevant FAC-008 enalty determination.	ng the Settlement Agreement process a ilityFirst on a regular basis, including m with an abundance of information rega e entity's cooperation is deserving of n /FAC-009 compliance history in determ	and awarded mitigating credit. The ent onthly calls, to discuss the violation, th rding the violation in a manner that wa nitigating credit. nining the penalty and disposition track	ity has been extremely o e mitigation, and the sta as detailed and timely. T . ReliabilityFirst conside	cooperative througho atus of mitigation. Thr he entity also timely ered entity's complian	ut the entire enforcement roughout the enforcement responded to requests for the history to be an

Last Updated 03/28/2019

## FirstEnergy Utilities (FEU) – NCR11315

NOC-2613

	Nell1313				100 2013				\$75,000
NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation
RFC2016015998	PRC-005-1b	R2	High	Lower	3/14/2012 (when the Standard became mandatory and enforceable on the entity)	12/29/2017 (Mitigation Plan completion)	Self-Report	12/29/2017	1/26/2018
Description of the Violat this document, each vio described as a "violatior procedural posture and possible, or confirmed v	ion (For purpose lation at issue is ," regardless of it whether it was a violation.)	s of ts	On August 8, The entity dis instances. Fir Program, whi Of the 46 rela Second, for th that these 100 identify PRC-C Additionally, t delayed. This violation enter all of th ensure that all than being ce	enforceable on the entity       (Mitigation Plan completion)         On August 8, 2016, the entity submitted a Self-Report to ReliabilityFirst stating that, as a Transmission Owner, it was in violation of PRC-005-1b R2.         The entity discovered 154 out of 38,168 in-scope PRC-005 relays (0.4%) were outside of the entity's defined maintenance interval. The entity identified two separate contributing causes for the 154 instances. First, for 46 of the 154 relays, the entity discovered that, in its maintenance and testing Cascade Database, the relays were incorrectly part of the non-Bulk Electric System (BES) Maintenance Program, which has slightly longer intervals than required by its BES program under PRC-005 (six years). The entity discovered that in seven years, 6 were maintained within sight years, and 3 were maintained within nine years or more.         Second, for the remaining 108 relays out of the 154 relays, the entity found all 108 of the missing relays during the completion of mitigating activities that included reviewing station diagrams at BES locations to identify PRC-005 relays that were maintained and tested. The entity found all 108 of the missing relays during the completion of mitigating activities that included reviewing station diagrams at BES locations to identify PRC-005 relays that were missing from the Cascade Database. These relays were older relays that never made it into the Cascade Database.         Additionally, there was one battery/charger at a new substation that was not entered into the Cascade Database in a timely manner and, therefore, orders for maintenance on that battery/charger were delayed.         This violation involves the management practices of asset and configuration management, verification, and validation. The root cause of the overdue maintenance was twofold. First, the entity failed to enter a					
Risk Assessment			This violation of equipment number of de that were par Therefore, if a tested and the these reasons The risk is not Maintenance were tested t Center if a fai database in a Accordingly, t	posed a moderate or facilities due to vices at issue (154 t of an Interconnec an issue were ident ere are multiple ov 5, while two relays c serious because th Program and thus hree years late. Of lure occurs) and 10 timely manner, the he violation posed	risk and did not pose a serious or substantial risk to the reliabil misoperation of the protection system equipment where the r relays) and the relatively long duration for the 108 relays for w ction Reliability Operating Limit (IROL). One relay is microproces ified, a corrective action would have been taken. Additionally, rerlapping relays that were maintained as well and those overla were part of an IROL, additional and overlapping measures wer his violation involved less than half of one percent of the entity' were tested between only one and three years later than the re the 108 relays that were not in the Cascade Database, 64 are m 0 had backup relays that would function in case the primary rela- e battery/charger was being monitored via low-voltage alarm a a moderate risk to the reliability of the bulk power system. rred.	ity of the bulk power system (BPS) b elay schemes were not maintained a hich the entity lacked testing and ma ssor-based and contains self-monitor this line has backup relaying that was pping relays would act in case of a b e in place to maintain reliability.) 's in-scope PRC-005 relays. Additiona equired six-year interval. Specifically nicroprocessor-based and contain se ay failed. For the one new battery/ch nd the entity performed periodic che	ased on the following factor and tested in a timely mann intenance records. (The en- ring which will send relay factor is maintained. The second re reaker failure to trip on that ally, of the 154 relays at iss of 37 were tested only one of monitoring (which will second narger at a new substation tecks on the battery/charge	ors. The risk posed by ner. The risk is not m ntity identified two ap ailure alarms back to relay was found to be at second relay therel ue, 46 were part of th year late, 6 were test end relay failure alarn that was not entered r during routine statio	r this violation is the loss nimal because of the oplicable relays at issue the Control Center. within tolerance when by reducing the risk. For ne entity's non-BES ed two years late, and 3 ns back to the Control 1 into the entity's on inspections.
Mitigation			The entity had and confirmed correctly sche The entity's m Database as b dedicated res additional sub	d already maintaine d that work was co eduled for future m nitigating actions di being part of the BE ources to review al ostations located in	ed and tested all but one relay scheme by the time the entity di mpleted as of April 7, 2016. For every issue, the entity made th aintenance per the entity's PRC-005 PSMP. irectly address the root causes of this violation. First, the entity S Protection System Maintenance Program. (To identify existin bout 790 substations. The entity re-reviewed the 79 CIP Medium is entity-East and entity-West operating areas. For those subs	iscovered all of the issues. The entity e appropriate modifications to the C conducted an extensive review to en g equipment potentially in scope of I m substations that are part of the Ba stations with equipment in scope of I	issued a maintenance and ascade Database by Augus nsure all relay schemes are PRC-005 that is missing in 0 r Coding initiative. In addit PRC-005, the entity will cor	testing order for the t 8, 2016, to ensure t appropriately "flagg Cascade, the entity es cion, the entity will re npare substation pro	remaining relay scheme hat the equipment is ed" in the Cascade stablished a project with view approximately 710 tective equipment

ReliabilityFirst Corporation (ReliabilityFirst)

FirstEnergy Utilities (FEU) – NCR11315	NOC-2613
	drawings against Cascade records to identify data integrity issues. Substations in the entity's other operating area, entity-South (former Alleg these locations are considered low risk based on a documented substation inventory walk-down completed in 2010 as part of a formal Mitiga this work based on risk to its BES transmission system. Top priority is 230 kV and higher substations and secondary priority is remaining BES s March 31, 2019.) Second, the entity has taken steps to ensure that all new equipment is entered into the Cascade Database upon installation requires that Project Managers verify that all appropriate equipment has been entered into Cascade. Second, the "New Equipment Entry Pro- equipment list is generated by the Substation Design group for all projects and that the list is integrated with the BES Flag review conducted to Records Control department then enters the equipment into Cascade. As an additional post-energization control to ensure all newly installed entity implemented a new monthly detective control. The detective control will confirm that all assets reflected as in-serviced in the entity's f Cascade Database.) The entity has historically employed a de-centralized method for data entry of substation equipment into the Cascade Database equipment entry within a recently formed corporate department - Asset Management & Records Control (AMF processes related to new construction and equipment additions at substations and will be implementing an additional control to better ensur prior to energization. To mitigate this violation, the entity:
	<ol> <li>reviewed the missing equipment for its CIP Medium and Tier 1 substations;</li> <li>did an extent of condition on 100% of its Tier II substations;</li> <li>implemented a detective control to ensure that the database includes all BES equipment; and</li> <li>reviewed Cascade Database "flags" for a need to shift from the entity's non-BES maintenance program to its PRC-005 Protection System M</li> </ol>
	The entity's mitigating actions will achieve greater assurance regarding the accuracy of the PRC-005 records residing in the Cascade Database devices relied upon for BPS reliability and ensured they are properly scheduled as required by the entity PRC-005 PSMP. The mitigation action controls to better position the entity for ongoing accuracy of the records in the Cascade Database.
Other Factors	The Settlement Agreement through which this violation was resolved included two violations, and the factors affecting the penalty determination opposed to each individual violation.
	ReliabilityFirst reviewed the entity's internal compliance program (ICP) and considered it to be a mitigating factor in the penalty determination entity's compliance program still deserved mitigating credit because of the controls that allowed it to identify the first issue and the entity's a and completed for both violations. The parent company of the entity has a robust internal compliance program that is managed by its FERC C responsibilities and is independent from the business units that are responsible for complying with the NERC Reliability Standards. Corporate monitoring activities that encourage opportunities to increase reliability. FCD is responsible for tracking and communicating new and updated Champions and their management. All Reliability Standard action items are recorded and tracked via the entity's compliance software. FCD m needed. FCD created a Director Dashboard which tracks new Reliability Standards or changes to existing Standards and associated action item entity's Executive Leadership Team, directors, managers, and Compliance Champions. Action items are given priorities with Regulatory deadlin Compliance that includes VP notification 30 days prior to due date.
	Effective oversight of the reliability of the BES depends on robust and timely self-reporting by Registered Entities. The entity promptly identified its compliance program and the installation of internal controls that yielded identification of the issues prior to the occurrence of any harm. The entity.
	ReliabilityFirst considered the entity's cooperation during the Settlement Agreement process and awarded mitigating credit. The entity has be Following the Self-Reports, the entity met and communicated with ReliabilityFirst on a regular basis, including multiple in-person meetings or and the status of mitigation. Throughout the enforcement process, the entity voluntarily provided ReliabilityFirst with an abundance of inform and timely.
	The entity is also in the process of constructing a new Center for Advanced Energy Technology (CAET) facility. This facility will allow for the int substation environment, will aid in the connectivity to the field devices, and improve data acquisition. The entity expects the facility to be operative of the integration of the integration environment, will aid in the connectivity to the field devices.

heny Power), are not included in this mitigating activity because ation Plan (Docket # RFC201000237). The entity has prioritized ubstations. These activities have a target completion date of n. (First, the "Pre-Energization Checklist," effective May 1, 2016, cess," effective October 10, 2016, ensures that a substation by the entity Protection group. The Asset Management and substation assets have been properly recorded in Cascade, the financial database ("Power Plant") are correctly recorded in the atabase. To improve data consistency and integrity, the entity RC). In addition, the entity has implemented two new control re new equipment is timely entered into the Cascade Database

laintenance Program (PSMP).

e. The mitigation actions identified missing protective equipment ns also established both detective and preventive internal

ation were considered in relation to both violations together as

on. Although both violations contain multiple instances, the aggressive and thorough mitigation that the entity undertook Compliance Department (FCD), which has corporate oversight Business Unit "Compliance Champions" assist FCD with d Reliability Standards to Corporate Business Unit Compliance nonitors action items and conducts follow-up meetings as ns. The Director Dashboard is communicated bi-monthly to the ines and milestones given the highest level of Critical

ied and reported the violation due to the effective execution of Therefore, ReliabilityFirst awarded some mitigating credit to the

een cooperative throughout the entire enforcement process. nsite at ReliabilityFirst to discuss the violations, the mitigation, mation regarding the violations in a manner that was detailed

troduction of new technology to the entity Transmission erational by March 31, 2019.

FirstEnergy Utilities (FEU) – NCR11315	NOC-2613
	Lastly, the entity is installing an Operational Technology Configuration Management (OTCM) Database to manage all configurable devices and standalone tool and not connected to any devices in the field, and configurations of non-relay devices were managed locally. This tool is being Database for consistency and workflow management. The entity is phasing the rollout of these systems and processes across the entity's opera targeted completion date in 2019. (The entity estimated the total cost to implement corrective actions and preventive measures for RFC20160 million: Substation walkdowns (includes inventory, barcoding, etc.) = \$47.3 Million; Drawing review – compared substation one-line diagrams \$29.4 Million; and Internal labor spent on mitigating activities = \$400k.)
	ReliabilityFirst considered the entity's compliance history in determining the penalty. ReliabilityFirst considered the entity's compliance history

d configuration files. Previously, the relay setting system was a g integrated with the entity's maintenance and testing Cascade rating companies beginning in the 4th quarter of 2018 with a 6015998, RFC2017017902, and related NERC Standards at \$78.8 s with Cascade equipment files = \$1.65 Million; OTCM Project =

bry to be an aggravating factor in the penalty determination.

# FirstEnergy Utilities (FEU) – NCR11315

NOC-2613

instellergy officies (i EO)	Nentisis				NOC 2015				\$75,000			
NERC Violation ID	Reliability Standard	Req.	Violation Risk Factor	Violation Severity Level	Violation Start Date	Violation End Date	Method of Discovery	Mitigation Completion Date	Date Regional Entity Verified Completion of Mitigation			
RFC2017017902	PRC-005-6	R3	High	Severe	4/2/2017 (when the Standard became mandatory and enforceable on the entity)	6/1/2018 (Mitigation Plan completion)	Self-Report	6/1/2018	6/18/2018			
Description of the Violat	tion (For purpose	s of this	On June 30, 2017, the entit	ty submitted a Self-Report to	ReliabilityFirst stating that, as a Transn	nission Owner, it was in violation o	f PRC-005-6 R3.					
document, each violatio	n at issue is desci	ribed as										
a "violation," regardless	of its procedural		The entity identified this vi	iolation through the PRC-005	-3(i) Guided Self Certification process ir	2017. The entity discovered that	it was incorrectly determini	ng battery performar	ice maintenance by			
posture and whether it	was a possible, o	r	utilizing the average of the	e string of the battery cell's in	Iternal ohmic value to compare to the in	ndividual cells rather than using the	e individual baseline for each	n battery as specified	in the PRC-005-6 R3,			
confirmed violation.)			20% of the entire string th	wonth's Maintenance interva	done to determine if battery replaceme	eprectors ballenes (62%). (When I	ement strategy resulted in t	the installation and re	anacement of more than			
			70 Bulk Electric System bat	tteries and chargers (\$1.5 mi	llion); an additional \$1.5 million was spe	ent on working and closing over 5,0	000 corrective maintenance	and preventative ma	intenance orders over an			
			18 months period, prior to	the Self-Report.) After iden	tifying the violation, the entity perform	ed the correct tests per PRC-005-6	R3 and did not identify any	additional battery ba	nks that needed to be			
			replaced. Although the ent	tity was not previously apply	ing the tests using the individual battery	y baselines across its footprint, the	entity's testing method yiel	ded similar results to	comparing against			
			battery baselines as requir	ed in PRC-005.								
			The entity conducted an in	wastigation to datarming ha	w this violation occurred. In 2014 and 2	2016 the entity added instructions	to record the initial average	hattory bacaling imr	adapco as moasurad 6 to			
			Ine entity conducted an investigation to determine how this violation occurred. In 2014 and 2016, the entity added instructions to record the initial average battery baseline impedance as measured 6 to 12 months after a new set of batteries had been installed to two different procedures. Due to an inconsistent implementation of this new maintenance strategy, however, most of the entity's operating									
			companies incorrectly continued to utilize the average of the string of battery cell's internal ohmic value to compare to the individual cells.									
			This violation involves the	This violation involves the management practices of work management and validation as the entity failed to validate that its new maintenance strategy for determining battery performance maintenance								
			was consistently implement	nted across the entity operat	ing companies. That inconsistent implei	mentation across the entity is a roo	ot cause.					
Risk Assessment			This violation posed a mod	lerate risk and did not pose a	a serious or substantial risk to the reliab	ility of the bulk power system base	d on the following factors.	Comparing each batt	erv's measurements everv			
			18 months to the initial ba	seline helps entities establis	h deviations as a predictor of age, wear,	etc., which would reduce the risk	of unexpected battery malfu	inctions due to those	factors. This risk was			
			mitigated in this case by the fact that, although the entity's testing practices were not in strict compliance with the Standard (because the entity was incorrectly determining battery performance									
			maintenance by utilizing th	ne average of the string of th	e battery cell's internal ohmic value to o	compare to the individual cells rath	her than using the battery ba	seline), the entity wa	is timely performing			
			maintenance and testing o	on its batteries in a way to ma	aximize battery performance. After the	entity established the battery base	elines per PRC-005 and com	pared to testing resul	ts, the entity did not			
			Identify any additional battery banks that needed to be replaced. (The entity identified 21 applicable lines and two applicable transformers that were part of an Interconnection Reliability Operating Limit									
			that needed to be replaced. As of June 1, 2018, PJM has removed 14 of the applicable lines and the two applicable transformers as IROL Facilities. Based on the current PIM defined IROLs, only seven									
			applicable lines utilized batteries at issue in this noncompliance.) Although the entity was not comparing to battery baselines across its footprint, the entity's method yielded similar results to comparing									
			against battery baselines as required in PRC-005. (ReliabilityFirst notes that the entity has an established battery replacement strategy that has replaced over 90 battery systems and has worked nearly									
			1070 Corrective Maintena	nce orders on batteries over	the past 18 months.)							
			No harm is known to have occurred									
Mitigation			To mitigate this violation, t	the entity:								
			1) undeted the Methode C	action 10N4 testing proceeding			andonan Thin activity analys		to chaicing will have			
			1) updated the Methods Section 16M testing procedure to incorporate evaluation of the test data to the established baseline impedance. This activity ensures that qualified field technicians will have									
			2) has determined baseline	e impedances for all existing	batteries. This activity ensures that all b	patteries older than 12 months hav	e an established baseline:					
			3) has created a detective	control that will be performe	ed annually to record the average batter	ry impedance of batteries that are	between 6 and 15 months c	ld. This activity ensu	res newer batteries have a			
			recorded baseline;									
			4) has performed an exten	t of condition to determine t	the list of batteries that need to be eval	uated against their baseline imped	ance. This activity ensures t	hat all batteries requi	red per PRC-005-6 R3,			
			Table 1-4(a) are included in	n the list to be mitigated;								
			6) conducted training on the	-ieu training module; he undated testing procedur	e for field technicians qualified for batte	erv testing: and						
			7) collected in-scope batte	erv test data through June 1.	2018 and evaluated results against base	eline impedance.						
			17 conected in-scope battery test data through june 1, 2010 and evaluated results against baseline impedative.									

# ReliabilityFirst Corporation (ReliabilityFirst)

FirstEnergy Utilities (FEU) – NCR11315	NOC-2613
	The entity's mitigating actions implemented process improvements that will ensure qualified field technicians will have proper instructions o determination to ensure that all batteries older than 12 months have an established baseline; annual baseline updates to ensure newer batter reinforcement of the new testing method.
Other Factors	The Settlement Agreement through which this violation was resolved included two violations, and the factors affecting the penalty determine opposed to each individual violation.
	ReliabilityFirst reviewed the entity's internal compliance program (ICP) and considered it to be a mitigating factor in the penalty determination entity's compliance program still deserved mitigating credit because of the controls that allowed it to identify the first issue and the entity's a and completed for both violations. The parent company of the entity, has a robust internal compliance program that is managed by its FERC or responsibilities and is independent from the business units that are responsible for complying with the NERC Reliability Standards. Corporate monitoring activities that encourage opportunities to increase reliability. FCD is responsible for tracking and communicating new and update Champions and their management. All Reliability Standard action items are recorded and tracked via the entity's compliance software. FCD n needed. FCD created a Director Dashboard which tracks new Reliability Standards or changes to existing Standards and associated action item entity's Executive Leadership Team, directors, managers, and Compliance Champions. Action items are given priorities with Regulatory deadl Compliance that includes VP notification 30 days prior to due date.
	ReliabilityFirst considered the entity's cooperation during the Settlement Agreement process and awarded mitigating credit. The entity has b Following the Self-Reports, the entity met and communicated with ReliabilityFirst on a regular basis, including multiple in-person meetings of and the status of mitigation. Throughout the enforcement process, the entity voluntarily provided ReliabilityFirst with an abundance of inform and timely.
	ReliabilityFirst considered the entity's compliance history in determining the penalty. ReliabilityFirst considered the entity's compliance history

on evaluating battery baseline impedance; baseline teries have a recorded baseline; and training to ensure the

nation were considered in relation to both violations together as

ion. Although both violations contain multiple instances, the aggressive and thorough mitigation that the entity undertook Compliance Department (FCD), which has corporate oversight e Business Unit "Compliance Champions" assist FCD with ed Reliability Standards to Corporate Business Unit Compliance monitors action items and conducts follow-up meetings as ems. The Director Dashboard is communicated bi-monthly to the dlines and milestones given the highest level of Critical

been cooperative throughout the entire enforcement process. onsite at ReliabilityFirst, to discuss the violations, the mitigation, rmation regarding the violations in a manner that was detailed

ory to be an aggravating factor in the penalty determination.