

Darrell Nitschke
Executive Secretary, Public Service Commission
600 East Boulevard Avenue, Department 408
Bismarck, North Dakota 58505-0480



December 18, 2017

Dear Commissioners:

Lake Region State College worked with the PSC in 2011-2012 to go through the siting process for a single wind turbine. Construction was completed and our turbine came online in February of 2013. LRSC's turbine was the first to go through the process after the 2011 Legislative Session changed requirements so that facilities capable of generating more than ½ megawatt must go through the full siting process. We worked closely with the Commissioners and staff to gain site approval.

The requirements in Case No. PU-17-339 - New Chapter 69-06-11 - Wind Energy Conversion Facility Lighting Systems for our turbine to have functioning light mitigation technology by December 31, 2021 is cost prohibitive with current light mitigation technology. The lighting system and radar needed to detect and activate the system will cost in excess of \$100,000 and possibly up to \$400,000 for our one turbine. We have any energy performance contract to pay off the costs of purchase and construction of the turbine not funded by legislative appropriation and we are just barely generating enough revenue to make the annual payments.

Our turbine site is a mile from the nearest occupied residence and the light is not an issue for the occupants. Our concern is that the turbine is located just over 3 miles from Devils Lake Airport and we want the turbine well lit for aviation traffic.

69-06-11-02 #3 appears to allow for a waiver of this chapter for a wind energy conversion facility designed for or capable of generating no more than five megawatts of electricity. We would respectfully request a waiver for this chapter.

Respectfully,

A handwritten signature in blue ink that reads "Doug Darling".

Doug Darling, Ph.D.
President, Lake Region State College

36 **PU-11-686** Filed: 12/21/2017 Pages: 3
Request for waiver re light mitigation technology

Lake Region State College
Doug Darling, President

History: Amended effective August 1, 1979; July 1, 2006; April 1, 2013; July 1, 2017;_____.

General Authority: NDCC 49-22-18

Law Implemented: NDCC 49-22-05.1

CHAPTER 69-06-11

Wind Energy Conversion Facility Lighting Systems

Section

69-06-11-01 Definitions

69-06-11-02 Implementation

69-06-11-03 Service, Maintenance, Safety, and Lighting System Standards

69-06-11-01. Definitions.

In this chapter:

1. "Aircraft Detection Lighting System" means a sensor-based system designed to detect aircraft as they approach a wind energy conversion facility; this system automatically activates obstruction lights until they are no longer needed.
2. "Commission" means the public service commission.
3. "Light Intensity Dimming Solution Technology" means obstruction lighting that provides a means of tailoring the intensity level of lights according to surrounding visibility.
4. "Light-Mitigating Technology System" means aircraft detection lighting system, lighting intensity dimming solution technology, or a comparable solution capable of reducing the impact of nighttime lighting while maintaining night conspicuity sufficient to assist aircraft in identifying and avoiding collision with the facilities.
5. "Owner" means a person who holds a certificate of site compatibility pursuant to North Dakota Century Code chapter 49-22.
6. "Wind Energy Conversion Facility" means any plant, addition, or combination of plant and addition, designed for or capable of generation by wind energy conversion exceeding one-half megawatt of electricity.

69-06-11-02. Implementation.

1. A wind energy conversion facility for which a certificate of site compatibility was issued after June 5, 2016 must be equipped with a functioning light-mitigating technology in compliance with this chapter by December 31, 2019.

2. A wind energy conversion facility for which a certificate of site compatibility was issued before June 5, 2016 must be equipped with a functioning light-mitigation technology in compliance with this chapter by December 31, 2021. The Commission may grant an extension of time based on technical or economic feasibility considerations.
3. The commission may grant a waiver of this chapter for a wind energy conversion facility designed for or capable of generating no more than five megawatts of electricity upon a motion demonstrating good cause for the waiver.
4. To allow proper conspicuity of a turbine at night during construction, a turbine may be lighted with temporary lighting until the permanent lighting configuration including the light mitigation technology is implemented.
5. Owner shall provide written notice to the commission upon implementation of light-mitigating technology in compliance with this chapter.
6. Owner is solely responsible for any costs associated with the implementation, operation, and maintenance of each light-mitigating technology system.
7. An extension request must be in writing and contain:
 - a. The purpose of the extension;
 - b. A description of the light-mitigating technologies submitted to the Federal Aviation Administration;
 - c. The technical or economic inability to implement light-mitigation technology systems;
 - d. The length of extension requested; and
 - e. Any other information requested by the commission.

69-06-11-03. Service, Maintenance, Safety, and Lighting System Standards.

Each light-mitigating technology system must be installed, operated, and maintained in accordance with United States Department of Transportation Federal Aviation Administration regulations [14 CFR 1.1. et. Seq] in effect as of [date of publishing rules] and receive Federal Aviation Administration approval prior to implementation.

History: Amended Effective 2017.

General Authority: NDCC 49-22-18

Law Implemented: NDCC 49-22-05.1