

August 30, 2018

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 Canadian Hills Wind, LLC,
FERC Docket No. NP18-_-000**

Dear Ms. Bose:

The North American Electric Reliability Corporation (NERC) hereby provides this Notice of Penalty¹ regarding Canadian Hills Wind, LLC (CHW), NERC Registry ID# NCR11354,² with information and details regarding the nature and resolution of the violation³ discussed in detail in the Settlement Agreement attached hereto (Attachment A), in accordance with the Federal Energy Regulatory Commission's (Commission or FERC) rules, regulations, and orders, as well as NERC's Rules of Procedure including Appendix 4C (NERC Compliance Monitoring and Enforcement Program (CMEP)).⁴

NERC is filing this Notice of Penalty with the Commission because Southwest Power Pool Regional Entity (SPP RE) and CHW have entered into a Settlement Agreement to resolve all outstanding issues arising from SPP RE's determination and findings of the violation of FAC-003-3 R2.

¹ *Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards* (Order No. 672), III FERC Stats. & Regs. ¶ 31,204 (2006); *Notice of New Docket Prefix "NP" for Notices of Penalty Filed by the North American Electric Reliability Corporation*, Docket No. RM05-30-000 (February 7, 2008). See also 18 C.F.R. Part 39 (2017). *Mandatory Reliability Standards for the Bulk-Power System*, FERC Stats. & Regs. ¶ 31,242 (2007) (Order No. 693), *reh'g denied*, 120 FERC ¶ 61,053 (2007) (Order No. 693-A). See 18 C.F.R § 39.7(c)(2).

² CHW was included on the NERC Compliance Registry as a Generator Owner (GO) on July 15, 2013 and a Generator Operator on May 19, 2017.

³ 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.

⁴ See 18 C.F.R § 39.7(c)(2) and 18 C.F.R § 39.7(d).

3353 Peachtree Road NE
Suite 600, North Tower
Atlanta, GA 30326
404-446-2560 | www.nerc.com

NERC Notice of Penalty
Canadian Hills Wind, LLC
August 30, 2018
Page 2

According to the Settlement Agreement, CHW admits to the violation, and has agreed to the assessed penalty of one hundred ten thousand dollars (\$110,000), in addition to other remedies and actions to mitigate the instant violation and facilitate future compliance under the terms and conditions of the Settlement Agreement.

Statement of Findings Underlying the Violation

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

In accordance with Section 39.7 of the Commission's regulations, 18 C.F.R. § 39.7 (2018), NERC provides the following summary table identifying each violation of a Reliability Standard resolved by the Settlement Agreement. Further information on the subject violation is set forth in the Settlement Agreement 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*	Violation Start-End Date	Risk	Penalty Amount
SPP2017018589	FAC-003-3	R2	High/Severe	GO	PDS 10/19/2017	1/1/2016- 7/22/2017	Moderate	\$110,000

SPP2017018589 FAC-003-3 R2 - OVERVIEW

On October 19, 2017, CHW submitted its 2017 Third Quarter FAC-003 Vegetation Report to SPP RE. Therein, CHW identified a vegetation-related outage of the 345 kV transmission line connecting the CHW and Kingfisher wind farms to the Cimarron Substation (hereinafter Generator Lead Line). CHW indicated the outage occurred on July 22, 2017, and lasted for approximately 3 hours and 40 minutes. CHW identified the outage as a Category 3 Sustained Vegetation-caused Outage, i.e., a sustained outage caused by vegetation falling into applicable lines from outside the Right of Way (ROW). This outage caused a loss of three MW of generation.

NERC Notice of Penalty
Canadian Hills Wind, LLC
August 30, 2018
Page 3

CHW reported that the cause was a tree in the ROW border zone that had come into proximity of the line during high ambient temperatures. CHW had previously identified this tree for monitoring in the bi-annual vegetation management inspection that occurred in early March 2017. CHW stated that while the tree was outside of the Minimum Vegetation Clearance Distance (MVCD), new growth on the limbs appeared capable of breaching the MVCD during wind gusts. Because CHW's description of the outage appeared inconsistent with the definition of a Category 3 Sustained Vegetation-caused Outage, SPP RE requested that CHW provide additional information.

To evidence the vegetation inspection of its Generator Lead Line ROWs, CHW provided SPP RE with inspection reports from January, March, June, and November 2016, and March, May, and July 2017. SPP RE observed that CHW's vegetation inspection reports did not document the trees in the Generator Lead Line ROW near the location of the July 22, 2017, vegetation-caused outage, until March 20, 2017.

On November 27, 2017, SPP RE conducted an independent on-site visit to assess evidence provided by CHW. Because CHW had removed the trees before SPP RE's on-site visit in order to fix the encroachment, SPP RE examined an aerial view of the encroachment site taken from June 20, 2017 Google Earth data. The aerial view indicated that before their removal, the trees were located within the ROW, in close proximity to the East conductor of the Generator Lead Line.

SPP RE determined that the information provided by CHW in its 2017 Third Quarter FAC-003 Vegetation Report regarding the size of the ROW, the location of the trees in relation to the ROW, and the category of the Sustained Vegetation-caused Outage was incorrect. Furthermore, the meteorological data provided by CHW did not indicate that the weather, specifically wind gusts, was a contributing factor to the encroachment. Although CHW was performing inspections of the Generator Lead Line that met the intervals established in its program, the inspections were incomplete and failed to document potential vegetation issues appropriately. The vegetation issues identified in CHW's inspections of the Generator Lead Line did not receive an appropriate priority and did not become action items in CHW's vegetation management plan.

Finally, SPP RE determined that CHW did not manage the vegetation in its ROW to prevent encroachment due to vegetation growth into the MVCD (4.4 ft.) of the 345 kV Generator Lead Line for the CHW and Kingfisher wind farms. Accordingly, the appropriate category for the resulting outage is a Category 1B Sustained Vegetation-caused Outage, i.e., a sustained outage caused by vegetation growing into applicable lines by vegetation growing inside the ROW.

The root cause of this violation was a combination of factors. While CHW had a detailed vegetation management program and performed vegetation inspections of all of its Generator Lead Line twice per

NERC Notice of Penalty
Canadian Hills Wind, LLC
August 30, 2018
Page 4

year, the inspection forms did not require detailed documentation of the inspection results. Additionally, the program did not require immediate follow-up on vegetation-related issues identified during the inspections. CHW also cites as contributing factors the lack of training, a lack of knowledge of the ROW width, and a lack of controls to ensure the performance of inspections and trimming.

SPP RE determined that this violation posed a moderate risk and did not pose a serious or substantial risk to the reliability of the bulk power system (BPS). Failure to properly maintain vegetation in transmission ROWs increases the risk of vegetation-caused outages and creates the potential for cascading outages. Here, the violation posed a moderate risk because the outage involved a 345 kV transmission line that provides the interconnection for almost 600 MW of generation. Nevertheless, the risk was not elevated for several reasons. The outage involved transmission that connected 600 MW of capacity from variable energy resources to the BES. At this location, these resources provide capacity that is less certain due to the variability of wind. The line at issue is not an element of an Interconnection Reliability Operating Limit (IROL). CHW restored operation of the transmission line in less than three hours, and CHW took prompt steps to ensure the outage would not occur again. There was minimal generation online when the outage occurred. Finally, there was no loss of customer load. Attachment A includes the facts regarding the violation that SPP RE considered in its risk assessment.

CHW submitted its Mitigation Plan to address the referenced violation. To mitigate the violation, CHW:

1. Removed the tree that caused the outage;
2. Completed a ground patrol and re-inspection of the lead line and ROW and removed any identified vegetation in 2017 and 2018;
3. Trained personnel on compliance obligations, the vegetation inspection process, and revisions to the Vegetation Management Program; and
4. Reviewed and updated the Vegetation Management Program to ensure the appropriate maintenance of clearances.

Attachment A includes a description of the mitigation activities CHW took to address this violation. A copy of the Mitigation Plan is included as Exhibit E to Attachment A.

CHW certified that it had completed all mitigation activities. SPP RE verified that CHW had completed all mitigation activities as of May 3, 2018. Attachment A and Exhibit G provide specific information on SPP RE's verification of CHW's completion of the activities.

NERC Notice of Penalty
Canadian Hills Wind, LLC
August 30, 2018
Page 5

Regional Entity's Basis for Penalty

According to the Settlement Agreement, SPP RE has assessed a penalty of one hundred ten thousand dollars (\$110,000) for the referenced violation. In reaching this determination, SPP RE considered the following factors:

1. the instant violation constituted CHW's first occurrence of violation of the subject NERC Reliability Standard;
2. SPP RE did not provide penalty credit for CHW's internal compliance program (ICP). CHW currently has a robust program, however, the program was not in place when the violation occurred, as discussed in Attachment A;
3. SPP RE provided penalty credit for CHW accepting responsibility and affirmatively admitting to the violation;
4. CHW was cooperative throughout the compliance enforcement process;
5. there was no evidence of any attempt to conceal a violation nor evidence of intent to do so;
6. while there was a loss of generator load of three MW, there was no loss of customer load;
7. the violation posed a moderate and not a serious or substantial risk to the reliability of the BPS, as discussed in Attachment A; and
8. there were no other mitigating or aggravating factors or extenuating circumstances that would affect the assessed penalty.

After consideration of the above factors, SPP RE determined that, in this instance, the penalty amount of one hundred ten thousand dollars (\$110,000) is appropriate and bears a reasonable relation to the seriousness and duration of the violation.

NERC Notice of Penalty
Canadian Hills Wind, LLC
August 30, 2018
Page 6

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 the NERC BOTCC reviewed the violation on August 14, 2018, and approved the resolution between SPP RE and CHW. In approving the resolution, the NERC BOTCC reviewed the applicable requirements of the Commission-approved Reliability Standards and the underlying facts and circumstances of the violation at issue.

For the foregoing reasons, the NERC BOTCC believes that the assessed penalty of one hundred ten thousand dollars (\$110,000) is appropriate for the violation 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.

Following a final determination by FERC, NERC will issue an invoice for the penalty to CHW and collect the penalty payment. Pursuant to NERC Rule of Procedure § 1107, NERC will transfer the penalty monies in accordance with the terms of the SPP Regional Entity termination agreement.⁷

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 SPP RE and CHW executed June 25, 2018, included as Attachment A;
 - a. Disposition of Violation, included as Attachment 1 to the Settlement Agreement;

⁵ See 18 C.F.R. § 39.7(d)(4).

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

⁷ *North American Electric Reliability Corp. et al.*, "Order Granting Approvals in Connection with the Dissolution of the Southwest Power Pool Regional Entity," 163 FERC ¶ 61,094 (2018).

NERC Notice of Penalty
Canadian Hills Wind, LLC
August 30, 2018
Page 7

- b. CHW's Q3 2017 FAC-003-4 Periodic Data Submittal, included as Exhibit A to the Settlement Agreement;
- c. CHW's Amended Q3 2017 FAC-003-4 - Periodic Data Submittal Amended, included as Exhibit B to the Settlement Agreement;
- d. CHW's Self Report, included as Exhibit C to the Settlement Agreement;
- e. SPP RE's Spot Check Report, included as Exhibit D to the Settlement Agreement;
- f. CHW's Mitigation Plan, included as Exhibit E to the Settlement Agreement;
- g. CHW's Certification of Mitigation Plan Completion, included as Exhibit F to the Settlement Agreement; and
- h. SPP RE's Verification of Mitigation Plan Completion, included as Exhibit G to the Settlement Agreement.

NERC Notice of Penalty
Canadian Hills Wind, LLC
August 30, 2018
Page 8

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

<p>Sara E. Patrick *</p> <p>President and Chief Executive Officer Midwest Reliability Organization 380 St. Peter Street, Suite 800 Saint Paul, MN 55102 (651) 855-1708 se.patrick@midwestreliability.org</p> <p>Valerie Agnew*</p> <p>Vice President of Regulatory Affairs and Enforcement Midwest Reliability Organization 380 St. Peter Street, Suite 800 Saint Paul, MN 55102 (651) 855-1745 vl.agnew@midwestreliability.org</p> <p>Jeremy Law</p> <p>Canadian Hills Wind, LLC c/o Longroad Energy Services 30 Danforth St, Suite 210 Portland, ME 04101</p> <p>Moirra Turnbull-Fox</p> <p>Canadian Hills Wind, LLC c/o DIF Management Canada Ltd. 100 Wellington Street West TD West Tower, Suite 1940 P.O. Box 79 Toronto, Ontario M5K 1E7 Canada</p>	<p>Sonia C. Mendonça*</p> <p>Vice President, Deputy General Counsel, and Director of Enforcement North American Electric Reliability Corporation 1325 G Street N.W. Suite 600 Washington, DC 20005 (202) 400-3000 (202) 644-8099 – facsimile sonia.mendonca@nerc.net</p> <p>Edwin G. Kichline*</p> <p>Senior Counsel and Director of Enforcement Oversight North American Electric Reliability Corporation 1325 G Street N.W. Suite 600 Washington, DC 20005 (202) 400-3000 (202) 644-8099 – facsimile edwin.kichline@nerc.net</p> <p>Alexander Kaplen*</p> <p>Associate Counsel North American Electric Reliability Corporation 1325 G Street N.W. Suite 600 Washington, DC 20005 (202) 400-3000 (202) 644-8099 – facsimile alexander.kaplen@nerc.net</p>
--	--

NERC Notice of Penalty
Canadian Hills Wind, LLC
August 30, 2018
Page 9

<p>*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.</p>	
---	--

NERC Notice of Penalty
Canadian Hills Wind, LLC
August 30, 2018
Page 10

Conclusion

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

Respectfully submitted,

/s/ Alexander Kaplen

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

cc: Canadian Hills Wind, LLC
Midwest Reliability Organization

Attachments

Attachment A

Settlement Agreement by and between SPP RE and CHW
Executed June 25, 2018

- a. Disposition of Violation, included as Attachment 1 to the Settlement Agreement;
- b. CHW's Q3 2017 FAC-003-4 Periodic Data Submittal, included as Exhibit A to the Settlement Agreement;
- c. CHW's Amended Q3 2017 FAC-003-4 - Periodic Data Submittal Amended, included as Exhibit B to the Settlement Agreement
- d. CHW's Self Report, included as Exhibit C to the Settlement Agreement
- e. SPP RE's Spot Check Report, included as Exhibit D to the Settlement Agreement
- f. CHW's Mitigation Plan, included as Exhibit E to the Settlement Agreement
- g. CHW's Certification of Mitigation Plan Completion, included as Exhibit F to the Settlement Agreement
- h. SPP RE's Verification of Mitigation Plan Completion, included as Exhibit G to the Settlement Agreement

**SETTLEMENT AGREEMENT
OF
SOUTHWEST POWER POOL REGIONAL ENTITY
AND
CANADIAN HILLS WIND, LLC**

I. INTRODUCTION

1. The Southwest Power Pool Regional Entity (“SPP RE”) and Canadian Hills Wind, LLC (“CHW”) (hereinafter referred to individually as “Party” and collectively as the “Parties”) enter into this Settlement Agreement (“Agreement”) to resolve all outstanding issues arising from the non-public determination by SPP RE, pursuant to the North American Electric Reliability Corporation (“NERC”) Rules of Procedure, of the violation by CHW of the following NERC Reliability Standard (“Violation”)¹.

NERC Violation Identification No.	Reliability Standard	Requirement(s)	Discovery Method	Date of Violation
SPP2017018589	FAC-003-3	R2	Periodic Data Submittal	10/19/17

2. CHW admits the Violation and has agreed to the proposed penalty of \$110,000 to be assessed by SPP RE for the purpose of resolving all outstanding issues relating to the Violation pursuant to the terms and conditions of this Agreement.

II. STIPULATIONS

3. The Parties enter into this Agreement and agree to the facts stipulated herein in order to avoid uncertainty and to effectuate a complete and final resolution of the Violation. The facts stipulated herein are stipulated solely for the purpose of resolving the Violation and do not represent stipulations or admissions, by either Party, for any other purpose. In consideration of the terms set forth herein, SPP RE and CHW hereby stipulate and agree to the following:

A. BACKGROUND

4. See Section I of the Disposition Document, Attachment 1 for a description of CHW.

B. VIOLATION(S)

5. See Section II of the Disposition Document, Attachment 1 for a description of the Violation.

¹ For purposes of this document and attachments hereto, the violation(s) at issue is/are described as a “Violation(s),” regardless of the procedural posture and whether the violation is a possible, alleged, or confirmed violation.

III. PARTIES' SEPARATE REPRESENTATIONS

A. STATEMENT OF SPP RE

6. As a result of SPP RE's assessment of the Alleged Violation, SPP RE has established sufficient facts to reasonably support the CHW Violation.
7. SPP RE has determined that CHW has completed a Mitigation Plan for the Violation.
8. SPP RE agrees that this Agreement is in the best interest of the Parties and Bulk Power System ("BPS") reliability.

B. STATEMENT OF CHW

9. CHW admits that the facts set forth and agreed to by the Parties for purposes of this Agreement constitute a violation of the identified NERC Reliability Standard.
10. CHW has agreed to enter into this Agreement with SPP RE to avoid extended litigation with respect to this matter, to avoid uncertainty, and to effectuate a complete and final resolution of the Violation.
11. CHW agrees that this Agreement is in the best interest of the Parties and BPS reliability.

IV. MITIGATING ACTIONS, REMEDIES AND SANCTIONS

12. SPP RE and CHW agree that CHW has completed and SPP RE has verified completion of the mitigating actions set forth in Section IV of the Disposition Document, Attachment 1.
13. SPP RE considered the specific facts and circumstances of the Violation, including CHW's actions in mitigation thereof, in determining a penalty satisfying the requirement in Section 215 of the Federal Power Act that "[a]ny penalty imposed under this section 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." The factors considered by SPP RE Staff in the determination of an appropriate penalty are set forth in Section V of Disposition Document, Attachment 1.
14. In settlement of all outstanding issues related to the Violation, the Parties agree that CHW shall pay a total penalty amount of \$110,000 ("Penalty") to SPP RE via wire transfer or cashier's check payable to a SPP RE account that will be outlined in an invoice sent to CHW upon approval or acceptance of this Agreement by the NERC Board of Trustees and by the Federal Energy Regulatory Commission ("FERC" or the "Commission"), either by order or by operation of law. Payment to SPP RE shall be made within thirty (30) days after the receipt of the invoice. SPP RE shall inform NERC if the payment is not timely received.

15. Failure to make a timely Penalty payment or to comply with any other conditions of this Agreement shall be deemed either a continuation of the Violation and/or additional violations and may subject CHW to new or additional enforcement, penalty or sanction actions in accordance with the NERC Rules of Procedure. CHW shall retain all rights to defend against such renewed or additional enforcement actions in accordance with the NERC Rules of Procedure.

16. If CHW fails to make the Penalty payment described above on the date agreed to by the Parties, then interest on the Penalty will begin to accrue at the rate(s) specified in the Commissions regulations at 18 C.F.R. § 35.19a(a)(2)(iii) commencing on the date that payment is due. Such interest shall be payable to SPP RE in addition to the Penalty.

V. ADDITIONAL TERMS

17. The Parties agree that they enter into this Agreement voluntarily and that, other than the recitations set forth herein, no tender, offer or promise of any kind by any member, employee, officer, director, agent, or representative of CHW or SPP RE has been made to induce the Parties to enter into this Agreement.

18. SPP RE shall report the terms of this Agreement to NERC. NERC will review the Agreement for the purpose of evaluating its consistency with other settlements entered into for similar violations or involving similar circumstances. Based on this review, NERC will either approve or reject the Agreement. If NERC rejects the Agreement, NERC will provide specific written reasons for such rejection and shall notify SPP RE and CHW of changes to the terms of the Agreement that would result in its approval, and SPP RE will attempt to negotiate a revised settlement agreement with CHW that will reflect any changes to the original Agreement. If a revised settlement cannot be reached, settlement discussions will be terminated and the enforcement process shall continue to conclusion. If NERC approves the Agreement, NERC will, upon execution by the Parties (i) file the approved Agreement with the Commission for the Commission's review and acceptance or approval by order or operation of law and (ii) may publicly post this Agreement and/or its contents.

19. This Agreement shall become effective upon the Commission's approval or acceptance of the Agreement by order or operation of law as submitted to it or as modified in a manner acceptable to the Parties.

20. CHW agrees that this Agreement, when approved or accepted by NERC and the Commission, shall represent a final settlement of all matters set forth herein and CHW waives its right to further hearings and appeal of such matters, unless and only to the extent that CHW contends that any NERC or Commission action on the Agreement contains one or more material modifications to the Agreement. SPP RE reserves all rights to initiate enforcement, penalty or sanction actions against CHW in accordance with the NERC Rules of Procedure in the event that CHW fails to comply with the terms of this Agreement. In the event CHW fails to comply with such terms, SPP RE may initiate enforcement, penalty, or sanction actions against CHW to the maximum extent allowed by the NERC Rules of Procedure and up to the maximum statutorily allowed penalty.

Except as otherwise specified in this Agreement, CHW shall retain all rights to defend against such enforcement actions according to the NERC Rules of Procedure.

21. CHW consents to the use of SPP RE's determinations, findings, and conclusions set forth in this Agreement for the purpose of assessing CHW's history of violations of the NERC Reliability Standards, in accordance with the NERC Sanction Guidelines and applicable Commission orders and policy statements. Such use may be in any enforcement action or compliance proceeding undertaken by NERC and/or any Regional Entity involving the Reliability Standard described herein; provided, however, that CHW does not consent to the use of the specific acts set forth in this Agreement as the sole basis for any other action or proceeding brought by NERC and/or SPP RE, nor does CHW consent to the use of this Agreement by any other party in any other action or proceeding.

22. Each of the undersigned warrants that he or she is an authorized representative of the Party designated; is authorized to bind such Party; and, accepts the Agreement on the Party's behalf.

23. The undersigned representative of each Party affirms that he or she has read this Agreement; that all of the matters set forth in this Agreement are true and correct to the best of his or her knowledge, information and belief; and, that he or she understands that this Agreement is entered into by such Party in express reliance on those representations; provided, however, that such affirmation by each Party's representative shall not apply to the other Party's statements of position set forth in Section III of this Settlement Agreement.

24. This Agreement may be executed in duplicate, each of which so executed shall be deemed to be an original.

25. This Agreement constitutes the entire agreement between the Parties with respect to the Violation, and supersedes all prior agreements, negotiations, considerations and representations between the Parties.

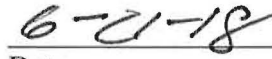
26. This Agreement may be modified only by written instrument signed by a duly-authorized representative of the Parties.

*Remainder of page intentionally blank.
Signatures to be affixed to the following page.*

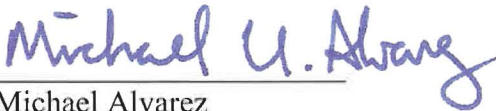
Agreed to and accepted:



Ron Ciesiel
President and General Manager
Southwest Power Pool Regional Entity



Date



Michael Alvarez
Chief Operating Officer
Longroad Energy Holdings, LLC as authorized signatory for CHW

6.25.18

Date

DISPOSITION OF VIOLATION

Dated June 21, 2018

NERC TRACKING NO.

SPP2017018589

REGISTERED ENTITY

Canadian Hills Wind, LLC (CHW)

NERC REGISTRY ID

NCR11354

REGIONAL ENTITY

Southwest Power Pool Regional Entity (SPP RE)

I. REGISTRATION INFORMATION

ENTITY IS REGISTERED FOR THE FOLLOWING FUNCTIONS (BOTTOM ROW INDICATES REGISTRATION DATE):

BA	DP	GO	GOP	IA	LSE	PA	PSE	RC	RP	RSG	TO	TOP	TP	TSP
		X												
		7/15/13												

*** VIOLATION APPLIES TO SHADED FUNCTIONS**

DESCRIPTION OF THE REGISTERED ENTITY

CHW is a 298.5 MW wind-powered generating facility located in Calumet, Oklahoma. The CHW generating facility is interconnected to the Bulk Electric System at the Oklahoma Gas & Electric, Cimarron Substation by a 20.4 mile 345 kV transmission line (Generator Lead Line). CHW shares its Generator Lead Line with Kingfisher Wind, LLC, (Kingfisher) a 298 MW wind-powered generating facility located in nearby Kingfisher County. Kingfisher's 345 kV transmission line ties to the Generator Lead Line at the Shepard Avenue Switchyard, which is located approximately 11.9 miles from the Cimarron Substation. The Cimarron Substation is the Point of Interconnection for CHW and Kingfisher. CHW is responsible for vegetation maintenance of the Generator Lead Line right of way.

II. VIOLATION INFORMATION

RELIABILITY STANDARD ¹	REQUIREMENT(S)	SUB-REQUIREMENT(S)	VRF(S)	VSL(S)
FAC-003-3	R2		High	Severe ²

¹ SPP RE determined that because the violation began on 1/1/16 and ended on 7/22/16, the violation is applicable to FAC-003-3 and FAC-003-4. Under FAC-003-4, R2.4 is the applicable requirement.

PURPOSE OF THE RELIABILITY STANDARD AND TEXT OF RELIABILITY STANDARD AND REQUIREMENT(S)/SUB-REQUIREMENT(S)

PURPOSE: “To maintain a reliable electric transmission system by using a defense-in-depth strategy to manage vegetation located on transmission rights of way (ROW) and minimize encroachments from vegetation located adjacent to the ROW, thus preventing the risk of those vegetation-related outages that could lead to Cascading.”

STANDARD AND REQ.:

FAC-003-3 R2. Each applicable Transmission Owner and applicable Generator Owner shall manage vegetation to prevent encroachments into the MVCD of its applicable line(s) which are not either an element of an IROL, or an element of a Major WECC Transfer Path; operating within its Rating and all Rated Electrical Operating Conditions of the types shown below.

1. An encroachment into the MVCD, observed in Real-time, absent a Sustained Outage,
2. An encroachment due to a fall-in from inside the ROW that caused a vegetation-related Sustained Outage,
3. An encroachment due to blowing together of applicable lines and vegetation located inside the ROW that caused a vegetation-related Sustained Outage,
4. An encroachment due to vegetation growth into the line MVCD that caused a vegetation-related Sustained Outage.

VIOLATION DESCRIPTION

On October 19, 2017, CHW submitted its 2017 Third Quarter FAC-003 Vegetation Report to the SPP RE. Therein, CHW identified a vegetation related outage of the 345 kV transmission line connecting the CHW and Kingfisher wind farms to the Cimarron Substation (hereinafter Generator Lead Line).³ CHW indicated the outage occurred on July 22, 2017, and lasted for approximately three hours and 40 minutes. CHW identified the outage as a Category 3 Sustained Vegetation-caused Outage, i.e., a sustained outage caused by vegetation falling into applicable lines from outside the Right of Way (ROW).⁴ In its description of the outage CHW stated:

On Saturday July 22nd at 16:02 CDT, Canadian Hills experienced an outage on the 345kV Generator Lead Line between Shepard Avenue

² Severe VSL. The responsible entity failed to manage vegetation to prevent encroachment into the MVCD of a line not identified as an element of an IROL and a vegetation-related Sustained Outage was caused by one of the following: A fall-in from inside the active transmission line ROW; Blowing together of applicable lines and vegetation located inside the active transmission line ROW; or A grow-in.

³ The Cimarron Substation is the point of interconnection for the CHW and Kingfisher wind farms and is operated by Oklahoma Gas and Electric.

⁴ The category definitions for sustained outages resulting from vegetation encroachment are identified in §1.4 *Additional Compliance Information, Periodic Data Submittal* in standards FAC-003-3 and FAC-003-4.

Switchyard and Cimarron Substation. The cause was a danger tree In (*sic*) the Right of Way Border Zone that had come into proximity of the line during high ambient temperatures. This tree was identified for monitoring in the bi-annual VMP inspection which occurred in early March 2017. While the tree was outside of the Minimum Vegetation Clearance Distance of 4.4 feet new growth on the limbs appeared capable of breaching the MVCD during wind gusts from the northwest. The outage affected Canadian Hills Wind and Kingfisher Wind with a total of 596.45MW capacity. The tree was pruned down approximately 25 feet and is scheduled to be removed completely from the ROW. Service was restored to Shepard Avenue July 22nd at 19:00 CDT with no further issues. Canadian Hills was returned to service at 19:40 CDT.

Because CHW's description of the outage appeared inconsistent with the definition of a Category 3 Sustained Vegetation-caused Outage, SPP RE requested that CHW provide measurements for the distance from the tree trunk to the outside edge of the ROW, the width of the ROW, and the distance from the conductors to the center and edge of the ROW. CHW responded on October 20, 2017, providing the below measurements.

Distances:

ROW Width – 100 ft.

ROW from Center of line – 50 ft.

ROW from Edge of line – 20-25 ft.

Center of line to Trunk – 65 ft.

Edge of line to Trunk – 37 ft.

Additionally, CHW provided SPP RE with a photograph, depicting an aerial view of the Generator Lead Line, meteorological data indicating the wind speed at the time of the outage, its ROW agreement, and a revised 2017 Third Quarter FAC-003 Vegetation Report (Revised FAC-003 Report). In its Revised FAC-003 Report, CHW provided the following information.

The flow (as a % of normal rating) on the circuit just prior to the outage.	3.92%
Outage start time	15:54 CDT
Detailed description of the Outage	<p>On Saturday July 22nd at 15:54 CDT, Canadian Hills 345kV Generator Lead Line between Shepard Avenue Switchyard and Cimarron Substation.</p> <p>The cause was a danger tree in the Right of Way Border Zone that came into proximity of the line. New limb growth breached the MVCD during wind shear of up to 19mph from the southwest.</p>

	<p>The outage affected Canadian Hills Wind and Kingfisher Wind with a total of 596.45MW capacity.</p> <p>Service was restored to Shepard Avenue July 22nd at 19:39 CDT with no further issues. Canadian Hills was returned to service at 19:40 CDT.</p>
Indicate category of the Sustained vegetation-caused Outage: Category 1A, 1B, 2A, 2B, 3, 4A, 4B	4B
If the vegetation causing the Outage was located outside the ROW provide the distance to the edge of the ROW.	17 feet
If the vegetation causing the outage was outside the ROW provide the distance to the nearest conductor	37 feet
Vegetation height	~50 feet
Remediation/mitigation actions taken by Registered Entity to address recurrence of the vegetation-caused outage.	The tree was removed completely.

On November 7, 2017, CHW submitted a Self-Report stating that, as a Generation Owner, it was in violation of FAC-004-3 R2. Therein, CHW stated:

On Saturday July 22nd at 15:54 CDT, there was an outage on Canadian Hills' 345kV generator lead line between Shepard Avenue Switchyard and Cimarron Substation. Note that this line is not an element of an Interconnection Reliability Operating Limit (IROL). The cause of the outage was a danger tree (Elm) in the Right of Way Border Zone that came into proximity of the line. New limb growth breached the MVCD during wind shear of up to 19 mph from the southwest. The outage affected Canadian Hills Wind and Kingfisher Wind with a total of 596.45MW capacity. This outage caused a loss of three MW of generation. Service was restored to Shepard Avenue, after a total of 182 minutes, on July 22nd at 18:56 CDT with no further issues. Canadian Hills was returned to service after 226 minutes at 19:40 CDT with no further issues.

On November 10, 2017, SPP RE initiated a Spot Check (which included FAC-002-1; FAC-002-2; and FAC-003-4) to gather additional information related to CHW's vegetation management program (VMP) and the July 22, 2017, outage.

CHW's VMP establishes specifications for vegetation management which included maintaining minimum vertical and horizontal clearances between conductors and vegetation. A 10 foot minimum vertical clearance is established in CHW's VMP for

vegetation within the ROW corridor (Wire Zone), i.e., the portion of the ROW directly beneath the conductors.⁵ A horizontal clearance is applied to the Border Zone of the ROW, i.e., the portion of the ROW on either side of the Wire Zone, extending to the outer edge of the ROW. The prescribed horizontal clearance varies based upon the span between the transmission line structures in order to allow for the horizontal movement of the conductors due to the wind.⁶

To ensure prescribed clearances are maintained CHW's VMP Rev 3 includes biannual inspections of the Generator Lead Line, to be completed no later than March 31st and August 31st. The March inspection occurs at the beginning of the growing season and its purpose is to identify vegetation encroachments that should be corrected in CHW's vegetation management work plan. CHW's VMP calls for the inspector to "observe and record all vegetation conditions which might affect the operation of (*sic*) maintenance of the lines." Required observations include, *among other things*, the height of vegetation in the Generator Lead Line corridor, vegetation which is not in compliance with standard clearances, any evidence of vegetation-conductor contact or burning by contact, trees which because of their condition are an immediate threat to the lines, and Action Thresholds, i.e., a point at which the level of incompatible plant species, height, location or condition threatens the stated management objectives and requires the implementation of control methods. The Action Thresholds are incorporated in CHW's vegetation work plan which requires the removal of encroaching vegetation to ensure vertical and horizontal clearances between conductors and vegetation are maintained.⁷

To evidence the Vegetation Inspection of its Generator Lead Line ROWs CHW provided SPP RE with Canadian Hills Generator Lead Line Inspection reports documenting the inspections that were performed in January 2016, March 2016, June 2016, November 2016, March 2017, May 2017, and July 2017. SPP RE observed that CHW's Vegetation Inspection reports did not document the trees in the Generator Lead Line ROW near Structure 71, the location of the July 22, 2017, vegetation-caused outage, until March 20, 2017. In the March 2017, vegetation inspection report CHW identified two Elm trees that were encroaching the ROW near structure 71. CHW stated, "2 trees near ROW – further monitor." SPP RE observed that the two Elm trees near structure 71, cited in the March 2017 inspection, were not identified in a subsequent July 2, 2017, inspection that was performed following a Generator Lead Line trip.

On November 27, 2017, SPP RE conducted an independent on-site visit in order to assess the Spot Check evidence provided by CHW. The following measurements were taken at the encroachment location by SPP RE during the on-site visit.

⁵ See CHW Vegetation Management Program, § 4.2.1.1 and Appendix A, 2015.

⁶ Id. § 4.2.1.2 and Appendix A.

⁷ Id. § 4.2.1.3.1.

Measured by SPP RE

Distances:	
ROW Width	150 ft. ⁸
ROW from Center of line	75 ft.
ROW from Edge of line	48 ft.
Center of line to Trunk	40 ft.
Edge of line to Trunk ⁹	13 ft.
Structure Span	598 ft.
Diameter of Trunk	3 ft. 8 in.

Because the Elm trees had been removed before SPP RE's on-site visit, SPP RE examined an aerial view of the encroachment site taken from the June 20, 2017, Google Earth data in order to validate the general location of the Elm trees. The aerial view from Google Earth indicated that before its removal, the Elm trees were located within the ROW, in close proximity to the East conductor of the Generator Lead Line.

Based upon measurements taken by SPP RE, the trunks of the Elm trees near structure 71 were located 13 feet from the East conductor of the Generator Lead Line and 34 feet within the ROW. In its 2017 Third Quarter FAC-003 Vegetation Report CHW indicated one of the Elm trees was approximately 50 feet tall. The height of the East conductor near this tree, as measured during the SPP RE on-site visit, was approximately 39 feet. Based upon the aforementioned measurements and an aerial view of the Elm trees taken from June 20, 2017, Google Earth data, it is SPP RE's determination that the Elm tree, that was approximately 50 feet tall, was within the 25 foot horizontal clearance prescribed in Appendix A of CHW's VMP.¹⁰ Although CHW cited the two Elm trees near structure 71 in its March 2017 inspection, no action was taken in CHW's vegetation work plan to trim the Elm trees to achieve the prescribed 25 ft. horizontal clearance before the July 22, 2017, Generator Lead Line outage.

On November 20, 2017, CHW provided SPP RE with additional meteorological information indicating the average wind speed at the time of the outage was 16.7 mph from the South-Southwest. CHW stated "[t]here were no unusual conditions nor inclement weather present that day." SPP RE notes that the meteorological information provided on November 20, 2017, is inconsistent with the information provided in the CHW self-report and mitigation plan submitted on November 7, 2017.

It is SPP RE determination that the information provided by CHW in its 2017 Third Quarter FAC-003 Vegetation Report regarding the size of the ROW, the location of the Elm tree in relation to the ROW, and the category of Sustained Vegetation-caused Outage was incorrect. Furthermore, CHW's statement in its self-report that the weather was a

⁸ ROW width taken from Canadian Hills Wind, LLC and Heinrich, Grant of Easement and Easement Agreement for Transmission Facilities, August 23, 2011.

⁹ The distance between structures near the Elm trees was determined by SPP RE to be 598 feet. In Appendix A, interpolating between a 300 foot span (22 feet horizontal clearance) and a 750 foot span (30 foot horizontal clearance) yields a 25 foot horizontal clearance.

¹⁰ Id.

contributing factor to the encroachment outage is not supported by the meteorological data provided by CHW. Although, CHW was performing inspections of the Generator Lead Line that met the intervals established in its VMP, the inspections were incomplete and failed to appropriately document potential vegetation issues. The vegetation issues identified in CHW's inspections of the Generator Lead Line were not assigned an appropriate priority and did not become action items in CHW's vegetation management plan.

Finally, it is SPP RE's determination that CHW did not manage the vegetation in its ROW to prevent encroachment due to vegetation growth into the MVCD (4.4 ft.) of the 345 kV Generator Lead Line for the CHW and Kingfisher wind farms. The appropriate category for the resulting outage is a Category 1B Sustained Vegetation-caused Outage, i.e., a sustained outage caused by vegetation growing into applicable lines by vegetation growing inside the ROW.

The root cause of this violation was a combination of factors. Although CHW had a detailed VMP and was performing vegetation inspections of 100% of its Generator Lead Line twice per year, the inspection forms did not require detailed documentation of the inspection results. Additionally, the VMP did not require immediate follow-up on vegetation-related issues identified during the inspections. CHW also cites a lack of training; a lack of knowledge of the ROW width and a lack of controls to ensure inspections and trimming were being performed.

RELIABILITY IMPACT STATEMENT- POTENTIAL AND ACTUAL

This violation posed a moderate risk and did not pose a serious or substantial risk to the reliability of the Bulk Power System. Failure to properly maintain vegetation in transmission ROWs increases the risk of vegetation-caused outages and creates the potential for cascading outages. Here, the violation posed a moderate risk because the outage involved a 345 kV transmission line which provided the interconnection for 596.45 MWs of generation. The actual risk to the BPS is mitigated because there was minimal generation online at the time of the outage; the outage involved intermittent wind farm generation, inherently unreliable capacity; there was no loss of load; CHW restored operation of the transmission line in less than three hours; and took prompt steps to ensure the outage would not occur again.

No harm is known to have occurred as a result of the violation.

IS THERE A SETTLEMENT AGREEMENT YES ☒ NO ☐

WITH RESPECT TO THE VIOLATION(S), REGISTERED ENTITY

NEITHER ADMITS NOR DENIES IT (SETTLEMENT ONLY) YES ☐
ADMITS TO IT YES ☒
DOES NOT CONTEST IT (INCLUDING WITHIN 30 DAYS) YES ☐

**WITH RESPECT TO THE ASSESSED PENALTY OR SANCTION,
REGISTERED ENTITY**

ACCEPTS IT/ DOES NOT CONTEST IT

YES ☒

III. DISCOVERY INFORMATION

METHOD OF DISCOVERY

SELF-REPORT

☐

SELF-CERTIFICATION

☐

COMPLIANCE AUDIT

☐

COMPLIANCE VIOLATION INVESTIGATION

☐

SPOT CHECK

☐

COMPLAINT

☐

PERIODIC DATA SUBMITTAL

☒

EXCEPTION REPORTING

☐

DURATION DATE(S) The violation began on 1/1/16, the date FAC-003-3 R2 became mandatory and enforceable for Generation Owners and ended on 7/22/16, the date CHW trimmed the offending trees in the ROW.

DATE DISCOVERED BY OR REPORTED TO REGIONAL ENTITY 7/22/17

IS THE VIOLATION STILL OCCURRING YES ☐ NO ☒
IF YES, EXPLAIN

N/A

REMEDIAL ACTION DIRECTIVE ISSUED YES ☐ NO ☒

IV. MITIGATION INFORMATION

FOR FINAL ACCEPTED MITIGATION PLAN:

MITIGATION PLAN NO.

SPPMIT013398-1

DATE SUBMITTED TO REGIONAL ENTITY

3/27/18

DATE ACCEPTED BY REGIONAL ENTITY

4/3/18

DATE APPROVED BY NERC

5/11/18

DATE PROVIDED TO FERC

5/11/18

**IDENTIFY AND EXPLAIN ALL PRIOR VERSIONS THAT WERE ACCEPTED
OR REJECTED, IF APPLICABLE**

Version 1 of the mitigation plan, submitted on 11/22/17, was rejected on 12/5/17 pending the results of a Spot Check initiated on 11/10/17 to investigate the vegetation-related sustained outage.

MITIGATION PLAN COMPLETED YES ☒ NO ☐

EXPECTED COMPLETION DATE 7/16/18

EXTENSIONS GRANTED N/A

ACTUAL COMPLETION DATE 5/3/18

DATE OF CERTIFICATION LETTER 5/14/18

CERTIFIED COMPLETE BY REGISTERED ENTITY AS OF 5/3/18

DATE OF VERIFICATION LETTER 5/15/18

VERIFIED COMPLETE BY REGIONAL ENTITY AS OF 5/15/18

ACTIONS TAKEN TO MITIGATE THE ISSUE AND PREVENT RECURRENCE

To mitigate the violation of FAC-003-3 R3 CHW:

1. Removed the tree on 7/22/2017 that caused the outage;
2. Completed a ground patrol and re-inspection of the 345 kV generator lead line and ROW between Canadian Hills Substation and Cimarron Substation on 7/23/2017;
3. Removed vegetation identified during the re-inspection on 8/26/2017;
4. Trained personnel on the FAC-003 compliance obligations and Vegetation Management Program inspection process on 11/30/2017;
5. Reviewed Canadian Hills' Vegetation Management Program to ensure appropriate clearances are maintained on 2/21/2018;
6. Updated the Canadian Hills' Vegetation Management Program to ensure appropriate clearances are maintained on 3/16/2018;
7. Trained personnel on revisions to the Vegetation Management Program on 3/13/2018 and 3/22/2018;
8. Completed an additional ground patrol of the 345 kV generator lead line and ROW between Canadian Hills substation and Cimarron Substation utilizing the new inspection process/documentation on 4/10/2018; and
9. Removed and/or trimmed vegetation identified in the 2018 ground patrol on 5/3/2018.

LIST OF EVIDENCE REVIEWED BY REGIONAL ENTITY TO EVALUATE COMPLETION OF MITIGATION PLAN (FOR CASES IN WHICH MITIGATION IS NOT YET COMPLETED, LIST EVIDENCE REVIEWED FOR COMPLETED MILESTONES)

CHW VMP Rev4 Signed.pdf

Vegetation Management Work Logs 05.03.2018.pdf
CDMS_MitPlanCertOfCompletion_126263-signed.pdf
CHW April 2018 Vegetation Management Inspection Forms 4-17-18.pdf
CHW FAC-003 Mitigation Plan 11-21-17 signed.pdf
CHW FAC-003 Training 03-16-18.pdf
CHW FAC-003 Training 11-30-17.pdf
CHW FAC-003 Training Sign-In and Quiz 03-22-18.pdf
CHW FAC-003 Training Sign-In and Quiz 11-30-17.pdf

V. PENALTY INFORMATION

TOTAL ASSESSED PENALTY OR SANCTION OF \$110,000 FOR ONE VIOLATION OF ONE RELIABILITY STANDARD.

(1) REGISTERED ENTITY'S COMPLIANCE HISTORY

FILED VIOLATIONS OF ANY OF THE INSTANT RELIABILITY STANDARD(S) OR REQUIREMENT(S) THEREUNDER

YES ☒ **NO** ☐

LIST VIOLATIONS AND STATUS

On January 1, 2018, SPP RE issue a report for the Spot Check initiated on November 10, 2017, to gather additional information related to CHW's Vegetation Management Program and the July 22, 2017, outage. Therein, SPP RE identified no findings on FAC-002-1 and FAC-002-2, and violations of FAC-003-4 R6 (SPP2018018906) and FAC-003-4 R7 (SPP2018018909). On March 1, 2018, SPP RE dismissed SPP2018018906 and SPP2018018909, consolidating the facts and circumstances of these violations with SPP2017018589 for FAC-003-4 R2.

ADDITIONAL COMMENTS

PREVIOUSLY FILED VIOLATIONS OF OTHER RELIABILITY STANDARD(S) OR REQUIREMENTS THEREUNDER

YES ☐ **NO** ☒

LIST VIOLATIONS AND STATUS

A Find, Fix, Track and Report informational filing addressing remediated issues for certain registered entities including CHW's noncompliance with PRC-023-2

R1 was posted by the North American Reliability Corporation on November 25, 2014. The 60-day review period passed on January 24, 2015.

ADDITIONAL COMMENTS

(2) THE DEGREE AND QUALITY OF COOPERATION BY THE REGISTERED ENTITY (IF THE RESPONSE TO FULL COOPERATION IS “NO,” THE ABBREVIATED NOP FORM MAY NOT BE USED.)

**FULL COOPERATION
IF NO, EXPLAIN**

YES ☒ **NO** ☐

(3) THE PRESENCE AND QUALITY OF THE REGISTERED ENTITY’S COMPLIANCE PROGRAM

IS THERE A DOCUMENTED COMPLIANCE PROGRAM
YES ☐ **NO** ☒ **UNDETERMINED** ☐
EXPLAIN

CHW was acquired by SunEdison, Inc. in June 2015. SunEdison declared Chapter 11 Bankruptcy in April 2016. Longroad Energy Services, LLC (Longroad) operates the facility on behalf of the registered entity, CHW. Longroad assumed operational control of the facility from SunEdison in September 2017, after the violation occurred. Currently, CHW utilizes a Compliance Program developed by Longroad to operate its wind generation facility. Although Longroad has a robust Compliance Program including monthly training, monthly self-checks and the utilization of compliance tracking software, the Compliance Program was not in place at the time of the violation.

EXPLAIN SENIOR MANAGEMENT’S ROLE AND INVOLVEMENT WITH RESPECT TO THE REGISTERED ENTITY’S COMPLIANCE PROGRAM, INCLUDING WHETHER SENIOR MANAGEMENT TAKES ACTIONS THAT SUPPORT THE COMPLIANCE PROGRAM, SUCH AS TRAINING, COMPLIANCE AS A FACTOR IN EMPLOYEE EVALUATIONS, OR OTHERWISE.

N/A

(4) ANY ATTEMPT BY THE REGISTERED ENTITY TO CONCEAL THE VIOLATION(S) OR INFORMATION NEEDED TO REVIEW, EVALUATE OR INVESTIGATE THE VIOLATION.

YES ☐ NO ☒
IF YES, EXPLAIN

(5) ANY EVIDENCE THE VIOLATION(S) WERE INTENTIONAL (IF THE RESPONSE IS “YES,” THE ABBREVIATED NOP FORM MAY NOT BE USED.)

YES ☐ NO ☒
IF YES, EXPLAIN

(6) ANY OTHER MITIGATING FACTORS FOR CONSIDERATION

YES ☐ NO ☒
IF YES, EXPLAIN

(7) ANY OTHER AGGRAVATING FACTORS FOR CONSIDERATION

YES ☐ NO ☒
IF YES, EXPLAIN

(8) ANY OTHER EXTENUATING CIRCUMSTANCES

YES ☐ NO ☒
IF YES, EXPLAIN

EXHIBITS:

SOURCE DOCUMENT

Exhibit A - Q3 2017 FAC-003-4 Periodic Data Submittal CHW 18589.xlsx
Exhibit B - Q3 2017 FAC-003-4 - Periodic Data Submittal Amended.xlsx
Exhibit C - Self Report CHW 18589.pdf
Exhibit D – CHW Spot Check Report.pdf

MITIGATION PLAN

Exhibit E - CDMS MitPlan CHW 18589.docx

CERTIFICATION BY REGISTERED ENTITY

Exhibit F - MitPlanCertOfCompletion CHW 18589.pdf

VERIFICATION BY REGIONAL ENTITY

Exhibit G - Mitigation Plan has been Completed CHW 18589.pdf

OTHER RELEVANT INFORMATION:

**NOTICE OF ALLEGED VIOLATION AND PROPOSED PENALTY OR
SANCTION ISSUED**

DATE: OR N/A ☒

SETTLEMENT DISCUSSIONS COMMENCED

DATE: 3/15/18 OR N/A ☐

NOTICE OF CONFIRMED VIOLATION ISSUED

DATE: OR N/A ☒

SUPPLEMENTAL RECORD INFORMATION

DATE(S) OR N/A ☒

REGISTERED ENTITY RESPONSE CONTESTED

FINDINGS ☐ **PENALTY** ☐ **BOTH** ☐ **DID NOT CONTEST** ☒

HEARING REQUESTED

YES ☐ **NO** ☒

DATE

OUTCOME

APPEAL REQUESTED

FAC-003-4 – Vegetation-Caused Sustained Outage Quarterly Report

Quarterly Report is due via [webCDMS](#) 20 days following the end of the full quarter reporting period.

Please complete the following sections as per the guidelines and instructions provided in the Instruction tab.

General Information

Entity Name:	Canadian Hills Wind, LLC
Entity Acronym:	CHW
Entity NCR:	11354
Applicable Function (Select from the drop down list):	Generator Owner (GO)
Contact Person's Name:	Len Nones
Contact Person's Phone:	(405) 439-8393
Reporting Quarter / Year:	Q3/2017

Applicability

Please select the appropriate applicability function(s) based on the Quarterly Reporting Instructions.

Transmission Owner

Does NERC Reliability Standard FAC-003-4 Transmission Vegetation Management apply to your entity's Transmission Owner (TO) registered function?

Defined below (referred to as “applicable lines”), including but not limited to those that cross lands owned by federal¹, state, provincial, public, private, or tribal entities: * Each overhead transmission line operated at 200kV or higher.

* Each overhead transmission line operated below 200kV identified as an element of an Operating Horizon IROL by PeakRC.

* Each overhead transmission line operated below 200kV identified as an element of a Major WECC Transfer Path in the Bulk Electric System by WECC.

* Each overhead transmission line identified above (4.2.1 through 4.2.3) located outside the fenced area of the switchyard, station or substation and any portion of the span of the transmission line that is crossing the substation fence.

NO

Click the green box and select from the drop down list

Generator Owner	
Does NERC Reliability Standard FAC-003-4 Transmission Vegetation Management apply to your entity's Generator Owner (GO) registered function?	
<p>Overhead transmission lines that (1) extend greater than one mile or 1.609 kilometers beyond the fenced area of the generating station switchyard to the point of interconnection with a Transmission Owner's Facility or (2) do not have a clear line of sight³ from the generating station switchyard fence to the point of interconnection with a Transmission Owner's Facility and are:</p> <ul style="list-style-type: none"> * Operated at 200kV or higher; or * Operated below 200kV identified as an element of an Operating Horizon IROL by PeakRC. * Operated below 200kV identified as an element of a Major WECC Transfer Path in the Bulk Electric System by WECC. 	
YES	Click the green box and select from the drop down list
Outage Reporting Form	
Please answer the following question and fill out the table below if necessary (Click on the green box and select from the drop down list):	
Yes	<p>Were there any sustained vegetation-caused outages this reporting period?</p> <p>If yes, complete the following section using a separate line for each outage</p>

The flow (as a % of normal rating) on the circuit just prior to the outage

FAC-003-4 – Vegetation-Caused Sustained Outage Quarterly Report

Quarterly Report is due via [webCDMS](#) 20 days following the end of the full quarter reporting period.

Please complete the following sections as per the guidelines and instructions provided in the Instruction tab.

General Information

Entity Name:	Canadian Hills Wind, LLC
Entity Acronym:	CHW
Entity NCR:	11354
Applicable Function (Select from the drop down list):	Generator Owner (GO)
Contact Person's Name:	Len Nones
Contact Person's Phone:	(405) 439-8393
Reporting Quarter / Year:	Q3/2017

Applicability

Please select the appropriate applicability function(s) based on the Quarterly Reporting Instructions.

Transmission Owner

Does NERC Reliability Standard FAC-003-4 Transmission Vegetation Management apply to your entity's Transmission Owner (TO) registered function?

Defined below (referred to as “applicable lines”), including but not limited to those that cross lands owned by federal¹, state, provincial, public, private, or tribal entities: * Each overhead transmission line operated at 200kV or higher.

* Each overhead transmission line operated below 200kV identified as an element of an Operating Horizon IROL by PeakRC.

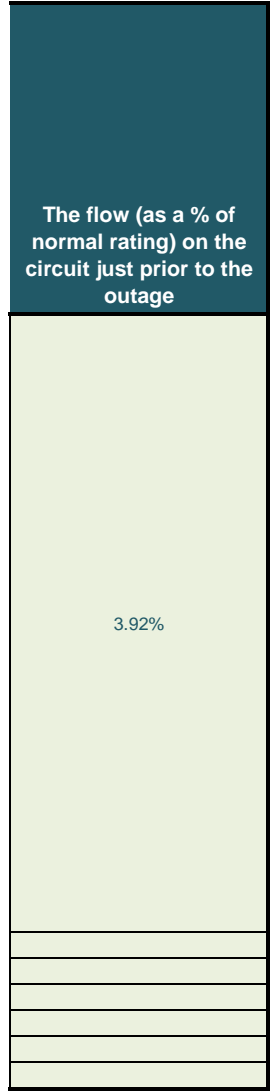
* Each overhead transmission line operated below 200kV identified as an element of a Major WECC Transfer Path in the Bulk Electric System by WECC.

* Each overhead transmission line identified above (4.2.1 through 4.2.3) located outside the fenced area of the switchyard, station or substation and any portion of the span of the transmission line that is crossing the substation fence.

NO

Click the green box and select from the drop down list

Generator Owner	
Does NERC Reliability Standard FAC-003-4 Transmission Vegetation Management apply to your entity's Generator Owner (GO) registered function?	
<p>Overhead transmission lines that (1) extend greater than one mile or 1.609 kilometers beyond the fenced area of the generating station switchyard to the point of interconnection with a Transmission Owner's Facility or (2) do not have a clear line of sight³ from the generating station switchyard fence to the point of interconnection with a Transmission Owner's Facility and are:</p> <ul style="list-style-type: none"> * Operated at 200kV or higher; or * Operated below 200kV identified as an element of an Operating Horizon IROL by PeakRC. * Operated below 200kV identified as an element of a Major WECC Transfer Path in the Bulk Electric System by WECC. 	
YES	Click the green box and select from the drop down list
Outage Reporting Form	
Please answer the following question and fill out the table below if necessary (Click on the green box and select from the drop down list):	
Yes	<p>Were there any sustained vegetation-caused outages this reporting period?</p> <p>If yes, complete the following section using a separate line for each outage</p>



[illegible]

[illegible]

Self Report

Entity Name: Canadian Hills Wind, LLC (CHW)

NERC ID: NCR11354

Standard: FAC-003-4

Requirement: FAC-003-4 R2.

Date Submitted: November 07, 2017

Has this violation previously No
been reported or discovered?:

Entity Information:

Joint Registration
Organization (JRO) ID:

Coordinated Functional
Registration (CFR) ID:

Contact Name: Len Nones
Contact Phone: 4054398393
Contact Email: len.nones@longroadenergy.com

Violation:

Violation Start Date: July 22, 2017
End/Expected End Date: July 22, 2017
Reliability Functions: Generator Owner (GO)

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: On Saturday July 22nd at 15:54 CDT, there was an outage on Canadian Hills' 345kV generator lead line between Shepard Avenue Switchyard and Cimarron Substation. Note that this line is not an element of an Interconnection Reliability Operating Limit (IROL). The cause of the outage was a danger tree (Elm) in the Right of Way Border Zone that came into proximity of the line. New limb growth breached the MVCD during wind shear of up to 19 mph from the southwest. The outage affected Canadian Hills Wind and Kingfisher Wind with a total of 596.45MW capacity. This outage caused a loss of three MW of generation. Service was restored to Shepard Avenue, after a total of 182 minutes, on July 22nd at 18:56 CDT with no further issues. Canadian Hills was returned to service after 226 minutes at 19:40 CDT with no further issues.

Mitigating Activities:

- Description of Mitigating Activities and Preventative Measure:
1. Remove the tree that caused the outage.
 2. Complete a ground patrol and re-inspection of 345kV generator lead lines and ROW between Shepard Avenue Switchyard and Cimarron Substation.
 3. Remove additional vegetation as necessary.
 4. Canadian Hills' vegetation management program will be reviewed and updated to ensure that the plan is robust enough to prevent any further violations.
 5. Canadian Hills' Vegetation Management training program will be reviewed to ensure that personnel are adhering to all GO requirements.

Self Report

Date Mitigating Activities Completed: December 01, 2017

Impact and Risk Assessment:

Potential Impact to BPS: Moderate

Actual Impact to BPS: Moderate

Description of Potential and Canadian Hills is a 298 MW wind farm. Kingfisher is a 298 MW wind farm.
Actual Impact to BPS: Outage of the 345kV generator lead line has the potential to cause a loss in one or both facilities to provide generation capacity to the BPS.

Risk Assessment of Impact to BPS: This violation posed a moderate risk and did not pose a serious or substantial risk to the reliability of the BPS. Canadian Hill's failure to properly manage vegetation along a transmission ROW resulted in vegetation encroaching a line's MVCD and an outage of 186 minutes for the line and 226 minutes for the Canadian Hills Wind generating facility. CHW has a vegetation management plan but did not address the potential for wind shears causing branches breaking and contacting the generator lead line.

Additional Entity Comments:

Additional Comments		
From	Comment	User Name
No Comments		

Additional Documents			
From	Document Name	Description	Size in Bytes
No Documents			

NCR ID :	NCR11354		
Registered Entity Name:	Canadian Hills Wind, LLC		
Registered Entity Acronym:	CHW		
Reliability Standards Scope:	Operations & Planning (FERC Order 693) Standards		
Compliance Monitoring Process:	Spot Check		
Distribution:	Non-Public Version. CUI//PRIV – DO NOT RELEASE		
Regional Entity:	Southwest Power Pool Regional Entity (SPP RE)		
Date of Opening Presentation:	December 20, 2017	Date of Closing Presentation:	December 20, 2017
Date of Report:	1/11/2018	IP Year:	2017
Potential Noncompliance:	Two (2)		
Jurisdiction:	United States		

Table of Contents

Executive Summary1

Spot Check Process.....2

 Objectives2

 Scope2

 Internal Compliance Program2

 Confidentiality and Conflict of Interest2

 Methodology3

 Company Profile3

Spot Check Findings.....4

Recommendations.....10

Compliance Culture11

Appendix 1.....12

Executive Summary

Southwest Power Pool Regional Entity (SPP RE) conducted an Operations & Planning (FERC Order 693) Standards Spot Check of 2017 (CHW), NCR ID NCR11354 from December 20, 2017 to December 20, 2017.

At the time of the Spot Check, CHW was registered for the functions of Generator Operator (GOP), Generator Owner (GO).

Southwest Power Pool (SPP), NERC ID NCR01143 is the Reliability Coordinator (RC), Balancing Authority (BA) and Planning Authority (PA) and Oklahoma Gas and Electric Co. (OKGE), NERC NCR01130 is the Transmission Operator (TOP) and Transmission Planner (TP) for CHW.

The Spot Check team (team) evaluated CHW for compliance with eight (8) requirements for the 2017 Electric Reliability Organization (ERO) Enterprise Compliance Monitoring and Enforcement Program (CMEP). The team assessed compliance with the NERC Reliability Standards for the period of January 1, 2016 to December 1, 2017 for FAC-003-3 and subsequent FAC-003-4 and from January 1, 2014 to December 1, 2017 for FAC-002-1 and subsequent FAC-002-2.

CHW submitted evidence for the team's evaluation of compliance with requirements. The team reviewed and evaluated all evidence provided to assess compliance with Reliability Standards applicable to CHW at this time.

Based on the evidence provided, the team's findings are summarized in Table 1: Summary of Spot Check Findings.

Table 1: Summary of Spot Check Findings				
Reliability Standard Requirement(s)	Registered Function	No Finding	Potential Noncompliance (PNC)	Open Enforcement Action (OEA)
8	GO	5	2	1

The team notified CHW of zero (0) areas of concern¹ and one (1) recommendation.

PNCs will be processed as outlined in the NERC Rules of Procedure and Appendix 4C.²

There was one open Mitigation Plan; therefore, it was reviewed by the team.

The Spot Check team lead certifies that the team adhered to all applicable requirements of the NERC Rules of Procedure (ROP) and Compliance Monitoring and Enforcement Program (CMEP).³

¹Per FERC Guidance Order on Compliance Audits Conducted by the Electric Reliability Organization and Regional Entities, dated January 15, 2009.

² See [NERC ROP and Appendix 4C](#).

³This statement replaces the Regional Entity Self-Certification process.

Spot Check Process

The Spot Check process steps are detailed in the NERC ROP. The CMEP generally conforms to the United States Government Auditing Standards and other generally accepted audit practices.

Objectives

All registered entities are subject to compliance assessments with all Reliability Standards applicable to the functions for which the registered entity is registered⁴ in the Region(s) performing the assessment. The Spot Check objectives are designed to:

- Provide reasonable assurance of compliance to the identified applicable Reliability Standards
- Review evidence of self-reported violations and previous self-certifications
- Review CHW's internal compliance program and controls
- Review the status of open Mitigation Plans

Scope

The scope of this Spot Check considered the NERC Reliability Standards from 2017 ERO Enterprise CMEP Implementation Plan, Inherent Risk Assessment (IRA) of CHW completed by Southwest Power Pool Regional Entity (SPP RE). In addition, the scope of the Spot Check included a review of Mitigation Plans or Remedial Action directives that were open during the Spot Check.

The Reliability Standards and Requirements in-scope for this Spot Check are illustrated in Table 2: Spot Check Scope.

Table 2: Spot Check Scope		
Registered Function	Standards	Requirement(s)
GO	FAC-003-4	R2, R3, R4, R5, R6, R7
GO	FAC-002-1	R1
GO	FAC-002-2	R5

The team did not expand the scope of the Spot Check beyond what was stated in the notification package.

Internal Compliance Program

Within the scope of the Spot Check, CHW's compliance program was reviewed.

Confidentiality and Conflict of Interest

Confidentiality and conflict of interest of the team are governed under the Regional Delegation Agreements with NERC, and Section 1500 of the NERC ROP.⁵ CHW was informed of Southwest Power Pool Regional Entity (SPP RE)'s obligations and responsibilities under the agreement and procedures. The work history for each team member was provided to CHW, which was given an opportunity to object to a team member's participation on the basis of a possible conflict of interest or the existence of other circumstances that could interfere with a team member's impartial performance of duties. CHW had not submitted any objections by the stated objection due date based

⁴[NERC ROP, Appendix 4C, Section 3.1, Compliance Audits.](#)

⁵ [See NERC ROP](#)

on the ROP and accepted the team member participants without objection. There were no denials or access limitations placed upon this team by CHW.

Methodology

The ERO Compliance Monitoring and Enforcement Manual (Manual)⁶ documents the ERO Enterprise's current approaches used to assess a registered entity's compliance with the NERC Reliability Standards. The ERO Enterprise uses, "to the extent possible, the Generally Accepted Auditing Standards (GAAS), the Generally Accepted Government Auditing Standards (GAGAS), and standards sanctioned by the Institute of Internal Auditors, as guidance for performing activities under the Compliance Monitoring and Enforcement Program (CMEP)."⁷ While the ERO Enterprise does not necessarily perform compliance monitoring activities that must be in accordance with these standards recognized in the United States, the ERO Enterprise uses these standards as framework to conduct compliance monitoring activities under the CMEP, and recognizes that these standards provide information used in oversight, accountability, transparency, and improvements in ERO Enterprise operations.

The Southwest Power Pool Regional Entity (SPP RE) provided CHW with a Spot Check notification package to commence the Spot Check. CHW provided evidence at the time requested, or as agreed upon, by Southwest Power Pool Regional Entity (SPP RE). The team performed an on-site field inspection, reviewed the evidence submitted by CHW and assessed compliance with the requirements of the applicable Reliability Standards. Additional evidence could be submitted until the agreed-upon deadline prior to the exit briefing. After that date, only data or information that was relevant to the content of the report or its finding could be submitted with the agreement of the team lead.

The team reviewed documentation provided by CHW and requested additional evidence and sought clarification from subject matter experts during the Spot Check. The evidence submitted in the form of policies, procedures, emails, logs, studies, data sheets, etc. were validated, substantiated, and cross-checked for accuracy as appropriate. Where sampling is applicable to a requirement, the sample set was determined by a statistical methodology, along with professional judgment as mentioned in the Manual.

The findings were based on the facts and documentation reviewed, the team's knowledge of the Bulk Electric System (BES), the NERC Reliability Standards, and professional judgment. All findings were developed based upon the consensus of the team.

Company Profile

CHW is a 299 MW wind farm located approximately 35 miles west of Oklahoma City, OK, comprised of 135 wind turbine generators which are configured as two generator facilities connected at 345 kV. One 149 MW generator facility consists of 62 Mitsubishi 2.4 MW wind turbines connected via 345/34.5 kV transformer T1. The other 150 MW generator facility consists of 73 Repower 2.05 MW wind turbines connected via 345/34.5 kV transformer T2. T1 and T2 are interconnected via a 20 mile 345 kV generation interconnection facility to OGE's Cimarron substation. Canadian Hills Wind, LLC (CHW) was acquired by TerraForm Power a subsidiary of SunEdison on June 26th, 2015. Sun Edison went into Chapter 11 Bankruptcy in 2016. Longroad Energy Services, LLC (LES) operates the facility on behalf of the registered entity, CHW. LES assumed operational control of the facility in September 2017.

⁶<http://www.nerc.com/pa/comp/Pages/ERO-Enterprise-Compliance-Auditor-Manual.aspx>

⁷[NERC ROP, Section 1207 and 126 FERC 61,038, Paragraph 3](#)

Spot Check Findings

The information in Table 3: Findings and Supporting Evidence details the Potential Noncompliance findings for the Reliability Standards and Requirements identified in the scope of this Spot Check. All other Reliability Standards and Requirements in-scope for this Spot Check were tested without exception.

Table 3: Findings and Supporting Evidence			
Standard	Req.	Registered Function	Category of Finding
FAC-003-4	R2	GO	Open Enforcement Action (OEA) NERC violation SPP2017018589
FAC-003-4	R6	GO	Potential Noncompliance (PNC)
FAC-003-4	R7	GO	Potential Noncompliance (PNC)
Description of Finding			
<p>R2</p> <p>Open Enforcement Action based on self report NERC violation SPP2017018589. Generator Owner did not manage vegetation to prevent encroachments into the MVCD (4.4 feet) of it applicable 345kv line operating within its Ratings. Initial determination based on CHW documents was a type 2.3 outage:</p> <p>Type 2.3 An encroachment due to blowing together of applicable lines and vegetation located inside the ROW that caused a vegetation-related Sustained Outage.</p> <p>The Spot Check team reviewed the following evidence:</p> <ul style="list-style-type: none"> • CHW_KF Shared Facilities Demaraction.pdf • Q3 2017 FAC-003-4 – Transmission Vegetation Management and 48-hour SPP.xlsx • Vegetation Outage Aerial View.jpg • Corrected Field Measurements FAC-003 Vegetation Outage July 22 2017@ 1602 CDT Canadian Hills Confidential.msg • Re: CHW vegetation contact.msg • Re: Request for ROW Easement.msg • Request for Information CHW Outage.msg • 171127 CHW vegetation contact site measurements.pdf • E phase looking north at tree #1.jpg • E phase looking south at tree #1.jpg • Google Earth est tree and phase position 170620.docs • CHW Vegetation Management Program Rev 3.pdf • CHW Appendix A Gen Lead Line Clearance-Vegetation.pdf <p><i>CHW Vegetation Management Program Rev 3.pdf (VMP) Section 4.0 Procedure states CHW will clear vegetation to levels “well away from” the minimum flashover zone to ensure that MVCD clearances are never violated. CHW VMP section 4.2.1.1 states ROW management of vegetation within the ROW corridor is managed to promote only low-growing, primarily herbaceous vegetation. CHW does not allow tall-growing trees on its generator lead line ROW. CHW does not prune trees to maintain them in generator lead line ROW; incompatible or tall growing trees are removed.</i></p> <p><i>CHW Appendix A Gen Lead Line Clearance-Vegetation.pdf specifies the minimum clearance between conductor and vegetation. CHW did not maintain the minimum side clearance (approx. 25’) between</i></p>			

Table 3: Findings and Supporting Evidence

Standard	Req.	Registered Function	Category of Finding
			<p>conductor and vegetation as required in VMP Appendix A based on the evidence reviewed and field site measurements and observations <i>171127 CHW vegetation contact site measurements.pdf</i>. <i>CHW_KF Shared Facilities Demaraction.pdf</i> specifies facility ownership between CHW and Kingfisher Wind (an adjacent 300MW wind farm that interconnects at Shepard Ave. Switchyard) and the location where the MVCD encroachment occurred. <i>Q3 2017 FAC-003-4 – Transmission Vegetation Management and 48-hour SPP.xlsx</i> is the third quarter 2017 reporting of the vegetation-caused sustained outage which stated an approximately 50 foot tree was 17 feet outside the ROW edge and 37 feet from the nearest conductor and that new limb growth breached into the MVCD. <i>Re: CHW vegetation contact.msg</i> is a response by CHW to an SPP RE email to clarify the type of tree (elm) and weather (101 degrees, wind average 16.7mph from SW with no storms) on the day of the encroachment. <i>Vegetation Outage Aerial View.jpg</i> was provided by CHW after the vegetation-caused outage indicating CHW determination of ROW and tree location based on an aerial photo. This was determined to be in error based on <i>171127 CHW vegetation contact site measurements.pdf</i>- an assessment of the MVCD encroachment site by SPP RE staff on a site visit 11/27/17 and <i>Request for ROW Easement.msg</i>, which verified the ROW width to be 150' not 100' as initially reported by CHW and that the subject tree stump was 13' from the outside phase, (within the 75' ROW from the center line of the easement.) This was recorded by the Spot Check team in <i>Corrected Field Measurements FAC-003 Vegetation Outage July 22 2017@ 1602 CDT Canadian Hills Confidential.msg</i>. Other documentation of the encroachment site include <i>E phase looking north at tree #1.jpg</i> and <i>E phase looking south at tree #1.jpg</i> which are photos taken during the SPP RE site visit.</p> <p><i>Google Earth est tree and phase position 170620.docs</i> is an aerial view screen shot of the encroachment site taken 6/20/17 which agrees with the SPP RE site visit determination that the tree in question was within the ROW under or near the east phase conductor and encroached within the MVCD.</p> <p><i>Request for Information CHW Outage.msg</i> is a request by SPP RE for outage data from SPP as the Reliability Coordinator which indicates the generation at the time of the outage was approximately 10MW although 600MW of generation from CHW and Kingfisher Wind (300MW) is attached to this 345kv circuit.</p> <p>The spot check team determined that based on the evidence reviewed the vegetation outage should have been classified as a Type 2.4 (Category 1B) encroachment as field measurements and aerial photos indicated the vegetation was in the ROW under or near the east phase conductor.</p> <p>Type 2.4 An encroachment due to vegetation growth into the line MVCD that caused a vegetation-related Sustained Outage which translates into a Category 1B outage.</p> <p>R6</p> <p>The Spot Check team reviewed the following evidence:</p> <ul style="list-style-type: none"> • CHW Gen-Line Inspections.pdf • CHW Appendix A Gen Lead Line Clearance-Vegetation.pdf • Vegetation Spot Check 10062017.pdf • 171127 CHW vegetation contact site measurements.pdf • Structure 29 looking east.jpg • CHW Vegetation Management Program Rev. 3.pdf • CHW Evidence Requests_2017121316-CHW Response 12-9-2017.xlsx • 171106 SPP RE Request for Information Ox response.docx.

Table 3: Findings and Supporting Evidence

Standard	Req.	Registered Function	Category of Finding
<p>In 2016, inspections were performed in January, March, June, and November. In 2017, inspections were performed in March, May, and July as reflected in <i>CHW Gen-Line Inspections.pdf</i> and again in October per <i>Vegetation Spot Check 10062017.pdf</i>.</p> <p><i>CHW Vegetation Management Program Rev. 3.pdf</i> (VMP) summarizes the annual work plan in section 4 which states in part “Ground patrol of all lines a minimum of (2) times per year”.</p> <p><i>CHW gen-Line Inspection.pdf</i> page 10 on 3/20/17 structure #71 (site of contact) states two trees near ROW, further monitor but did not identify these as encroaching into the MVCD of its applicable line or in close proximity to the line. <i>CHW gen-Line Inspection</i> page 15 on 7/22/17 (date of vegetation contact) structure 71 states fire near tree in ROW. <i>CHW gen-Line Inspection</i> page 16 on 7/23/17 structure 71 states two trees in ROW border.</p> <p>CHW policy regarding inspections for danger trees: CHW VMP section 4.2.1.1 states ROW management of vegetation within the ROW corridor is managed to promote only low-growing, primarily herbaceous vegetation. CHW does not allow tall-growing trees on its generator lead line ROW. CHW does not prune trees to maintain them in generator lead line ROW; incompatible or tall growing trees are removed. <i>CHW Appendix A Gen Lead Line Clearance-Vegetation.pdf</i> specifies the minimum clearance between conductor and vegetation. Appendix A was not provided initially. VMP section 4.2.8 lists the CHW Vegetation Inspection requirements which includes recording heights of vegetation in the generator lead line corridor, vegetation which is not in compliance with standard clearances, identifying incompatible vegetation, or identifying action thresholds for the implementation of control methods.</p> <p>On 11/27/17, Spot Check team members drove the entire route of the generator tie line from OKGE Cimarron Substation to Canadian Hills Substation (via public roads) to identify any vegetation issues and take measurements and observations near Structure 71 (location of MVCD encroachment) <i>171127 CHW vegetation contact site measurements.pdf</i>. The Spot Check team noted approx. 20 ft high trees under the line near the railroad at Structure 29 (see structure 29 looking east.jpg).</p> <p>The Spot Check team determined that heights of vegetation in the generator lead line corridor were not recorded in the line inspections as required per the VMP nor did CHW record all vegetation conditions that could affect the operation of the line nor identify action thresholds. CHW did not note the two tall trees in the ROW near Structure 71 (location of MVCD encroachment) prior to 3/20/17 in <i>CHW gen-Line Inspection.pdf</i> and did not record trees, approx. 20 ft height under line at Structure 29 prior to 10/7/17 in <i>Vegetation Spot Check 10062017.pdf</i>.</p> <p>Evidence Request ER-02, The Spot Check team asked for the root cause of why vegetation inspections did not address tall-growing trees within the ROW to ensure no vegetation encroachments occur within the MVCD. CHW response CHW Evidence Requests_2017121316-CHW Response 12-9-2017.xlsx was “Two scheduled inspections semi-annually occur on the CHW line. One before the grow season and one after the grow season. The root cause of this encroachment was from rapid growth of an elm tree during the 2017 growing season. The tree was identified for monitoring during the annual pre-grow season inspection in</p>			

Table 3: Findings and Supporting Evidence

Standard	Req.	Registered Function	Category of Finding
<p>March 2017. The tree was not capable of breaching the MVCD when performing multiple line patrols of 100% of the line over the following months during non-vegetation related outages.”</p> <p>Evidence Request ER-03, The Spot Check team asked for the dates and determined cause of generator lead line operations (analysis) in 2016 and 2017 in the context of line patrols noted in ROW inspections. A review of the evidence <i>CHW Evidence Requests_2017121316-CHW Response 12-9-2017.xlsx</i> indicated the operations were due to causes other than vegetation contact with the exception of the vegetation encroachment contact operation on 7/22/17.</p> <p>The Spot Check team found an issue of possible non-compliance as CHW did not follow their VMP for vegetation inspections as follows:</p> <p>Potential Non-Compliance</p> <p>Although CHW provided evidence of vegetation Inspection of 100% of its applicable transmission lines at least once per calendar year, CHW did not follow it’s VMP procedure 4.2.8 regarding conducting vegetation inspections as follows:</p> <ul style="list-style-type: none"> • Allowed tall-growing trees on its generator lead line ROW. Violation of VMP section 4.2.1.1. • Did not observe and record all vegetation conditions, which might affect the operation or maintenance of the lines. Did not record trees, approx. 20 ft height under line at Structure 29 prior to 10/7/17. • Did not record heights of vegetation in the generator lead line corridor. For example, vegetation near Structure 29 and 71. • Did not identify vegetation action thresholds at structures 29 and 71 at which the level of incompatible plant species, height, location or condition threatens the stated management objectives and requires the implementation of control method(s). <p>Impact to the BES was a sustained outage of 182 minutes on 7/22/17 due to vegetation contact on the 345kv generator tie line circuit near structure 71 with a loss of approximately 10MW of generation on line at the time of the outage. 600MW of generation from CHW and Kingfisher Wind (300MW) was unavailable due to the line outage. There were no abrupt changes in line flow in the immediate area of the outage per <i>171106 SPP RE Request for Information Ox response.docx</i>.</p> <p>R7</p> <p>The Spot Check team reviewed the following evidence:</p> <ul style="list-style-type: none"> • CHW Gen-Line Inspections.pdf • Canadian Hills Wind 8.25-9.2.pdf • CHW Appendix A Gen Lead Line Clearance-Vegetation.pdf • 171127 CHW vegetation contact site measurements.pdf • E phase looking north at tree #1.jpg • E phase looking south at tree #1.jpg • CHW Vegetation Management Program Rev. 3.pdf • 171106 SPP RE Request for Information Ox response.docx. • Google Earth est tree and phase position 170620.docx <p>CHW stated it completed 100% of its annual vegetation work plan. Included as evidence is an invoice <i>Canadian Hills Wind 8.25-9.2.pdf</i> from The Davey Tree Surgery Company for the tree removal work</p>			

Table 3: Findings and Supporting Evidence			
Standard	Req.	Registered Function	Category of Finding
<p>completed in August 2017, but this was after the vegetation contact in July 2017. No other vegetation management was performed during the spot check period.</p> <p>Annual Work Plan as stated in <i>CHW Vegetation Management Program (VMP) Rev 3.pdf</i>:</p> <p>4.0 PROCEDURES Summary of CHW Annual Work Plan:</p> <ul style="list-style-type: none"> • Ground patrol of all lines a minimum of (2) times per year • Identify problem trees during ground inspection for remedial action • Remove or cut dangerous trees. • Document all activity on appropriate inspection and action forms • Report all vegetation related outages as soon as possible <p>VMP section 4.2.8.5 states when vegetation is not in compliance with the CHW VMP, then action will be initiated within a reasonable time frame to obtain the conductor to vegetation clearance described.</p> <p><i>CHW Vegetation Management Program (VMP) Rev 3.pdf</i>; page 4 states CHW will manage vegetation to ensure that vegetation does not encroach into the MVCD, which requires CHW to manage vegetation to a distance further than the MVCD. This means that CHW will clear vegetation to levels "well away from" the minimum flashover zone to ensure that MVCD clearances are never violated.</p> <p>VMP section 4.2.1.1 states ROW management of vegetation within the ROW corridor is managed to promote only low-growing, primarily herbaceous vegetation. CHW does not allow tall-growing trees on its generator lead line ROW. CHW does not prune trees to maintain them in generator lead line ROW; incompatible or tall growing trees are removed.</p> <p>The first identification of the trees at Structure 71 that encroached within the MVCD resulting in a sustained outage was the 3/20/17 inspection report <i>CHW Gen-Line Inspections.pdf</i> stating "2 trees near ROW-further monitor". No action was taken to remove the trees until August 2017, after the outage on 7/22/17.</p> <p><i>CHW Appendix A Gen Lead Line Clearance-Vegetation.pdf</i> specifies the minimum clearance between conductor and vegetation. CHW did not maintain the minimum side clearance (approx. 25') between conductor and vegetation as required in VMP Appendix A based on the evidence reviewed and field site measurements and observations <i>171127 CHW vegetation contact site measurements.pdf</i> and <i>Google Earth est tree and phase position 170620.docx</i>. Other documentation of the encroachment site include <i>E phase looking north at tree #1.jpg</i> and <i>E phase looking south at tree #1.jpg</i> which are photos taken during the SPP RE site visit.</p> <p>The Spot Check team found an issue of possible non-compliance as CHW did not follow their work plan as follows: Potential Non-Compliance: The CHW annual work plan is deficient in that it did not identify problem vegetation during ground inspections for remedial action and thus did not take action to modify its work plan to avoid MVCD encroachment and a subsequent sustained outage. Heights of vegetation in the generator lead line corridor were not recorded in the line inspections as required per the VMP nor did CHW record all vegetation</p>			

Table 3: Findings and Supporting Evidence			
Standard	Req.	Registered Function	Category of Finding
			<p>conditions that could affect the operation of the line. CHW did not maintain the minimum side clearance (approx. 25') between conductor and vegetation as required in VMP Appendix A based on the evidence reviewed and field site measurements and observations (tree contact stump was 13' from east phase conductor and aerial photos show trees under/near east phase conductor prior to outage). CHW did not take action within a reasonable time frame after the 3/20/17 inspection to obtain the conductor to vegetation clearance per VMP section 4.2.8.5 and VMP section Procedure 4.0- that vegetation is "well away from" the minimum flashover zone to ensure that MVCD clearances are never violated . CHW did not follow VMP 4.2.1.1 and 4.2.8.3.7 allowing tall-growing trees on its generator lead line ROW without taking action prior to an encroachment outage.</p> <p>Impact to the BES was a sustained outage of 182 minutes on 7/22/17 due to vegetation contact on the 345kv generator tie line circuit near structure 71 with a loss of approximately 10MW of generation on line at the time of the outage. 600MW of generation from CHW and Kingfisher Wind (300MW) was unavailable due to the line outage. There were no abrupt changes in line flow in the immediate area of the outage per <i>171106 SPP RE Request for Information Ox response.docx</i>.</p>

Recommendations

Recommendations

The team identified and informed CHW of one (1) recommendation. The specific details of each recommendation is described below:

1. Correct typo on Part 3.2, page 4 of Vegetation Management Program to reflect “Precipitation” not “Participation” is considered to the extent necessary to effectively schedule work.

Compliance Culture

The team performed an assessment of CHW's compliance culture in conjunction with the Spot Check process. The assessment was accomplished through a review of responses to the Internal Compliance Survey questionnaire and additional information that was gathered during interviews and observations. This included an assessment of factors that characterize vigorous and effective compliance programs including:

- Active engagement and leadership by senior management;
- Effective, in-practice preventive measures appropriate to the circumstances of the company;
- Prompt detection of problems, cessation of misconduct, and reporting of a violation; and
- Remediation of the misconduct.

Southwest Power Pool Regional Entity (SPP RE) Contact Information

Any questions regarding this Spot Check report can be directed to:

Southwest Power Pool Regional Entity (SPP RE)
201 Worthen Drive
Little Rock, AR 72223

On behalf of Southwest Power Pool Regional Entity (SPP RE), this report was prepared and reviewed by:

Spot Check Team Lead	Date
Jeff Rooker	1/10/17
Management Representative	Date
Ron Ciesiel, President and General Manager	1/11/17

Appendix 1

Spot Check Participants

Appendix Table 1: Spot Check Team and Appendix Table 2: CHW Participants list all personnel from the team and CHW who were directly involved during the meetings and interviews.

Appendix Table 1: Spot Check Team			
Role	Name	Title	Entity
Spot Check Team Lead	Jeff Rooker	Lead Compliance Engineer	SPP RE
Team Member	Thomas Teafatiller	Lead Compliance Engineer	SPP RE
Team Member	Mike Hughes	Lead Compliance Engineer	SPP RE
Team Member	Jim Williams	Lead Compliance Specialist	SPP RE

Appendix Table 2: CHW Participants		
Name	Title	Entity
Jill Loewer	Senior Compliance Analyst	Utility Services
Brian Robinson	Manager of Technical Services	Utility Services
Jeremy Law	Director of Operations	Longroad Energy
EJ Martin	Vice President of Operations	Longroad Energy
Jacob Erzen	Senior Operations Manager	Longroad Energy
Len Nones	Assistant Operations Manager	Longroad Energy

Mitigation Plan

Mitigation Plan Summary

Registered Entity: Canadian Hills Wind, LLC

Mitigation Plan Code: SPPMIT013398-1

Mitigation Plan Version: 2

NERC Violation ID	Requirement	Violation Validated On
SPP2017018589	FAC-003-4 R2.	

Mitigation Plan Submitted On: March 27, 2018

Mitigation Plan Accepted On: April 03, 2018

Mitigation Plan Proposed Completion Date: July 16, 2018

Actual Completion Date of Mitigation Plan:

Mitigation Plan Certified Complete by CHW On:

Mitigation Plan Completion Verified by SPPRE 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: **Canadian Hills Wind, LLC**

NERC Compliance Registry ID: **NCR11354**

Address: **c/o Longroad Energy Services, LLC
133 Federal St, Suite 1202
Boston MA 02110**

Name: **Jeremy Law**

Title: **Director - Operations and Maint., Longroad Energy Services, LLC**

Email: **jeremy.law@longroadenergy.com**

Phone: **617-377-4323**

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		
SPP2017018589	07/22/2017	FAC-003-4 R2.
Each applicable Transmission Owner and applicable Generator Owner shall manage vegetation to prevent encroachments into the MVCD of its applicable line(s) which are not either an element of an IROL, or an element of a Major WECC Transfer Path; operating within its Rating and all Rated Electrical Operating Conditions of the types shown below:		

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

On Saturday July 22nd at 15:54 CDT, there was an outage on Canadian Hills' 345kV generator lead line between Canadian Hills Substation and Cimarron Substation. The cause of the outage was a tree (elm) in the Right of Way that was in close proximity to the generator lead line. This outage caused a loss of three MW of generation. Service was restored to Shepard Avenue, after a total of 182 minutes, on July 22nd at 18:56 CDT with no further issues. Canadian Hills was returned to service after 226 minutes at 19:40 CDT with no further issues.

The root cause of this violation was an inadequate procedure. Specifically, although CHW had a Vegetation Management Program (VMP) and was performing vegetation inspections of 100% of its generator lead line twice per year, the inspection forms did not contain many details of the inspection results. Additionally, the VMP did not require any immediate follow-up on any identified vegetation-related issues noted during the inspections.

A contributing factor was personnel inattention to detail. The person who conducted the inspection should have identified the elm tree as a danger tree in accordance with the VMP at the time of the inspections.

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

Note that this line is not an element of an Interconnection Reliability Operating Limit (IROL).

Plan Details

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

1. Removed the tree that caused the outage.
2. Completed a ground patrol and inspection of 345kV generator lead line and ROW between Canadian Hills Substation and Cimarron Substation.
3. Removed and/or trimmed additional vegetation as necessary.
4. Trained CHW personnel so they are aware of FAC-003 compliance obligations and the Vegetation Management Plan inspection process.
5. Reviewed and enhanced Vegetation Management Program to ensure appropriate clearances are maintained.
6. Train CHW personnel to ensure that personnel are aware of all revisions to the Vegetation Management Plan inspection process and forms
7. Complete a ground patrol and re-inspection of 345kV generator lead line and ROW between Canadian Hills Substation and Cimarron Substation utilizing new inspection forms.
8. Remove and/or trim additional vegetation as necessary.

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: **July 16, 2018**

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

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
Remove tree	Removed the tree that caused the outage.	07/22/2017	07/22/2017		No
Ground patrol #1	Completed a ground patrol and re-inspection of 345kV generator lead line and ROW between Canadian Hills Substation and Cimarron Substation.	07/23/2017	07/23/2017		No
Remove and/or trim vegetation #1	Removed additional vegetation as necessary	08/26/2017	08/26/2017	Three encroaching trees removed	No
Personnel training #1	Training held to ensure that personnel are aware of FAC-003	11/26/2017	11/30/2017		No

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
	compliance obligations and the Vegetation Management Plan inspection process				
Review VMP	Canadian Hills' vegetation management program has been reviewed to ensure appropriate clearances are maintained	02/21/2018	02/21/2018	Redline edit of VMP created for team review	No
Personnel training #2	Training held to ensure that personnel are aware of revisions to the Vegetation Management Plan.	03/13/2018	03/13/2018		No
Update VMP	Canadian Hills' vegetation management program has been enhanced to ensure appropriate clearances are maintained	03/16/2018	03/16/2018		No
Personnel training #3	Training will be held to ensure that personnel are aware of revised Vegetation Management Plan inspection process and forms	03/28/2018	03/22/2018		No
Ground patrol #2	Complete a ground patrol and re-inspection of 345kV generator lead line and ROW between Canadian Hills Substation and Cimarron Substation utilizing new inspection forms	04/16/2018			No
Remove and/or trim	Remove and/or trim	07/16/2018			No

Milestone Activity	Description	*Proposed Completion Date (Shall not be greater than 3 months apart)	Actual Completion Date	Entity Comment on Milestone Completion	Extension Request Pending
vegetation #2	additional vegetation as necessary based on 2018 ground patrol				

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.

Ground patrol of the generator lead line was completed immediately following the outage with three additional trees identified as suspect trees growing in the ROW and these trees were removed proactively.

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

Completion of this plan will ensure a more conservative approach to vegetation management to prevent this type of violation from recurring. Suspect trees have been removed from the ROW and training will be conducted to ensure all personnel are familiar with the updated vegetation management plan.

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

Longroad Energy Services, LLC (LES) assumed operational control of the CHW facility in September of 2017, after the vegetation-related outage. LES has a robust and proactive NERC compliance program which includes monthly training on NERC topics; an online compliance task tracking platform; weekly NERC compliance conference calls with their NERC consultant and LES management; all to ensure NERC compliance obligations are understood and compliance due dates are met.

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.

Canadian Hills Wind, 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: **Jeremy Law**

Title: **Director - Operations and Maint., Longroad Energy Services, LLC**

Authorized On: **March 27, 2018**

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: Canadian Hills Wind, LLC

NERC Registry ID: NCR11354

NERC Violation ID(s): SPP2017018589

Mitigated Standard Requirement(s): FAC-003-4 R2.

Scheduled Completion as per Accepted Mitigation Plan: July 16, 2018

Date Mitigation Plan completed: May 03, 2018

SPPRE Notified of Completion on Date: May 14, 2018

Entity Comment:

Additional Comments		
From	Comment	User Name
Entity	Longroad Energy Services, LLC ("LES") operates the facility on behalf of the registered entity, Canadian Hills Wind, LLC. LES assumed operational control of the facility in September 2017.	Bob Reynolds

Additional Documents			
From	Document Name	Description	Size in Bytes
Entity	CHW FAC-003 Mitigation Plan 11-21-17 signed.pdf	Signed Mitigation Plan	209,371
Entity	CHW FAC-003 Training 11-30-17.pdf	FAC-003-4 Training slide deck	409,420
Entity	CHW FAC-003 Training Sign-In and Quiz 11-30-17.pdf	FAC-003-4 Training sign-in sheet and quiz results	369,632
Entity	CDMS_MitPlanCertOfCompletion_126263-signed.pdf	Certificate of Completion	117,202
Entity	CHW VMP Rev4 Signed.pdf		641,228
Entity	CHW FAC-003 Training 03-16-18.pdf		162,788
Entity	CHW FAC-003 Training Sign-In and Quiz 03-22-18.pdf		181,413
Entity	CHW April 2018 Vegetation Management Inspection Forms 4-17-18.pdf		3,629,613
Entity	Vegetation Management Work Logs 05.03.2018.pdf		456,152

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: Michael Alvarez

Title: Chief Operating Officer at Longroad Energy Services, LLC

Email: Michael.alvarez@longroadenergy.com

Phone: 1 (415) 792-6071

Authorized Signature _____ Date _____

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

From: noreply@oati.net
To: [SPP RE Mitigation Plan](#)
Subject: **External Email** Mitigation Plan has been Completed: Canadian Hills Wind, LLC SPP2017018589/ SPP RE
Date: Tuesday, May 15, 2018 9:54:34 AM

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.

Note: This is a webCDMS application generated message. Please Do NOT reply to this email. If you have questions, please contact sppremitigationplan@spp.org.

Entity: Canadian Hills Wind, LLC - NCR11354

NERC Violation ID: **SPP2017018589**
Standard and Requirement: FAC-003-4 R2.
Discovery Method: Self Report
Proposed Completion Date: 07/16/2018
Mitigation Plan Submitted: 03/27/2018
Mitigation Plan Verified: 05/15/2018

Southwest Power Pool Regional Entity (SPP RE) received Canadian Hills Wind, LLC's Certification of Completion for the subject Mitigation Plan. The SPP RE Enforcement Staff has completed its review of the evidence in support of the mitigation plan completion. The SPP RE Enforcement Staff finds Canadian Hills Wind, LLC has successfully completed the subject mitigation plan on 05/03/2018.

Questions regarding this matter should be directed to Bob Reynolds.

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

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

[OATI Information - Email Template: MitPlan_Completed]