

November 30, 2021

VIA ELECTRONIC FILING

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

Re: **NERC Full Notice of Penalty regarding NaturEner Wind Watch, LLC,
FERC Docket No. NP22-_-000**

Dear Ms. Bose:

The North American Electric Reliability Corporation (NERC) hereby provides this Notice of Penalty¹ regarding NaturEner Wind Watch, LLC (NWIND), NERC Registry ID# NCR11382,² in accordance with the Federal Energy Regulatory Commission's (Commission or FERC) rules, regulations, and orders, as well as NERC's Rules of Procedure including Appendix 4C (NERC Compliance Monitoring and Enforcement Program (CMEP)).³

NERC is filing this Notice of Penalty, with information and details regarding the nature and resolution of the violations,⁴ with the Commission because Western Electricity Coordinating Council (WECC) and the Entity have entered into a Settlement Agreement to resolve all outstanding issues arising from WECC's determination and findings of the violations of the Reliability Standards listed below.

According to the Settlement Agreement, NWIND admits to the violations, and has agreed to the assessed penalty of fifty-four thousand dollars (\$54,000), in addition to other remedies and actions to mitigate

¹ *Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards, Order No. 672, 114 FERC ¶ 61,104, order on reh'g, Order No. 672-A, 114 FERC ¶ 61,328 (2006); Notice of New Docket Prefix "NP" for Notices of Penalty Filed by the N. Am. Elec. Reliability Corp., Docket No. RM05-30-000 (February 7, 2008); Mandatory Reliability Standards for the Bulk-Power System, Order No. 693, 118 FERC ¶ 61,218, order on reh'g, Order No. 693-A, 120 FERC ¶ 61,053 (2007).*

² NWIND was included on the NERC Compliance Registry as a Balancing Authority (BA) on 10/02/2013.

³ See 18 C.F.R § 39.7(c)(2) and 18 C.F.R § 39.7(d).

⁴ For purposes of this document, each violation at issue is described as a "violation," regardless of its procedural posture and whether it was a possible, alleged, or confirmed violation.

NERC Notice of Penalty
NWIND
November 30, 2021
Page 2

the instant violations and facilitate future compliance under the terms and conditions of the Settlement Agreement.

Statement of Findings Underlying the Violations

This Notice of Penalty incorporates the findings and justifications set forth in the Settlement Agreement, by and between WECC and NWIND. The details of the findings and basis for the penalty are set forth in the Settlement Agreement and herein.

In accordance with Section 39.7 of the Commission’s regulations, 18 C.F.R. § 39.7 (2021), NERC provides the following summary table identifying each violation of a Reliability Standard resolved by the Settlement Agreement. Further information on the subject violations is set forth in the Settlement Agreement/Notice of Confirmed Violation and herein.

Violation(s) Determined and Discovery Method								
*SR = Self-Report / SC = Self-Certification / CA = Compliance Audit / SPC = Spot Check / CI = Compliance Investigation								
NERC Violation ID	Standard	Req.	VRF/VSL	Applicable Function(s)	Discovery Method* & Date	Violation Start-End Date	Risk	Penalty Amount
WECC2018020595	BAL-001-2	R2	Medium /Lower	BA	SR; 10/30/18	5/28/18 – 5/28/18	Moderate	\$54k
WECC2019021703	BAL-001-2	R2	Medium /Lower	BA	SR; 6/14/19	4/18/19 – 4/18/19	Moderate	

Information about the Entity

NWIND formed in 2006, is a renewable energy platform based in Palm Beach Gardens FL, that provides solutions for clean energy development, operations, and renewable energy integration in North America. The Company operates a platform, which includes scheduling for wind and hydroelectric assets in addition to controlling and operating two wind-only NERC / WECC-certified Balancing Authorities, via the NaturEner Operating Center.

NERC Notice of Penalty
NWIND
November 30, 2021
Page 3

WECC2018020595 (BAL-001-2 R2)

WECC determined that, on May 28, 2018, NWIND's Energy Management System (EMS) issued an audible and visual alarm at 7:37 PM, after the ten-minute mark, and another audible and visual EMS-issued alarm at 7:42 PM. The System Operator acknowledged both alarms but took no immediate action to resolve the issue to ensure that NWIND operated such that its clock-minute average of Reporting ACE did not exceed its clock-minute Balancing Authority ACE Limit (BAAL) for more than 30 consecutive clock-minutes. Attachment 1 includes additional facts regarding the violation.

The cause of this violation was attributed to the System Operator dismissing the alarm and acting willfully to not fulfill his responsibility to resolve the issue causing the alarms, in a timely manner.

WECC determined that this violation posed a moderate risk to the reliability of the bulk power system (BPS). Attachment 1 includes the facts regarding the violation that WECC considered in its risk assessment.

NWIND submitted its mitigating activities to address the referenced violation. Attachment 1 includes a description of the mitigation activities NWIND took to address this violation.

NWIND certified that it had completed all mitigation activities. WECC verified that NWIND had completed all mitigation activities. Attachment 1 provides specific information on WECC's verification of the NWIND's completion of the activities.

WECC2019021703 (BAL-001-2 R2)

WECC determined that, on April 18, 2019, NWIND's System Operator silenced an alarm triggered by flow limit exceedances in the area, but unrelated to NWIND operations. By silencing the alarm, the System Operator also silenced the BAAL alarms. Soon thereafter, a BAAL timer event started and instead of maintaining situation awareness, the System Operator moved away from the controls. The EMS issued an alarm indicating BAAL had been exceed for 30 consecutive minutes before the System Operator took adequate action. Attachment 1 includes additional facts regarding the violation.

The cause of this violation was attributed to the System Operator dismissing the alarm and acting willfully to not fulfill his responsibility to resolve the issues causing the alarms, in a timely manner.

WECC determined that this violation posed a moderate risk to the reliability of the bulk power system (BPS). Attachment 1 includes the facts regarding the violation that WECC considered in its risk assessment.

NERC Notice of Penalty
NWIND
November 30, 2021
Page 4

NWIND submitted its Mitigation Plan to address the referenced violation. Attachment 1 includes a description of the mitigation activities NWIND took to address this violation. A copy of the Mitigation Plan is included as Attachment 4.

NWIND certified that it had completed all mitigation activities. WECC verified that NWIND had completed all mitigation activities. Attachment 6 provide specific information on WECC's verification of the NWIND's completion of the activities.

Regional Entity's Basis for Penalty

According to the Settlement Agreement WECC has assessed a penalty of fifty-four thousand dollars (\$54,000) for the referenced violations. In reaching this determination, WECC considered the following factors:

1. The willful acts of NWIND's System Operators, which could have resulted in a frequency excursion beyond defined limits;
2. WECC considered NWIND's compliance history an aggravating factor;
3. NWIND had an internal compliance program at the time of the violation, however WECC determined that the ICP was not effective in preventing the behavior of either System Operator, as discussed in Attachment 1;
4. NWIND self-reported the violations in a timely manner;
5. NWIND was cooperative throughout the compliance enforcement process;
6. NWIND accepted responsibility and admitted to the violation;
7. NWIND agreed to settle these violations and penalty;
8. There were no other mitigating or aggravating factors or extenuating circumstances that would affect the assessed penalty/disposition method.

After consideration of the above factors, WECC determined that, in this instance, the penalty amount of fifty-four thousand dollars (\$54,000) is appropriate and bears a reasonable relation to the seriousness and duration of the violations.

NERC Notice of Penalty
NWIND
November 30, 2021
Page 5

Statement Describing the Assessed Penalty, Sanction, or Enforcement Action Imposed⁵

Basis for Determination

Taking into consideration the Commission's direction in Order No. 693, the NERC Sanction Guidelines and the Commission's July 3, 2008, October 26, 2009 and August 27, 2010 Guidance Orders,⁶ NERC Enforcement staff reviewed the applicable requirements of the violations at issue, and considered the factors listed above.

For the foregoing reasons, NERC Enforcement staff approved the resolution between WECC and NWIND and believes that the assessed penalty of fifty-four thousand dollars (\$54,000) is appropriate for the violations and circumstances at issue, and is consistent with NERC's goal to promote and ensure reliability of the BPS.

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

Attachments to be Included as Part of this Notice of Penalty

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

1. Settlement Agreement by and between WECC and NWIND executed October 8, 2021, included as Attachment 1;
2. NWIND Self-Report for BAL-001-2 R2 dated October 30, 2018, included as Attachment 2;
3. NWIND's mitigating activities for BAL-001-2 R2 submitted May 14, 2020, included in the Settlement Agreement of Attachment 1;
4. NWIND Self-Report for BAL-001-2 R2 dated June 14, 2019, included as Attachment 3;
5. NWIND's Mitigation Plan designated as WECCMIT015118 for BAL-001-2 R2 submitted May 14, 2020, included as Attachment 4;
6. NWIND's Certification of Mitigation Plan Completion for BAL-001-2 R2 submitted May 27, 2020, included as Attachment 5; and

⁵ See 18 C.F.R. § 39.7(d)(4).

⁶ N. Am. Elec. Reliability Corp., "Guidance Order on Reliability Notices of Penalty," 124 FERC ¶ 61,015 (2008); N. Am. Elec. Reliability Corp., "Further Guidance Order on Reliability Notices of Penalty," 129 FERC ¶ 61,069 (2009); N. Am. Elec. Reliability Corp., "Notice of No Further Review and Guidance Order," 132 FERC ¶ 61,182 (2010).

NERC Notice of Penalty

NWIND

November 30, 2021

Page 6

7. WECC's Verification of Mitigation Plan Completion for BAL-001-2 R2 dated May 27, 2020, included as Attachment 6.

NERC Notice of Penalty
NWIND
November 30, 2021
Page 7

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

<p>Melanie Frye* President and Chief Executive Officer Western Electricity Coordinating Council 155 North 400 West, Suite 200 Salt Lake City, UT 84103 (801) 883-6882 (801) 883-6894 – facsimile mfrye@wecc.org</p> <p>Heather Laws* Director of Enforcement and Mitigation Western Electricity Coordinating Council 155 North 400 West, Suite 200 Salt Lake City, UT 84103 (801) 819-7642 (801) 883-6894 – facsimile hlaws@wecc.org</p> <p>Nancy Murray* General Counsel NaturEner Wind Watch, LLC 4750 East Park Drive, Third Floor Palm Beach Gardens, FL 33410 415-972-9380 nmurray@naturener.us</p> <p>Jeff Rehfeld* Senior Counsel NaturEner Wind Watch, LLC 4750 East Park Drive, Third Floor Palm Beach Gardens, FL 33410 415-531-9889 jrehfeld@naturener.us</p>	<p>Teresina Stasko* Assistant General Counsel and Director of Enforcement North American Electric Reliability Corporation 1325 G Street NW, Suite 600 Washington, DC 20005 (202) 400-3000 (202) 644-8099 – facsimile teresina.stasko@nerc.net</p> <p>James McGrane* Senior Counsel North American Electric Reliability Corporation 1325 G Street NW, Suite 600 Washington, DC 20005 (202) 400-3000 (202) 644-8099 – facsimile james.mcgrane@nerc.net</p> <p>Alain Rigaud* Associate Counsel North American Electric Reliability Corporation 1325 G Street NW Suite 600 Washington, DC 20005 (202) 400-3000 (202) 644-8099 – facsimile alain.rigaud@nerc.net</p>
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NERC Notice of Penalty

NWIND

November 30, 2021

Page 8

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

NERC Notice of Penalty
NWIND
November 30, 2021
Page 9

Conclusion

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

Respectfully submitted,

/s/ Alain Rigaud
James McGrane
Senior Counsel
Alain Rigaud
Associate Counsel
North American Electric Reliability
Corporation
1325 G Street NW
Suite 600
Washington, DC 20005
(202) 400-3000
(202) 644-8099 - facsimile
james.mcgrane@nerc.net
alain.rigaud@nerc.net

cc: NaturEner Wind Watch, LLC
Western Electricity Coordinating Council

Attachments

**CONFIDENTIAL**

Heather M. Laws
Director, Enforcement and Mitigation
801-819-7642 • hlaws@wecc.org

September 28, 2021

Via webCDMS Document Repository

Nancy Murray
 General Counsel
 NaturEner Wind Watch, LLC

Subject: Notice of Expedited Settlement Agreement

Nancy Murray,

I. Introduction

The Western Electricity Coordinating Council (WECC) hereby notifies NaturEner Wind Watch, LLC (NWIND) (NCR11382) that WECC identified Possible Violations of North American Electric Reliability Corporation (NERC) Reliability Standards (Reliability Standards) in the Preliminary Screen process and that based on an assessment of the facts and circumstances of the Possible Violations addressed herein, evidence exists that NWIND has Alleged Violations of the Reliability Standards.

WECC reviewed the Alleged Violations referenced herein and determined that these violations were appropriate for disposition through the Expedited Settlement process. In determining whether to exercise its discretion to use the Expedited Settlement process, WECC considered all facts and circumstances related to the violations.

This Notice of Expedited Settlement Agreement (Notice) notifies NWIND of the proposed penalty and/or sanctions for such violations. By this Notice, WECC reminds NWIND to retain and preserve all data and records relating to the Alleged Violations.

II. Alleged Violations

Standard Requirement	NERC Violation ID
BAL-001-2 R2	WECC2018020595
BAL-001-2 R2	WECC2019021703



Expedited Settlement Agreement

NaturEner Wind Watch, LLC

CF1656

September 28, 2021

The attached Expedited Settlement Agreement includes a summary of the facts and evidence supporting each Alleged Violation, as well as the basis on which the penalty and/or sanctions were determined.

III. Proposed Penalty or Sanction

Pursuant to the Federal Energy Regulatory Commission's (FERC or Commission) regulations and orders, NERC Rules of Procedure, and the NERC Sanction Guidelines, WECC may assess a penalty and/or nonmonetary sanction for the Alleged Violations of the Reliability Standards, as referenced in the attached Settlement Agreement.

In determining a penalty and/or sanction, WECC considers various factors that may include, but are not limited to: (1) Violation Risk Factor; (2) Violation Severity Level; (3) risk to the reliability of the Bulk Electric System (BES)¹, including the seriousness of the violation; (4) Violation Time Horizon and timeliness of remediation; (5) the violation's duration; (6) the Registered Entity's compliance history; (7) the timeliness of the Registered Entity's self-report; (8) the degree and quality of cooperation by the Registered Entity in the audit or investigation process, and in any remedial action; (9) the quality of the Registered Entity's Internal Compliance Program; (10) any attempt by the Registered Entity to conceal the violation or any related information; (11) whether the violation was intentional; (12) any other relevant information or extenuating circumstances; (13) whether the Registered Entity admits to and takes responsibility for the violation; (14) "above and beyond" actions and investments made by the Registered Entity in an effort to prevent recurrence of this issue and/or proactively address and reduce reliability risk due to similar issues; and (15) the Registered Entity's ability to pay a penalty, as applicable.

WECC's determination of penalties is guided by the statutory requirement codified at 16 U.S.C. § 824o(e)(6) that any penalty imposed "shall bear a reasonable relation to the seriousness of the violation and shall take into consideration the efforts of [the Registered Entity] to remedy the violation in a timely manner." In addition, WECC considers all other applicable guidance from NERC and FERC.

IV. Procedures for Registered Entity's Response

If NWIND accepts WECC's proposal that the violations listed in the Settlement Agreement be processed through the Expedited Settlement process, NWIND must sign the attached Settlement Agreement and submit it to WECC **within 15 calendar days from the date of this Notice**.

¹ "The Commission, the ERO, and the Regional Entities will continue to enforce Reliability Standards for facilities that are included in the Bulk Electric System." (*Revision to Electric Reliability Organization Definition of Bulk Electric System*, 113 FERC ¶ 61,150 at P 100 (Nov. 18, 2010))



Expedited Settlement Agreement

NaturEner Wind Watch, LLC

CF1656

September 28, 2021

If NWIND does not accept WECC's proposal, NWIND must submit a written rejection **within 15 calendar days from the date of this Notice**, informing WECC of the decision not to accept WECC's proposal.

If NWIND rejects this proposal or does not respond **within 15 calendar days**, WECC will issue a Notice of Alleged Violation and Proposed Penalty or Sanction.

V. Conclusion

In all correspondence, please provide the name and contact information of a representative from NWIND who is authorized to address the listed Alleged Violations and who is responsible for providing the required Mitigation Plans. Please also list the relevant NERC Violation Identification Numbers in any correspondence.

Responses or questions regarding the Settlement Agreement or for further guidance regarding confidential treatment of CEII should be directed to Ari Barusch, Associate Enforcement and Mitigation Attorney, at 801-883-6845 or abarusch@wecc.org.

Sincerely,



Heather M. Laws

Director, Enforcement and Mitigation

cc: NERC Enforcement



Attachment
EXPEDITED SETTLEMENT AGREEMENT
OF
WESTERN ELECTRICITY COORDINATING COUNCIL
AND
NATURENER WIND WATCH, LLC

Western Electricity Coordinating Council (WECC) and NaturEner Wind Watch, LLC (NWIND) (individually a “Party” or collectively the “Parties”) agree to the following:

1. NWIND admits to the violations of the NERC Reliability Standard listed herein.
2. The violations addressed herein will be considered Confirmed Violations as set forth in the NERC Rules of Procedure.
3. The terms of this Settlement Agreement, including the agreed upon payment, are subject to review and possible revision by NERC and FERC. Upon NERC approval of the Settlement Agreement, NERC will file a Notice of Penalty with FERC and will post the Settlement Agreement publicly, if applicable. If either NERC or FERC rejects the Settlement Agreement, then WECC will attempt to negotiate a revised Settlement Agreement with NWIND that includes any changes to the Settlement Agreement specified by NERC or FERC. If the Parties cannot reach a Settlement Agreement, the CMEP governs the enforcement process.
4. The Parties have agreed to enter into this Settlement Agreement to avoid extended litigation with respect to the matters described or referred to herein, to avoid uncertainty, and to effectuate a complete and final resolution of the issues set forth herein. The Parties agree that this Settlement Agreement is in the best interest of each Party and in the best interest of Bulk Power System (BPS) reliability.
5. This Settlement Agreement represents a full and final disposition of the violations listed herein, subject to approval or modification by NERC and FERC. NWIND waives its right to further hearings and appeal; unless and only to the extent that NWIND contends that any NERC or FERC action on this Settlement Agreement contains one or more material modifications to this Settlement Agreement.
6. In the event NWIND fails to comply with any of the terms set forth in this Settlement Agreement, WECC will initiate enforcement, penalty, and/or sanction actions against NWIND to the



maximum extent allowed by the NERC Rules of Procedure, up to the maximum statutorily allowed penalty. Except as otherwise specified in this Settlement Agreement, NWIND shall retain all rights to defend against such enforcement actions, in accordance with the NERC Rules of Procedure.

7. This Settlement Agreement shall be governed by and construed under federal law. This Settlement Agreement and all terms and stipulations set forth herein shall become effective upon FERC's approval of the Agreement by order or operation of law.
8. This Settlement Agreement contains the full and complete understanding of the Parties regarding all matters set forth herein. The Parties agree that this Settlement Agreement reflects all terms and conditions regarding all matters described herein and no other promises, oral or written, have been made that are not reflected in this Settlement Agreement.
9. Each of the undersigned warrants that he or she is an authorized representative of the Party identified, is authorized to bind such Party and accepts the Settlement Agreement on that Party's behalf.
10. The undersigned representative of each Party affirms that he or she has read the Settlement Agreement, that all representations set forth in the Settlement Agreement are true and correct to the best of their knowledge, information, and belief, and that he or she understands that the Settlement Agreement is entered into by each Party in express reliance on those representations.
11. To settle these NWIND hereby agrees to pay \$54,000 to WECC via wire transfer or cashier's check. NWIND shall make the funds payable to a WECC account identified in a Notice of Payment Due that WECC will send to NWIND upon approval of this Settlement Agreement by NERC and FERC. NWIND shall issue the payment to WECC no later than thirty days after receipt of the Notice of Payment Due. If this payment is not timely received, WECC shall assess, and NWIND agrees to pay, an interest charge calculated according to the method set forth at 18 CFR §35.19(a)(2)(iii) beginning on the 31st day following issuance of the Notice of Payment Due.
12. NOW, THEREFORE, in consideration of the terms set forth herein the Parties stipulate to the following:



A. NERC RELIABILITY STANDARD BAL-001-2 REQUIREMENT 2

NERC VIOLATION ID: WECC2018020595 AND WECC2019021703

STANDARD

1. NERC Reliability Standard BAL-001-2 Requirement 2 states:

R2. Each Balancing Authority shall operate such that its clock-minute average of Reporting ACE does not exceed its clock-minute Balancing Authority ACE Limit (BAAL) for more than 30 consecutive clock-minutes, calculated in accordance with Attachment 2, for the applicable Interconnection in which the Balancing Authority operates.

VIOLATION FACTS

2. On October 30, 2018, and June 14, 2019, respectively, NWIND submitted Self-Reports stating that, as a Balancing Authority, it was in potential noncompliance with BAL-001-2 R2.
3. In two instances, NWIND did not operate such that its clock-minute average of reporting Area Control Error (ACE) did not exceed its clock-minute Balancing Authority Area Control Error (ACE) Limit (BAAL) for more than 30 consecutive clock-minutes, due to over generation in one instance, and under generation in a second instance
4. Regarding the first instance, on May 28, 2018, NWIND's Energy Management System (EMS) issued an audible and visual alarm at 7:37 PM, after the ten-minute mark, and another audible and visual EMS-issued alarm at 7:42 PM. The System Operator acknowledged both alarms but took no immediate action to resolve the issue. On the day of the incident, the EMS system was issuing audible alarms and visual alerts, however other automated displays and applications typically relied upon by the System Operator were not displaying accurate information or initiating automated corrective actions. Despite being verbally alerted to these issues, the System Operator failed to realize that these automated systems were not operating correctly. At 7:52 PM, an audible and critical visual 2-minute EMS alarm was issued; however, the System Operator did not acknowledge the alarm or take action to address the issue. At 7:57 PM, when another EMS-issued alarm indicated that the BAAL had been exceeded for 30 consecutive clock-minutes, the System Operator acknowledged the alarm. However, it wasn't until 7:59 PM that the System Operator acted by manually setting the Automatic Generation Control (AGC) to "control to schedule" mode, which reduced the generation to the current net schedule interchange, bringing the reporting ACE back within the BAAL and ending the violation, for a duration of three minutes of noncompliance.
5. WECC determined the root cause of the first instance was attributed to the System Operator acting willfully to dismiss the alarm and failing to fulfill his responsibility to respond to alarms



from the EMS. The System Operator did not implement NWIND's protocol despite receiving training, including failing to seek managerial support when uncertain what measures to take. Because the System Operator acted willfully and contrary to his duty to act in compliance with BAL-001-2 R2 the issue must be treated as a high-risk issue.

6. Regarding the second instance, on April 18, 2019, at 10:00 PM, persistent, repeated alarms were triggered by flow limit exceedances in the area, but unrelated to NWIND operations. The System Operator, (not the same employee as the first instance) silenced the alarm, which he characterized as "a very persistent nuisance alarm." However, in silencing the volume related to those alarms, the System Operator silenced the BAAL alarms. Later, at 12:10 AM NWIND began to experience generation dropping due to low-wind conditions, requiring schedule curtailments at 1:05 AM and 1:42 AM. At 1:47 AM, a BAAL timer event started; however, instead of maintaining situational awareness, the System Operator moved away from the controls and closed his eyes, resulting in him not noticing a third rapid drop-off in generation.² At 2:13 AM, when an unrelated BAAL alarm began to sound, the System Operator noticed the BAAL lower limit exceedance and began to take action; yet, at 2:17 AM another EMS-issued alarm indicated that the BAAL had been exceeded for 30 consecutive clock-minutes. However, within seconds the ACE returned to 0 MW and the BAAL timer returned to 0 minutes at 2:18 AM, ending the violation, for a duration of one minute of noncompliance.
7. WECC determined the root cause of the instance was attributed to the System Operator's willful actions resulting in mismanagement of NWIND's BAAL tools and failing to properly implement procedures for which the employee had been trained, specifically pushing back from the controls and failing to use the rapid curtailment tool. The System Operator failed to properly implement NWIND's BAL-001-2 R2 procedure by willfully acting to ignore multiple alarms and choosing to close his eyes.

RELIABILITY RISK ASSESSMENT

8. WECC determined these violations posed a moderate risk to the Bulk Power System (BPS). WECC has not determined that either System Operator willfully or intentionally caused the violations to occur. However, the willful (deliberate, but incorrect) actions of the two System Operators in two separate instances contributed to the violations occurring and the potential harm that could have

² See NWIND Self Report, October 30, 2018, p. 1 ("despite training, procedures, protocols, and receipt of numerous warning alarms, the System Operator did not maintain situational awareness and did not take the action necessary to reduce the generation")



occurred from a BAAL violation. In these instances, NWIND failed, for three minutes and for one minute respectively, to operate such that its clock-minute average of reporting ACE did not exceed its BAAL for more than 30 consecutive clock-minutes, as required BAL-001-2 R2.

9. Failure to remain within BAAL standard requirements outside of normal operating limits could result in frequency excursions resulting from over/under generation, which could lead to equipment damage and a deteriorated system response. During the first instance, maximum ACE and Frequency was 39.5 MW / 60.0316Hz. During the second instance, maximum ACE and Frequency was -88.0 MW / 59.9642 Hz. Neither of the NWIND frequency excursions exceeded Western Interconnection normal operating ranges. NWIND is a generation only BA with no load but balances 189 MW of generation. A frequency excursion would risk the 189 MW of generation. While the loss of generation is low, the risk is increased by a pattern of not responding to BAAL alarms.

REMEDICATION AND MITIGATION

10. On May 14, 2020, NWIND submitted Mitigation Plans to address each instance, and on May 27, 2020, WECC accepted NWIND's Mitigation Plans.
11. To remediate and mitigate the first instance--WECC2018020595, NWIND has:
 - a. Returned to non-exceedance for BAAL for the issue herein;
 - b. Requested and received the resignation of the System Operator;
 - c. Provided additional training to all System Operators regarding their obligation to maintain situational awareness and the systems available and present to the System Operators to monitor potential BAAL issues; and
 - d. Added a new code to the EMS to obtain a higher level of reliability, as well as setting the AGC to intervene when the BAAL timer reaches 18 minutes and 20 seconds.
12. To remediate and mitigate the second instance--WECC2019021703, NWIND has:
 - a. Returned to non-exceedance BAAL for the issue herein;
 - b. Terminated the System Operator;
 - c. Added additional training for current System Operators, including: situational awareness training, BAAL timer and ACE value options, compliance issues, and the resources available to resolve a BAAL under-generation issue; and
 - d. Disabled the ability for the System Operators to silence an alarm without both looking at the EMS screen and acknowledging the alarm's content.
13. On May 14, 2020, NWIND submitted a Mitigation Plan Completion Certification for each instance and on May 27, 2020, WECC verified NWIND's completion of its Mitigation Plans.



PENALTY AND/OR SANCTION

14. WECC determined the proposed penalty of \$54,000 is appropriate based on the following:
- a. Base penalty factors:
 - i. The Violation Risk Factor for both violations is Medium and the Violation Severity Level is Lower for both violations.
 - ii. These violations posed a moderate risk to the BPS, however, these violations included willful actions and inactions of the System Operators and therefore shall be treated as a “most serious risk” issue and filed with FERC as a full Notice of Penalty.⁴³
 - iii. The violations’ durations were one and three minutes, as described herein.
 - iv. BAL-001-2 R2 has a Real-time Operations violation time horizon expectation for remediation to occur within less than one hour to preserve the reliability of the BPS.
 - b. WECC applied a mitigating credit for the following reasons:
 - i. NWIND was cooperative throughout the process.
 - ii. NWIND self-reported this violation in a timely manner from the date of discovery.
 - iii. NWIND accepted responsibility and admitted to the violation.
 - iv. NWIND agreed to settle these violations and penalty.
 - c. WECC considered the following as aggravating factors:
 - i. The willful (deliberate, but incorrect) acts of NWIND’s System Operators, which could have resulted in a frequency excursion beyond defined limits, as a result of over/under generation.
 - ii. NWIND’s previous relevant compliance history, given NERC violation ID WECC2017017640, NWIND had four instances of noncompliance caused by System Operator error when NWIND began transitioning to a new BAAL monitoring system. The System Operators in question lacked understanding of the new system and their responsibilities under the Standard. Therefore, NWIND’s previous CE, coupled with the instant violations, is an aggravating factor.

³ *Id.* at ¶ 49.



- d. Other Considerations:
 - i. NWIND has a documented Internal Compliance Program (ICP) and WECC determined that the ICP was not effective in preventing the behavior of either System Operator.

[Remainder of page intentionally left blank - signatures affixed to following page]



Agreed to and Accepted by:

WESTERN ELECTRICITY COORDINATING COUNCIL



Heather M. Laws (Oct 8, 2021 16:14 MDT)

Heather M. Laws
Director, Enforcement and Mitigation

Oct 8, 2021

Date

NATURENER WIND WATCH, LLC



Name: James F. Kutley
Title: PRESIDENT

4 Oct 2021

Date







2021 09 28 - WECC - Notice of Expedited Settlement Agreement - NWIND -REV

Final Audit Report

2021-10-08

Created:	2021-10-08
By:	Mailee Cook (mcook@wecc.org)
Status:	Signed
Transaction ID:	CBJCHBCAABAAhauvslqPDHS8rc_T0qL4AaM-WXuZ7hhS

"2021 09 28 - WECC - Notice of Expedited Settlement Agreement - NWIND -REV" History

-  Document created by Mailee Cook (mcook@wecc.org)
2021-10-08 - 7:53:50 PM GMT
-  Document emailed to Heather Laws (hlaws@wecc.org) for signature
2021-10-08 - 7:54:27 PM GMT
-  Email viewed by Heather Laws (hlaws@wecc.org)
2021-10-08 - 10:13:56 PM GMT- IP address: 172.56.40.227
-  Document e-signed by Heather Laws (hlaws@wecc.org)
Signature Date: 2021-10-08 - 10:14:20 PM GMT - Time Source: server- IP address: 172.56.40.227
-  Agreement completed.
2021-10-08 - 10:14:20 PM GMT

Self Report

Entity Name: NaturEner Wind Watch, LLC (NWIND)

NERC ID: NCR11382

Standard: BAL-001-2

Requirement: BAL-001-2 R2.

Date Submitted: October 30, 2018

Has this violation previously No
been reported or discovered?:

Entity Information:

Joint Registration
Organization (JRO) ID:

Coordinated Functional
Registration (CFR) ID:

Contact Name: Eric Smith

Contact Phone: 4152175524

Contact Email: esmith@naturener.us

Violation:

Violation Start Date: May 28, 2018

End/Expected End Date:

Reliability Functions: Balancing Authority (BA)

Is Possible Violation still No
occurring?:

Number of Instances: 1

Has this Possible Violation No
been reported to other
Regions?:

Which Regions:

Date Reported to Regions:

Detailed Description and Cause of Possible Violation: WWA, as a Balancing Authority (BA), is self-reporting a possible noncompliance with BAL-001-2, R2. Under Requirement 2 of this standard, the clock-minute average of the BA's Reporting Area Control Error (ACE) should not exceed its clock-minute Balancing Authority ACE Limit (BAAL) for more than 30 consecutive clock-minutes.

On May 28, 2018, from 19:26 to 19:59 (33 minutes) WWA exceeded the BAAL high trigger limit due to over-generation when the System Operator failed to mitigate BAAL in a timely manner. Maximum ACE and Frequency during this period 39.5 MW / 60.0316 Hz.

Despite training, procedures, protocols, and receipt of numerous warning alarms, the System Operator did not maintain situational awareness and did not take the action necessary to reduce the generation. The System Operator allowed the BAAL timer to reach the 30-minute limit before taking corrective action, with the result that the BAAL timer exceeded the permitted limit by three (3) additional minutes.

WWA uses a GE/Alstom Energy Management System (EMS) to calculate WWA's Reporting ACE and track the BAAL clock-minutes. WWA uses a third-party control area tagging service provider. As of the date of the incident, the displays visible to the System Operator were redundant, using area overview data from both the EMS and from an external system (PI) for displaying BAAL, ACE, generation levels and other operational data. In other words, the System Operator had visibility of BAAL, ACE, generation levels and operations data on

Self Report

two different displays, one fed from EMS and the other fed from data that comes from an external system (PI data and SQL calculations). When operating correctly the two systems displayed the same information.

The System Operators had previously all been trained and task qualified on how to recognize BAAL issues and what actions to take when the BAAL timer starts. Additionally, the EMS also provided audible and visual alarms to occur in the control room three (3) times in the twenty-minute period prior to a BAAL event, with a fourth warning at the thirtieth minute. WWA further had in place procedures and reference documents that outline the System Operator's responsibility and courses of action in a BAAL event. According to the procedure and reference documentation, the Operational Technology Turbine Optimization (OTTO) system (which is fed by PI data using SQL calculations) should initiate a capping sequence at the BAAL timer 12-minute mark. The procedure states that if the BAAL event continues beyond the 12-minute mark, then the System Operator must manually cap generation via the EMS or Scada system by no later than the BAAL timer 20-minute mark.

On the date of the incident, one of the PI servers failed resulting in the following applications and processes, which are typically available to the System Operator, being unavailable and/or compromised:

- Wallboard wind Forecast summary
- All PI Wallboard and Process Book data displays
- Generation and Potential data feeds into a third-party meteorological services provider's platform, and forecast Summary
- OTTO capping program

Despite the problems with PI that were occurring, it is important to note that at all relevant times during the time period in question (1) the production EMS system and associated data (which do not rely on PI) continued to correctly reflect the ACE, generation levels and the BAAL clock-minutes, all of which was visible to the System Operator in the control room, and (2) the BAAL alarming and alerting functions, warning of increasing BAAL clock-minutes, were also available and functioning in the control room.

The EMS in the control room issued its first alarm and visual alerts at 19:37 PPT, warning that BAAL as calculated by the EMS had been out of balance for 10 minutes. This alarm was acknowledged by the System Operator but not acted upon. The second audible alarm and visual alerts were issued at 19:42, warning that BAAL had now been out of balance for 15 minutes. This alarm also was acknowledged by the Operator but not acted upon. Then at 19:52 an audible alarm and critical visual alerts warning that BAAL had now been out of balance for 25 minutes were issued but went without acknowledgment. At 25 minutes the visual notification changes color to alert the System Operator of the critical status of the BAAL event. Finally, at 19:57 the audible alarms and critical visual alerts were issued signifying that BAAL had now been out of balance for 30 minutes and was now in violation. At this point the System Operator on shift acknowledged the alarm and finally acted.

While the EMS system was issuing audible alarms and visual alerts and keeping the BAAL time, the OTTO system and those displays that are fed from the PI system data were not displaying accurate information (the systems were displaying a flatline at the last known good data point) or initiating corrective action (OTTO reducing generation via a capping sequence). The PI troubles had been verbally communicated to the System Operator during the shift change process at 17:30 and were also documented in the Operations log. The System Operator should have had the situational awareness that a BAAL timer issue was occurring - based on (1) the communications that PI was not displaying accurate information, (2) the fact that the data from PI was not available and the displays that depend on PI had frozen and were flat lined at the last good data point, (3) the EMS displays in the control room were continuing to operate correctly and were reflecting increasing BAAL clock minutes, and (4) the BAAL alarms and alerts kept being issued.

However, the System Operator failed to maintain situational awareness and to

Self Report

timely implement the procedures on which he had been trained to manually cap generation at the BAAL timer 20-minute mark using the EMS system.

After the 30-minute audible alarms and the critical visual alerts the System Operator acknowledged the alarms and then at BAAL 33 minute the System Operator manually set the WWA Automatic Generation Control (AGC) into "control to Schedule" mode. This action reduced generation to the current net schedule interchange bringing the Reporting ACE back within the BAAL.

This incident was due to the System Operator not maintaining situational awareness and thus failing to properly implement procedures on which he had been trained. The System Operator failed to realize that certain timing actions in the automated systems (the OTTO application) were not operating correctly even though the systems and displays which depend on PI data were displaying as a flat line on his board, and the EMS system was working and providing clear and repeated BAAL warnings. When system timing actions failed to occur at the 12 -minute marks the System Operator, pursuant to training he had received as well as protocols and procedures that were in place, should have by no later than the 20-minute mark taken manual control of the system to bring the Reporting ACE back into acceptable limits prior to the timing deadline. The System Operator, however, failed to do so, instead waiting to take action at the 33-minute time.

Mitigating Activities:

Description of Mitigating Activities and Preventative Measure: WWA understands the importance of this requirement and takes this potential violation very seriously. WWA has ensured that the IT/OT department, the Operations department and the Compliance department have been involved and working together in the mitigation measures taken as a result of this event.

This has resulted in the implementation of various types and levels of measures, all of which have now been fully implemented, to mitigate the risk of any such future violations.

1) Personnel. Due to the serious nature of the violation, on June 18, 2018, after completion of an internal investigation, the System Operator on duty at the time of the incident was asked to resign, did resign, and is no longer employed by the Company.

2) Further Additional Training. Beginning June 1 through August 24, 2018, additional training was provided to all System Operators to ensure that all operators are aware of:

- Their obligation to maintain situational awareness.
- BAAL timer and ACE value options and the resources available to balance the ACE and to resolve the BAAL issue.
- The systems available to System Operators and what might be happening when they see certain anomalies on their screens and/or receive contradictory information, and what to do to investigate and address such situations.
- The newly implemented system enhancement described in Section 3 "Systems Enhancements" immediately below.
- Compliance obligations.

3) Systems Enhancements.

WWA has added code to the EMS system to obtain a higher level of reliability than is available using PI data. The additional code allows the EMS system to control generation in the case of a BAAL event. The enhancements to the EMS system set the AGC to "control to schedule" and if the BAAL condition remains, then the EMS system will cut generation to 0 MW raw ACE.

To do this, the code that has been added to the EMS allows the EMS system to act directly on the calculations of CPS, BAAL [RBC] and BAL-004-WECC [inadvertent]. The EMS system now takes action when the BAAL timer reaches 18 minutes and 20 minutes. At 18 minutes the system will set the AGC to "control to schedule" when in a BAAL High over generation event state, and if

Self Report

the if the generation remains in an over generation state at 20 minutes, then the EMS system sets the AGC to cut the generation to 0 MW raw ACE.

The new code runs on EMS as an integrated part of AGC and relies on real-time operational data. The modified EMS system is thus extremely reliable, more visible and fault tolerant, as well as providing enhanced situational awareness using native EMS displays and alarms as an integral part of the EMS. The System Operators now have more dependable real-time tools, and no longer rely at all on an external system to take automatic actions to reduce generation during a BAAL High event. The improved and enhanced EMS system provides a more accurate and dependable automated response to mitigate the risk of a future BAAL incident.

Have Mitigating Activities Yes
been Completed?

Date Mitigating Activities August 24, 2018
Completed:

Impact and Risk Assessment:

Potential Impact to BPS: Minimal

Actual Impact to BPS: Minimal

Description of Potential and Minimal impact to the interconnection or to neighboring BAs due to minimal
Actual Impact to BPS: frequency bias (0.6 MW/0.01 Hz) and the fact that maximum over-generation never exceeded 39.5 MW.

Risk Assessment of Impact to Minimal impact to the interconnection or to neighboring BAs due to minimal
BPS: frequency bias (0.6 MW/0.01 Hz) and the fact that maximum over-generation never exceeded 39.5 MW.

Additional Entity Comments: The reset occurred at minute 33 and went no further.

Additional Comments		
From	Comment	User Name
No Comments		

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	resignation letter.pdf	Resignation letter of the operator. This is described in the mitigation activity #1.	421,568
Entity	BAAL Mitigation Training 8_23_2018.pptx	The training described in mitigation activity #2.	3,824,955
Entity	EH BAAL quiz.pdf	The quiz administered after the training to assess the operator's understanding of the items discussed in mitigation activity #2.	349,425
Entity	sign in sheet training 8-23-2018.pdf	The sign-in sheet to show attendance of all WWA operators at the training described in the mitigation activity #2.	3,023,115

Self Report

Entity Name: NaturEner Wind Watch, LLC (NWIND)

NERC ID: NCR11382

Standard: BAL-001-2

Requirement: BAL-001-2 R1.

Date Submitted: June 14, 2019

Has this violation previously No
been reported or discovered?:

Entity Information:

Joint Registration
Organization (JRO) ID:

Coordinated Functional
Registration (CFR) ID:

Contact Name: Eric Smith

Contact Phone: 4152175524

Contact Email: esmith@naturener.us

Violation:

Violation Start Date: April 18, 2019

End/Expected End Date: April 18, 2019

Reliability Functions: Balancing Authority (BA)

Is Possible Violation still No
occurring?:

Number of Instances: 1

Has this Possible Violation No
been reported to other
Regions?:

Which Regions:

Date Reported to Regions:

Detailed Description and Cause of Possible Violation: WWA, as a Balancing Authority (BA), is self-reporting a possible noncompliance with BAL-001-2, R2. Under Requirement 2 of this standard, the clock-minute average of the BA's Reporting Area Control Error (ACE) should not exceed its clock-minute Balancing Authority ACE Limit (BAAL) for more than 30 consecutive clock-minutes.

On April 18, 2019, from 01:47 to 02:17 (30 minutes) WWA exceeded the BAAL low trigger limit due to under-generation when the System Operator failed to mitigate BAAL in a timely manner. Maximum ACE and Frequency during this period -88.0 MW / 59.9642 Hz.

Despite training, procedures, protocols, and receipt of numerous warning alarms, the System Operator did not maintain situational awareness and did not take the action necessary to address a rapid ramp down in generation due to a change in wind conditions. The System Operator allowed the BAAL timer to reach the 26-minute limit before taking corrective action which, with the tools he chose use, did not leave enough time for the corrective action to impact the BAAL, with the result that the BAAL timer exceeded the permitted limit by less than one (1) minute.

The System Operator had recent training and had been task qualified on how to recognize BAAL issues and what actions to take when the BAAL timer starts. Additionally, the EMS also provided audible and visual alarms to occur in the control room three (3) times in the twenty-minutes immediately prior to a BAAL event, with a fourth warning at the thirtieth minute. WWA further had in

Self Report

place procedures and reference documents that outline the System Operator's responsibility and courses of action in a BAAL event.

A comprehensive investigation revealed that at about 22:00, contrary to protocols and procedures, the System Operator intentionally quieted the volume on the alarms due to what the System Operator characterized as "a very persistent nuisance alarm." The persistent, repeated alarms were triggered by flow limit exceedances in the area south of Great Falls, unrelated to the operation of WWA. However, in silencing the volume related to those alarms, the System Operator silenced the BAAL alarms.

At approximately 00:10 the System Operator noticed generation dropping due to low wind conditions prompting two schedule curtailments, one occurring at 01:05 and one at 01:42. Another BAAL timer event started at 01:47. Instead of continuing to maintain situational awareness, the System Operator pushed back from the controls, and closed his eyes. As a result of the failure to maintain situational awareness, the System Operator did not notice the third rapid drop off in generation, including because the volume of the audible alarms had been silenced by him. At about minute 26, a BAAL alarm for another BA managed by the System Operator caused the System Operator to focus and start to maintain situational awareness, at which point he noticed that the BAAL clock for WWA was very close to the 30 minute limit. In response, contrary to protocols and procedures, and ignoring tools available to avoid a BAAL violation even that late in the period, the System Operator began to curtail schedules one at a time rather than all at once using the rapid curtailment tool in CAS. The System Operator had been trained to use the rapid curtailment tool and passed task-oriented testing, but instead the System Operator made a deliberate choice not to curtail multiple schedules at once, which would have enabled him to avoid a BAAL violation.

In summary, this incident occurred as a result of (1) the System Operator's failure to maintain situational awareness, (2) the System Operator's intentional silencing of alarms in direct violation of WWA's protocols, and (3) the System Operator's failure to use the rapid curtailment tool provided that would have permitted compliance, even in a very short time period.

Mitigating Activities:

Description of Mitigating Activities and Preventative Measure: WWA takes this potential violation very seriously. The WWA Operations and Compliance departments engaged in a comprehensive investigation and the worked together on the mitigation measures taken as a result of this event.

After the incident occurred WWA initiated various types and levels of measures, all of which have now been fully implemented, to mitigate the risk of any such future violations.

1) Personnel. Due to the serious nature of the violation, and the intentional choice by the System Operator to circumvent measures put in place by WWA to ensure BAAL violations will not occur, promptly after completion of an internal investigation, which included a detailed review of records and information recorded during the System Operator's shift, interviews with the prior System Operator on duty and others who interacted with the Shift Operator before and during his shift, the System Operator on duty at the time of the incident was terminated for cause and is no longer employed by the Company.

2) Additional Training for Current Operators. Although none of the current System Operators was involved or responsible for the possible non-compliance event, in order to enhance the culture of compliance with respect to avoidance of BAAL violations, additional training programs including all System Operators were conducted to ensure that all operators are aware of:

- Their obligation to maintain situational awareness.

Self Report

- BAAL timer and ACE value options and the resources available to balance the ACE and to resolve the BAAL issue, including in under-generation situations for which there are no automated systems to depend upon.
- Compliance obligations.

Have Mitigating Activities Yes
been Completed?

Date Mitigating Activities June 14, 2019
Completed:

Impact and Risk Assessment:

Potential Impact to BPS: Minimal

Actual Impact to BPS: Minimal

Description of Potential and Potential impact was minimal due to the small exceedance and short time of
Actual Impact to BPS: exceeding the timer threshold.

Risk Assessment of Impact to BPS: Given that maximum ACE and Frequency during this period -88.0 MW / 59.9642 Hz there was minimal impact to the interconnection or to neighboring BAs due to the reset occurring during minute 31 and went no further.

Additional Entity Comments:

Additional Comments		
From	Comment	User Name
No Comments		

Additional Documents			
From	Document Name	Description	Size in Bytes
No Documents			

Mitigation Plan

Mitigation Plan Summary

Registered Entity: NaturEner Wind Watch, LLC

Mitigation Plan Code: WECCMIT015118

Mitigation Plan Version: 1

<u>NERC Violation ID</u>	<u>Requirement</u>	<u>Violation Validated On</u>
WECC2019021703	BAL-001-2 R2.	02/25/2020

Mitigation Plan Submitted On: May 14, 2020

Mitigation Plan Accepted On:

Mitigation Plan Proposed Completion Date: March 21, 2020

Actual Completion Date of Mitigation Plan:

Mitigation Plan Certified Complete by NWIND On: May 14, 2020

Mitigation Plan Completion Verified by WECC On:

Mitigation Plan Completed? (Yes/No): No

Compliance Notices

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

- (1) The Registered Entity's point of contact for the Mitigation Plan, who shall be a person (i) responsible for filing the Mitigation Plan, (ii) technically knowledgeable regarding the Mitigation Plan, and (iii) authorized and competent to respond to questions regarding the status of the Mitigation Plan. This person may be the Registered Entity's point of contact described in Section B.
 - (2) The Alleged or Confirmed Violation(s) of Reliability Standard(s) the Mitigation Plan will correct.
 - (3) The cause of the Alleged or Confirmed Violation(s).
 - (4) The Registered Entity's action plan to correct the Alleged or Confirmed Violation(s).
 - (5) The Registered Entity's action plan to prevent recurrence of the Alleged or Confirmed violation(s).
 - (6) The anticipated impact of the Mitigation Plan on the bulk power system reliability and an action plan to mitigate any increased risk to the reliability of the bulk power-system while the Mitigation Plan is being implemented.
 - (7) A timetable for completion of the Mitigation Plan including the completion date by which the Mitigation Plan will be fully implemented and the Alleged or Confirmed Violation(s) corrected.
 - (8) Implementation milestones no more than three (3) months apart for Mitigation Plans with expected completion dates more than three (3) months from the date of submission. Additional violations could be determined or recommended to the applicable governmental authorities for not completing work associated with accepted milestones.
 - (9) Any other information deemed necessary or appropriate.
 - (10) The Mitigation Plan shall be signed by an officer, employee, attorney or other authorized representative of the Registered Entity, which if applicable, shall be the person that signed the Self Certification or Self Reporting submittals.
 - (11) This submittal form may be used to provide a required Mitigation Plan for review and approval by regional entity(ies) and NERC.
- The Mitigation Plan shall be submitted to the regional entity(ies) and NERC as confidential information in accordance with Section 1500 of the NERC Rules of Procedure.
 - This Mitigation Plan form may be used to address one or more related alleged or confirmed violations of one Reliability Standard. A separate mitigation plan is required to address alleged or confirmed violations with respect to each additional Reliability Standard, as applicable.
 - If the Mitigation Plan is accepted by regional entity(ies) and approved by NERC, a copy of this Mitigation Plan will be provided to the Federal Energy Regulatory Commission or filed with the applicable governmental authorities for approval in Canada.
 - Regional Entity(ies) or NERC may reject Mitigation Plans that they determine to be incomplete or inadequate.
 - Remedial action directives also may be issued as necessary to ensure reliability of the bulk power system.
 - The user has read and accepts the conditions set forth in these Compliance Notices.

Entity Information

Identify your organization:

Entity Name: NaturEner Wind Watch, LLC

NERC Compliance Registry ID: NCR11382

Address: 435 Pacific Ave. Suite 400
San Francisco CA 94133

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

Name: Eric Smith

Title: Compliance Manager

Email: esmith@naturener.us

Phone: 415-217-5524

Violation(s)

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

Violation ID	Date of Violation	Requirement
Requirement Description		
WECC2019021703	04/18/2019	BAL-001-2 R2.
Each Balancing Authority shall operate such that its clock-minute average of Reporting ACE does not exceed its clock-minute Balancing Authority ACE Limit (BAAL) for more than 30 consecutive clock-minutes, calculated in accordance with Attachment 2, for the applicable Interconnection in which the Balancing Authority operates.		

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

WWA, as a Balancing Authority (BA), is self-reporting a possible noncompliance with BAL-001-2, R2. Under Requirement 2 of this standard, the clock-minute average of the BA's Reporting Area Control Error (ACE) should not exceed its clock-minute Balancing Authority ACE Limit (BAAL) for more than 30 consecutive clock-minutes.

On April 18, 2019, from 01:47 to 02:17 (30 minutes) WWA exceeded the BAAL low trigger limit due to under-generation when the System Operator failed to mitigate BAAL in a timely manner. Maximum ACE and Frequency during this period -88.0 MW / 59.9642 Hz.

Despite training, procedures, protocols, and receipt of numerous warning alarms, the System Operator did not maintain situational awareness and did not take the action necessary to address a rapid ramp down in generation due to a change in wind conditions. The System Operator allowed the BAAL timer to reach the 26-minute limit before taking corrective action which, with the tools he chose use, did not leave enough time for the corrective action to impact the BAAL, with the result that the BAAL timer exceeded the permitted limit by less than one (1) minute.

The System Operator had recent training and had been task qualified on how to recognize BAAL issues and what actions to take when the BAAL timer starts. Additionally, the EMS also provided audible and visual alarms to occur in the control room three (3) times in the twenty-minutes immediately prior to a BAAL event, with a fourth warning at the thirtieth minute. WWA further had in place procedures and reference documents that outline the System Operator's responsibility and courses of action in a BAAL event.

A comprehensive investigation revealed that at about 22:00, contrary to protocols and procedures, the System Operator intentionally quieted the volume on the alarms due to what the System Operator characterized as "a very persistent nuisance alarm." The persistent, repeated alarms were triggered by flow limit exceedances in the area south of Great Falls, unrelated to the operation of WWA. However, in silencing the volume related to those alarms, the System Operator silenced the BAAL alarms.

At approximately 00:10 the System Operator noticed generation dropping due to low wind conditions prompting two schedule curtailments, one occurring at 01:05 and one at 01:42. Another BAAL timer event started at 01:47. Instead of continuing to maintain situational awareness, the System Operator pushed back from the controls, and closed his eyes. As a result of the failure to maintain situational awareness, the System Operator did not notice the third rapid drop off in generation, including because the volume of the audible alarms had been silenced by him. At about minute 26, a BAAL alarm for another BA managed by the System Operator caused the System Operator to focus and start to maintain situational awareness, at which point he noticed that the BAAL clock for WWA was very close to the 30 minute limit. In response, contrary to protocols and procedures, and ignoring tools available to avoid a BAAL violation even that late in the period, the System Operator began to curtail schedules one at a time rather than all at once using the rapid curtailment tool in CAS. The System Operator had been trained to use the rapid curtailment tool and passed task-oriented testing, but instead the System Operator made a deliberate choice not to curtail multiple schedules at once, which would have enabled him to avoid a BAAL violation.

In summary, this incident occurred as a result of (1) the System Operator's failure to maintain situational awareness, (2) the System Operator's intentional silencing of the alarm in direct violation of WWA's protocols, and (3) the System Operator's failure to use the rapid curtailment tool provided that would have permitted compliance, even in a very short time period.

Relevant information regarding the identification of the violation(s):

The BAAL timer violation was discovered when the Real-time Operations Manager contacted the SO to check in.

Plan Details

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

WWA takes this potential violation very seriously. The WWA Operations and Compliance departments engaged in a comprehensive investigation and the worked together on the mitigation measures taken as a result of this event.

After the incident occurred WWA initiated various types and levels of measures, all of which have now been fully implemented, to mitigate the risk of any such future violations.

1) Personnel. Due to the serious nature of the violation, and the intentional choice by the System Operator to circumvent measures put in place by WWA to ensure BAAL violations will not occur, promptly after completion of an internal investigation, which included a detailed review of records and information recorded during the System Operator's shift, interviews with the prior System Operator on duty and others who interacted with the Shift Operator before and during his shift, the System Operator on duty at the time of the incident was terminated for cause and is no longer employed by the Company.

2) Disable F12 key. Remove the F12 key functionality that allows the System Operator to silence an individual alarm by hitting the F12 key without looking at the screen. Instead, System Operators must look at the screen and click on the alarm to acknowledge it, then click acknowledge. This will require System Operators to engage the screen and address the alarm issue.

3) Additional Training for Current Operators. Although none of the current System Operators was involved or responsible for the possible non-compliance event, in order to enhance the culture of compliance with respect to avoidance of BAAL violations, additional training programs including all System Operators were conducted to ensure that all operators are aware of:

- Their obligation to maintain situational awareness.
- The method for acknowledging an alarm in EMS and the absence of the F12 key
- BAAL timer and ACE value options and the resources available to balance the ACE and to resolve the BAAL issue, including in under-generation situations for which there are no automated systems to depend upon.
- Compliance obligations.

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

Proposed Completion date of Mitigation Plan: March 21, 2020

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

Additional Relevant Information

Reliability Risk

Reliability Risk

While the Mitigation Plan is being implemented, the reliability of the bulk Power System may remain at higher Risk or be otherwise negatively impacted until the plan is successfully completed. To the extent they are known or anticipated : (i) Identify any such risks or impacts, and; (ii) discuss any actions planned or proposed to address these risks or impacts.

WWA is anomalous in the Western Interconnection in that it is a generation only BA, serving no load. WWA serves as BA for just one generation facility (NaturEner Rim Rock [NERR]). The total max generation capacity for this facility is 189MW. As a generation only BA, balancing is not done by balancing generation with load, but rather by balancing generation to schedule.

Having no load and max generation capacity of only 189MW makes the impact and risk of WWA minimal on to the BES.

In addition, the maximum ACE and Frequency during this period -88.0 MW / 59.9642 Hz meaning that there was minimal impact to the interconnection or to neighboring BAs due to the reset occurring during minute 31 and it went no further.

Prevention

Describe how successful completion of this plan will prevent or minimize the probability further violations of the same or similar reliability standards requirements will occur

The primary issue was the SO choosing to not act according to his training. Taking the personnel action will ensure that current and future SO will be of better training and competence. The disabling of the F12 key will require all SO to view the screen(s) and acknowledge alarms before being able to silence or dismiss any alarms. The additional training will ensure that all SO are fully aware of all of the tools at their disposal to resolve BAAL timer issues in a timely fashion.

Describe any action that may be taken or planned beyond that listed in the mitigation plan, to prevent or minimize the probability of incurring further violations of the same or similar standards requirements

Authorization

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

- * Submits the Mitigation Plan, as presented, to the regional entity for acceptance and approval by NERC, and
- * if applicable, certifies that the Mitigation Plan, as presented, was completed as specified.

Acknowledges:

1. I am qualified to sign this mitigation plan on behalf of my organization.
2. I have read and understand the obligations to comply with the mitigation plan requirements and ERO remedial action directives as well as ERO documents, including but not limited to, the NERC rules of procedure and the application NERC CMEP.
3. I have read and am familiar with the contents of the foregoing Mitigation Plan.

NaturEner Wind Watch, LLC Agrees to be bound by, and comply with, this Mitigation Plan, including the timetable completion date, as accepted by the Regional Entity, NERC, and if required, the applicable governmental authority.

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

Authorized Individual

Name: Eric Smith

Title: Compliance Manager

Authorized On: May 14, 2020

Certification of Mitigation Plan Completion

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

Registered Entity Name: NaturEner Wind Watch, LLC

NERC Registry ID: NCR11382

NERC Violation ID(s): WECC2019021703

Mitigated Standard Requirement(s): BAL-001-2 R2.

Scheduled Completion as per Accepted Mitigation Plan: March 21, 2020

Date Mitigation Plan completed: March 21, 2020

WECC Notified of Completion on Date: May 14, 2020

Entity Comment:

Additional Comments		
From	Comment	User Name
Entity	<p>Documents showing that the mitigation actions have been completed were uploaded.</p> <p>Weds Meeting Training Topics June2019 BAAL training.msg is the message to the trainer outlining the training topics to cover relevant to this plan.</p> <p>The Assessment question answers June2019 BAAL mitigation training.pdf contains the list of SO in attendance at the training and the date of the training June 2019.</p> <p>2019 May Conrad Load Pocket Rapid Curtail PP BAAL training.pptx is the powerpoint of the training that was delivered to the SO, in June of 2019.</p> <p>The F12TICKET2.png and the FW Disable EMS keyboard F-12 Audible Silence function.msg are proof of the 12 ke function being disabled as of March 20, 2020</p>	Eric Smith

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	2019 May Conrad Load Pocket_Rapid Curtail PP BAAL training.pptx		157,456
Entity	Weds Meeting Training Topics June2019 BAAL training.msg		52,224
Entity	FW Disable EMS keyboard F-12 Audible Silence function.msg		61,440
Entity	F12TICKET2 (002).png		94,338

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	Assment question answers June2019 BAAL mitigation training.pdf		1,755,241
Entity	CDMS_MitPlanCertOfComple tion_150838.docx		44,110

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

Name: Eric Smith

Title: Compliance Manager

Email: esmith@naturener.us

Phone: 01 (415) 217-5524

Authorized Signature _____ Date _____

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

From: noreply@oati.net
Sent: 05/27/2020 12:59:23

Attachment 6

To: esmith@naturener.us;nmurray@naturener.us

Subject: WECC Notice - Completed Mitigation Plan Acceptance - BAL-001-2 R2. - NaturEner Wind Watch, LLC

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

NERC Registration ID: NCR11382
NERC Violation ID: WECC2019021703
Standard/Requirement: BAL-001-2 R2.
Subject: Completed Mitigation Plan Acceptance

WECC received the Certification of Mitigation Plan Completion submitted by NaturEner Wind Watch, LLC on 05/14/2020 for the violation of BAL-001-2 R2.. After a thorough review, WECC has accepted the Certification of Mitigation Plan Completion.

webCDMS Login: <https://www.cdms.oati.com/CDMS/sys-login.wml>

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[OATI Information - Email Template: MitPlan_Completed]