

October 11, 2021

VIA E-MAIL

North Dakota Public Service Commission
c/o Steven Kahl, Executive Secretary
600 E. Boulevard Ave., Dept. 408
Bismarck, ND 58505

**RE: Light-Mitigation Waiver Request
Glen Ullin Energy Center Case No. PU-11-662
Bison 1 Wind Project Case No. PU-09-151
Bison 2 Wind Project Case No. PU-11-57
Bison 3 Wind Project Case No. PU-11-162
Bison 4 Wind Project Case No. PU-13-127**

Dear Mr. Kahl:

In advance of the October 13, 2021 hearing, ALLETE provides the following timeline for the North Dakota Public Service Commission's consideration.

ALLETE Light Mitigating Technology Timeline Overview

- Q3 2017: Initial contact with Laufer Wind regarding their ADLS product. At the time, this was the only Light Mitigating Technology ("LMT") vendor known to ALLETE.
 - Laufer Wind ultimately exited the LMT market.
- Q3 2018: Initial proposal for ADLS received from Terma.
- Q2 2019: Initial proposal for LIDS received from Technostrobe.
- Q3 2019: Ordered TWR LCM (light control module) components
- Q4 2019: GUEC site construction complete and operational.
- Q1 2020: Initial proposal for ADLS received from DeTect.
- Q3 2020: With LIDS FAA approval still not in place, ALLETE decided that ADLS from either Terma or DeTect was the path forward.
- Both vendors indicated that 6-8 months of lead time were needed for product delivery, installation, and commissioning.
- Q3/Q4 2020: Minnesota Power ("MP") and ALLETE Clean Energy ("ACE") agreed to purchase a jointly-owned ADLS system from DeTect.
- Q1 2021: MP and ACE finalized contracts and Purchase Orders for DeTect to furnish and install the ADLS.
 - DeTect's project schedule had the following contractual milestones:

Date	Milestone
03.02.2021	Issuance of Design Drawings
03.17.2021	Completion of Procurement

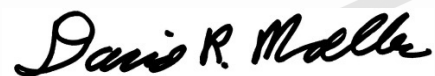
04.16.2021	Start of manufacturing
05.16.2021	Completion of Infrastructure Components
06.15.2021	Completion of Electronics
09.13.2021	At Shipment
10.13.2021	At Commissioning
12.27.2021	Final Acceptance (Start Up)

- Q2 2021: MP purchased all required upgraded obstruction lights from TWR Lighting.
- Q2 2021: Turbine OEM for MP's Bison site awarded contract to configure network to allow ADLS communication between radars and turbine obstruction lights.
- Q2 2021: Barr Engineering was contracted to provide construction drawings for the civil, electrical, and communications infrastructure. Bid drawings complete July 2021.
- Q2 2021: MP personnel began installing upgraded obstruction lights in the Bison turbines.
- Q3 2021: All required land lease agreements signed.
- Q3 2021: All required Conditional Use and Building permits obtained.
- Q3 2021: Archaeological and wetland studies and reports completed. Zero impacts from the project were identified.
- Q3 2021: Wanzek awarded infrastructure construction scope of work.
- Q3 2021: Wanzek awarded LCM install scope of work for GUEC.
- Q4 2021: Radar and generator foundations poured

In late July 2021, DeTect notified ALLETE that their radar manufacturer was facing supply chain instability and that the delivery of the radar equipment would be delayed until December 2021. This does not leave enough time to install and commission the overall ADLS project. As of early October, all necessary project components are on schedule to be complete such that the radar equipment can be installed immediately on arrival and commissioning initiated.

Thank you for your consideration of this information. If you have any questions, or need additional information, please contact me at 218-723-3963 or dmoeller@allete.com.

Yours truly,



David R. Moeller
Senior Attorney and
Director of Regulatory Compliance

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