



**CONFIDENTIAL**

October 10, 2019

**Via Email**

Gary Woods, Vice President, Gas & Renewables

Kent Hills Wind LP  
110-12th Avenue S.W., Box 1900, Station "M"  
Calgary, Alberta  
T2P 2M1

**SUBJECT: Notice of Confirmed Violations, Penalties and Approval of Mitigation Plans for Kent Hills Wind (KHW) Violations of VAR-002-4 (VTNs 2018001 and 2018006)**

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The NBEUB is issuing this notice to:

1. Notify KHW that pursuant to Section 4.6 of the *New Brunswick Compliance Monitoring and Enforcement Program (NB CMEP) - Schedule A to the Reliability Standards Regulation - Electricity Act*, the NBEUB has confirmed KHW Violations of NBEUB approved NERC Reliability Standard VAR-002-4 (VTNs 2018001 and 2018006); and
2. Notify KHW of the financial penalty applicable to each Confirmed Violation as determined by the NBEUB, according to Section 17 of the *Reliability Standards Regulation (Regulation)*; and
3. Notify KHW that pursuant to Section 5.5 of the NB CMEP, of the NBEUB approval of Mitigation Plans as submitted by KHW through the NBEUB Compliance Monitoring and Reporting System (CMRS) to address the Violations.

## **Enforcement Actions**

On February 12, 2018, KHW self-reported a possible non-compliance with VAR-002-4 R3 through the CMRS (VTN 2018001).

On April 18, 2018, the NBEUB issued KHW a Notice of Potential Violation for VTN 2018001.

On September 10, 2018, KHW self-reported an additional possible non-compliance with VAR-002-4 R3 through the CMRS (VTN 2018006).

On October 18, 2018, the NBEUB issued KHW a Notice of Potential Violation for VTN 2018006.

On June 19, 2019 the NBEUB issued KHW Notice of Alleged Violations and Penalties for the above referenced Violations.

On July 4, 2019 KHW responded to the Notice of Alleged Violations and Proposed Penalties stating "KHW agrees with and does not contest the Alleged Violations and proposed penalties and agrees to submit and implement approved Mitigation Plans to correct the violations and their underlying causes."

On July 24, 2019 KHW submitted the final Mitigation Plan supporting evidence to address the Violations.

## **Confirmed Violations, Penalties and Approval of Mitigation Plans**

### **VAR-002-4 R3 VTN 2018001**

*VAR-002-4 R3 states "Each Generator Operator shall notify its associated Transmission Operator of a status change on the AVR, power system stabilizer, or alternative voltage controlling device within 30 minutes of the change. If the status has been restored within 30 minutes of such change, then the Generator Operator is not required to notify the Transmission Operator of the status change."*

#### ***Violation***

KHW failed to notify the Transmission Operator of a DVAR failure within 30 minutes of the failure.

The KHW operators receive multiple notifications via outlook e-mail including notifications related to the specific sites such as communication failures. The system is supposed to alarm with a specific audio tone when high priority emails are received so that KHW Operators are aware there are alarms that require immediate action. KHW received a notification of communications failure between the remote KHW site and their monitoring facility at 6:54 MST on January 13, 2018. The DVAR tripped at the same time as the communications failure. This notification was not acknowledged by the Operator on shift until 2 hours later. The operator discovered the DVAR failure at 9:01 and notified NB Power. KHW, in their analysis of the incident, discovered that Corporate IT had performed a Windows upgrade that had disabled the special audio tones for high

priority alarm emails and the Operator on shift was unaware that the alarm email was received until 2 hours after receipt.

The violation existed from January 13, 2018 7:25 MST (30 minutes after the DVAR failure) to January 13, 2018 9:01 MST when NB Power was notified of the DVAR status.

***Penalty***

The Violation Risk Factor (VRF) for the violation is “Medium” and the Violation Severity Level (VSL) is “Severe”. The associated penalty range is \$10k-\$335k. In determining the penalty amount the NBEUB took into consideration the various factors set out in Section 17 of the Regulations, the potential risk the violation posed to the reliability of the BPS and penalties imposed in the NPCC region for violations having similar circumstances.

**Penalty Amount: \$22,000**

***Mitigation***

Under the Mitigation Plan, KHW re-enabled their audible alarm in Outlook and issued a standing order that the alarm be re-enabled after any software updates, added verification of audible alarms to the KHW software upgrade procedure, created a list of critical systems so they can be treated more carefully during updates, added an additional technician to the alarm list as a backup, implemented a standing order that NB Power be contacted within 30 minutes of a DVAR state change, issued a standing order that KHW Corporate IT are to be provided an updated list of critical assets every 6 months, and provided operator training on the events that lead to the violations.

Pursuant to Section 5.5(k) of the NB CMEP the NBEUB hereby gives approval to the KHW Mitigation Plan VAR-002-4 R3 VTN2018001 (Rev 10) as entered into the CMRS.

**VAR-002-4 R3 VTN 2018006**

*VAR-002-4 R3 states “Each Generator Operator shall notify its associated Transmission Operator of a status change on the AVR, power system stabilizer, or alternative voltage controlling device within 30 minutes of the change. If the status has been restored within 30 minutes of such change, then the Generator Operator is not required to notify the Transmission Operator of the status change.”*

***Violation***

KHW failed to notify the Transmission Operator of a DVAR failure within 30 minutes of the failure.

The KHW operators receive multiple notifications via outlook e-mail including notifications related to the specific sites such as communication failures. The system is supposed to alarm with a specific audio tone when high priority emails are received so that KHW Operators are aware there are alarms that require immediate action. During a manual validation check of the DVAR on June 27, 2018 at 3:56 MST, KHW noted that the DVAR was at 0% availability and NB Power was notified immediately. The DVAR had tripped on June 26, 2018 at 23:52 MST and the KHW

operator had received no alarms. The DVAR was at 0% availability for 4 hours and 4 minutes before NB Power was notified.

KHW's investigation found that the DVAR experienced a communication error which was caused by Corporate IT making changes to the network topology as part of the NERC CIP implementation upgrades.

The violation existed from June 27, 2018 00:22 MST (30 minutes after the DVAR failure) to June 27, 2018 at 3:56 MST when NB Power was notified of the DVAR status.

***Penalty***

The VRF for the violation is "Medium" and the VSL is "Severe". The associated penalty range is \$10k-\$335k. In determining the penalty amount the NBEUB took into consideration the various factors set out in Section 17 of the Regulations, the potential risk the violation posed to the reliability of the BPS and penalties imposed in the NPCC region for violations having similar circumstances.

**Penalty Amount: \$28,000**

***Mitigation***

Under the Mitigation Plan, KHW re-enabled communications between SCADA and the RTU, established a standing order that any work done in the substation that could affect communication between the DVAR and the RTU be followed by alarm testing, updated and implemented change management procedures requiring IT changes that could impact the Wind Control Centre and its operations be managed, approved, and controlled under the Wind Control Centre Management of Change process.

Pursuant to Section 5.5(k) of the NB CMEP the NBEUB hereby gives approval to the KHW Mitigation Plan VAR-002-4 R3 VTN2018006 (Rev 7) as entered into the CMRS.

**Payment of Financial Penalty**

KHW shall pay the financial penalty of fifty thousand dollars (\$50,000) to the NBEUB in the form of a cheque made payable to the Minister of Finance thirty days from the date of this notice.

**Completion of Enforcement Actions**

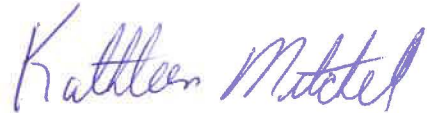
Once the penalty is paid and the approved Mitigation Plans are verified as complete the NBEUB will issue KHW a Notice of Completion of Enforcement Action.

**Posting of Confirmed Violations and Penalties**

Pursuant to Section 7.4 of the NB CMEP Notices of Confirmed Violations and Penalties are posted on the NBEUB website. Notices of Confirmed Violations and Penalties are posted in accordance with Section 7.2 of the NBCMEP, which prohibits the posting of Confidential Information. As a result, KHW is encouraged to review this Notice and promptly advise the NBEUB of any concerns related to the Notice and Confidential Information, otherwise a copy of this Notice will be publicly posted on the NBEUB website when the Enforcement Action is completed.

In addition, in accordance with Section 4.6(a) and 7.4(c) of the NB CMEP, KHW may provide a written explanatory statement to accompany the public posting of the Confirmed Violation.

Sincerely



Kathleen Mitchell  
Chief Clerk

cc Scott Nied, AVP Compliance, NPCC  
Damase Herbert, Director Enforcement, NPCC  
Calvin Duncan, Director Reliability Standards, Compliance and Enforcement, NBEUB  
Morgan Tam, Compliance, KHW