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June 18, 2025

Via Hand Delivery & Electronic Mail

Mr. Steve Kahl
North Dakota Public Service Commission
600 E. Boulevard, Dept. 408
Bismarck, ND 58505-0480
ndpsc@nd.gov

In re: Emmons-Logan Energy Storage, LLC
Emmons County
Siting Application

Dear Mr. Kahl:

Enclosed for filing please find the following:

1) Emmons-Logan Energy Storage, LLC's Application for a Certificate of Site Compatibility in Emmons County, North Dakota (8 copies).

2) NextEra Energy Resources Development LLC's check in the amount of $95,500.00 for the Commission's filing fee set forth under N.D.C.C. § 49-22-22(1)(a).

3) NextEra Energy Resources Development LLC's check in the amount of $38,200.00 for the Commission's administrative filing fee set forth under N.D.C.C. § 49-22-22(4).

4) Publication Map (8 copies).

5) Notice of Appearance.

We are also enclosing a USB containing project GIS and an electronic version of the application for your convenience.

Please feel free to contact me if you have any questions. Thank you.

Sincerely,

Casey A. Furey

CAF/lh
Enc.

cc: Tracy Davis (via email)
Clint Scherb (via email)
Dina Brown (via email)
Erik Edison (via email)

APPLICATION FOR A CERTIFICATE OF SITE COMPATIBILITY

Emmons-Logan Energy Storage

EMMONS COUNTY, NORTH DAKOTA

SUBMITTED TO:

North Dakota Public Service Commission

SUBMITTED BY:

Emmons-Logan Energy Storage, LLC
700 Universe Boulevard
Juno Beach, Florida 33408

PREPARED BY:

Merjent, Inc.
1 Main Street SE, Suite 300
Minneapolis, Minnesota 55414

JUNE 2025

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F11. Tribal Notification Letter Template

ACRONYMS AND ABBREVIATIONS

AC	alternating current
BESS	Battery Energy Storage System
BGEPA	Bald and Golden Eagle Protection Act
BMPs	best management practices
BMS	battery management system
BOL	beginning of life
Certificate	Certificate of Site Compatibility
Commission	North Dakota Public Service Commission
dBA	decibel, A-weighted
DC	direct current
EMF	electric and magnetic fields
EOL	end of life
ERP	Emergency Response Plan
ESA	Energy Storage Agreement
FEMA	Federal Emergency Management Agency
IPaC	Information for Planning and Consultation
kV	kilovolt
MBTA	Migratory Bird Treaty Act
MISO	Midcontinent Independent System Operator
MW	megawatt
N.D. Admin. Code	North Dakota Administrative Code
N.D.C.C.	North Dakota Century Code
ND	North Dakota
NDDEQ	North Dakota Department of Environmental Quality
NDDOT	North Dakota Department of Transportation
NDDTL	North Dakota Department of Trust Lands
NDDWR	North Dakota Department of Water Resources
NDGFD	North Dakota Game and Fish Department
NDGIS	North Dakota GIS Hub Data Portal
NDGS	North Dakota Geological Survey
NDLMI	Job Service North Dakota Labor Market Information Center
NDRAM	North Dakota Risk Assessment MapService
NEC	National Electrical Code
NextEra Energy Resources	NextEra Energy Resources, LLC
NFIP	National Flood Insurance Program
NFPA	National Fire Protection Association
NHD	National Hydrography Dataset
NIEHS	National Institute of Environmental Health Sciences
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
Emmons-Logan Energy Storage	Emmons-Logan Energy Storage, LLC
O&M	operations and maintenance
PCS	power conversion system
PLC	programmable logic controller
PLOTS	Private Land Open to Sportsmen
Project	Emmons-Logan Energy Storage
SCADA	Supervisory Control and Data Acquisition

SHSND	State Historical Society of North Dakota
SHPO	State Historic Preservation Office
Siting Act	Energy Conversion and Transmission Facility Siting Act
SPCC	Spill Prevention, Control, and Countermeasure
SWPPP	Storm Water Pollution Prevention Plan
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USDHS	U.S. Department of Homeland Security
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
Wind Energy Center	Emmons-Logan Wind Energy Center

APPLICATION CHECKLIST

State Authority and Description	Section Addressed
North Dakota Administrative Code Chapter 69-06-04-01. Application. 2. Contents.	
1. The application must contain:	
a. A description of:	
(1) The type of energy conversion facility proposed	1.0
(2) The gross design capacity	1.0
(3) The net design capacity	1.0
(4) The estimated thermal efficiency of the energy conversion process and the assumptions upon which the estimate is based	NA
(5) The number of acres that the proposed facility will occupy	1.0, 1.4, 3.7
(6) The anticipated time schedule for:	1.3
(a) Obtaining the certificate of site compatibility	1.3
(b) Completing land acquisition	1.3
(c) Starting construction	1.3
(d) Completing construction	1.3
(e) Testing operations	1.3
(f) Commencing commercial production	1.3
(g) Beginning any expansions or additions	1.3
b. Copies of any evaluative studies or assessments of the environmental impact of the proposed facility submitted to any federal, regional, state, or local agency.	Appendices B, C, D
c. An analysis of the need for the proposed facility based on present and projected demand for the product or products to be produced by the proposed facility, including the most recent system studies supporting the analysis of the need.	1.2.1
d. A description of any feasible alternative methods of serving the need.	1.2.3
e. A study area that includes the proposed facility site, of sufficient size to enable the commission to evaluate the factors addressed in N.D.C.C. Section 49-22-09.	1.4, all map figures
f. A discussion of the utility's policies and commitments to limit the environmental impact of its facilities, including copies of board resolutions and management directives.	Appendix A
g. A map identifying the criteria that provides the basis for the specific location of the proposed facility within the study area.	All map figures
h. A discussion of the criteria evaluated within the study area, including exclusion areas, avoidance areas, selection criteria, policy criteria, design and construction limitations, and economic considerations.	2.1, 2.2, 2.3, 2.4, 2.6, 2.7
i. A discussion of the mitigative measures that the applicant will take to minimize adverse impacts which result from the location, construction, and operation of the proposed facility.	6.1.2, 6.2.2, 6.3.2, 6.4.2, 6.5.2, 6.6.2, 6.7.2, 6.8.2
j. The qualifications of each person involved in the facility site location study.	9.0
k. A map of the study area showing the location of the proposed facility and the criteria evaluated.	All map figures

State Authority and Description	Section Addressed
l. An eight and one-half-inch by eleven-inch black and white map suitable for newspaper publication depicting the site area.	Electronically provided
m. A discussion of present and future natural resource development in the area.	1.4, 6.5, 6.6, 6.7, 6.8
n. Map and GIS requirements. The applicant shall provide information that is complete, current, presented clearly and concisely, and supported by appropriate references to technical and other written material available to the commission.	All map figures, GIS provided
North Dakota Administrative Code Chapter 69-06-08-01. Energy conversion facility siting criteria.	
The following criteria must guide and govern the preparation of the inventory of exclusion and avoidance areas, and the site suitability evaluation process.	
(1) Exclusion areas. The following geographical areas must be excluded in the consideration of a site for an energy conversion facility.	2.1, Figure 2.1-1
(2) Additional exclusion areas for wind energy conversion facilities.	NA
(3) Avoidance areas. The following geographical areas may not be approved as a site for an energy conversion facility unless the applicant shows that under the circumstances there is no reasonable alternative.	2.2, Figure 2.2-1
(4) Additional avoidance areas for wind energy conversion facilities.	NA
(5) Selection criteria. A site may be approved in an area only when it is demonstrated to the commission by the applicant that any significant adverse effects resulting from the location, construction, and operation of the facility in that area as they relate to the following, will be at an acceptable minimum, or that those effects will be managed and maintained at an acceptable minimum.	2.3
(6) Policy criteria. The commission may give preference to an applicant that will maximize benefits that result from the adoption of the following policies and practices, and in a proper case may require the adoption of such policies and practices. The commission may also give preference to an applicant that will maximize interstate benefits.	2.4
North Dakota Century Code 49-22-08. Application for a certificate - Notice of filing - Amendment - Designation of a site or corridor.	
1. An application for a certificate shall be in such form as the commission may prescribe, containing the following information:	
a. A description of the size and type of facility.	1.0, 1.4, 3.7
b. A summary of any studies which have been made of the environmental impact of the facility.	Appendices B, C, D
c. A statement explaining the need for the facility.	1.2.1, 1.2.2
d. An identification of the location of the preferred site for any energy conversion facility.	1.4
e. An identification of the location of the preferred corridor for any transmission facility.	NA
f. A description of the merits and detriments of any location identified and a comprehensive analysis with supporting data showing the reasons why the preferred location is best suited for the facility.	1.0, 1.2.1, 1.4
g. A description of mitigative measures that will be taken to minimize all foreseen adverse impacts resulting from the location, construction, and operation of the proposed facility.	6.1.2, 6.2.2, 6.3.2, 6.4.2, 6.5.2, 6.6.2, 6.7.2, 6.8.2
h. An evaluation of the proposed site or corridor with regard to the applicable considerations set out in section 49-22-09 and the criteria established pursuant to section 49-22-05.1.	2.1, 2.2, 2.5
i. Such other information as the applicant may consider relevant or the commission may require.	1.2.2, 3.0, 4.0, 5.0, 8.0

State Authority and Description	Section Addressed
North Dakota Century Code 49-22-09. Factors to be considered in evaluating applications and designation of sites, corridors, and routes.	
1. The commission shall be guided by, but is not limited to, the following considerations, where applicable, to aid the evaluation and designation of sites, corridors, and routes:	
a. Available research and investigations relating to the effects of the location, construction, and operation of the proposed facility on public health and welfare, natural resources, and the environment.	2.5
b. The effects of new energy conversion and transmission technologies and systems designed to minimize adverse environmental effects.	2.5
c. The potential for beneficial uses of waste energy from a proposed energy conversion facility.	2.5
d. Adverse direct and indirect environmental effects which cannot be avoided should the proposed site or route be designated.	2.5
e. Alternatives to the proposed site, corridor, or route which are developed during the hearing process and which minimize adverse effects.	2.5
f. Irreversible and irretrievable commitments of natural resources should the proposed site, corridor, or route be designated.	2.5
g. The direct and indirect economic impacts of the proposed facility.	2.5
h. Existing plans of the state, local government, and private entities for other developments at or in the vicinity of the proposed site, corridor, or route.	2.5
i. The effect of the proposed site or route on existing scenic areas, historic sites and structures, and paleontological or archaeological sites.	2.5
j. The effect of the proposed site or route on areas which are unique because of biological wealth or because they are habitats for rare and endangered species.	2.5
k. Problems raised by federal agencies, other state agencies, and local entities.	2.5
3. Before the commencement of operations of the proposed facility, the applicant shall inform the commission that the applicant has executed or filed an unexecuted generation interconnection agreement, or comparable transmission services agreement, with the affected regional transmission organization or transmission owner.	1.2.1, 2.5

1.0 INTRODUCTION

Emmons-Logan Energy Storage, LLC (Emmons-Logan Energy Storage), a wholly owned, indirect subsidiary of NextEra Energy Resources, LLC (NextEra Energy Resources), respectfully submits this application for a Certificate of Site Compatibility (Certificate) to the North Dakota Public Service Commission (Commission) to construct the Emmons-Logan Energy Storage Project (Project). The Project will be a 140-megawatt (MW) battery energy storage system (BESS) with a four-hour duration to store excess energy available on the grid. The Project is proposed to be located adjacent to the existing Emmons-Logan Wind Energy Center (Wind Energy Center), which is owned and operated by Emmons-Logan Energy Storage's affiliate, Emmons-Logan Wind, LLC (Emmons-Logan Wind). The Project Area encompasses approximately 24 acres in Emmons County, North Dakota (Figure 1.0-1). Emmons-Logan Energy Storage expects to start construction in the second quarter of 2026 with commercial operation anticipated in the fourth quarter of 2026. The anticipated lifespan of the Project is 35 years.

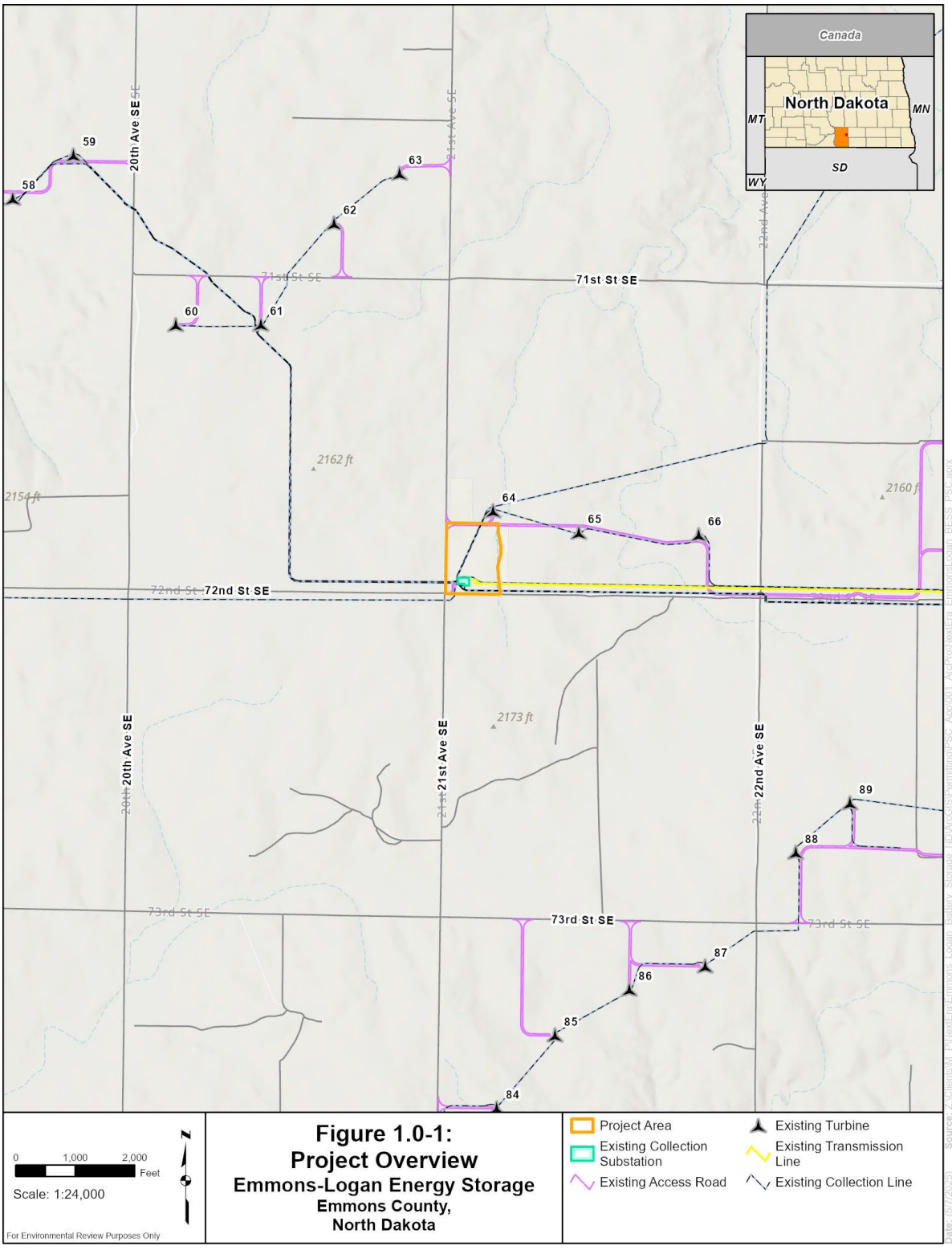
The Project includes a 140-MW, four-hour duration BESS facility with associated inverters, transformers, underground cables, and other ancillary facilities, such as fencing, roads, and a supervisory control and data acquisition (SCADA) system. The Project will connect to the existing Emmons-Logan Wind 230-kilovolt (kV) collection substation.

The Project will be capable of storing excess power from the grid when production exceeds system demand (oversupply). If the grid has excess energy (*e.g.*, during periods of low demand), this energy will be absorbed by the Project for later release. The Project will provide additional reliability for and deliverability to the grid by having the ability to store low-cost, excess generation (relative to load) and inject it into the grid at times of increased demand.

The North Dakota Energy Conversion and Transmission Facility Siting Act (Siting Act), North Dakota Century Code (N.D.C.C.) Chapter 49-22 requires the proponent of a utility-scale energy storage plant designed for operation as a grid resource and capable of 5 MW or more of rated power capacity to obtain a Certificate from the Commission in order to locate, construct, and operate the facility in the state of North Dakota. An application for a Certificate must meet certain criteria set forth in the Siting Act, as well as in North Dakota Administrative Code (N.D. Admin. Code) Chapter 69-06-08. An energy storage facility is required to be sited in an orderly manner compatible with environmental preservation and the efficient use of resources (N.D.C.C. Section 49-22-02).

In this application, Emmons-Logan Energy Storage presents the information required by the Siting Act and the Commission's siting rules. Emmons-Logan Energy Storage has considered the exclusion and avoidance areas, selection criteria, and policy criteria in the design of the Project, in accordance with N.D.C.C. Chapter 49-22 and N.D. Admin. Code Chapter 69-06-08. Information regarding Project design, construction, and operation has been included in this application to allow a thorough understanding of the Project and to aid in review by the Commission, regulatory agencies, and the public.

Emmons-Logan Energy Storage seeks a Certificate for the Project Area, rather than for specific infrastructure locations. This process allows flexibility in determining the final equipment layout in the site plan as the design is finalized and specific technology is selected. A pre-construction conference call will be held with Commission staff to ensure that the final Project site plan conforms to the Certificate requirements. This siting process is consistent with North Dakota siting rules, Commission precedent, and provides Emmons-Logan Energy Storage with the flexibility necessary to develop a timely, safe, cost-effective project in an environmentally responsible manner.


Canada
North Dakota
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2162 ft
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21st Ave SE
22nd Ave SE
89
88
73rd St SE
87
86
85
84
0 1,000 2,000 Feet
Scale: 1:24,000
For Environmental Review Purposes Only
Figure 1.0-1:
Project Overview
Emmons-Logan Energy Storage
Emmons County,
North Dakota
Project Area
Existing Collection Substation
Existing Access Road
Existing Turbine
Existing Transmission Line
Existing Collection Line

1.1 APPLICANT INFORMATION

Emmons-Logan Energy Storage will be responsible for constructing, owning, operating, and maintaining the Project, as well as fulfilling the conditions set forth by the Commission if the Commission grants the requested Certificate. Emmons-Logan Energy Storage will secure a third-party engineering, procurement, and construction (EPC) contractor to manage and complete construction of the Project.

NextEra Energy Resources, through its subsidiaries and affiliates, develops renewable energy projects throughout the United States and Canada. NextEra Energy Resources is a world leader in battery energy storage, with more than approximately 3,000 MW of operational energy storage capacity. NextEra Energy Resources is also the world's largest generator of renewable energy from the sun and wind, operating more than 33,000 MW of emissions-free wind and solar energy in North America. In North Dakota, NextEra Energy Resources subsidiaries own and/or operate 16 wind facilities and two gas pipelines, with additional wind energy and energy storage projects currently in development. Since 2003, NextEra Energy Resources' subsidiaries have been helping fuel North Dakota's economic growth, improving quality of life, and moving our country toward energy independence. NextEra Energy Resources' subsidiaries design, construct, and operate their facilities in an environmentally sound and responsible manner. Appendix A describes Emmons-Logan Energy Storage's commitments to avoid and minimize environmental impacts.

1.2 PURPOSE AND NEED

1.2.1 Statement of Need

The Project is being developed adjacent to the operational Wind Energy Center. Midcontinent Independent System Operator (MISO), the system operator, has requested additional capacity to meet growing demand and MISO requirements. The Project will share the Wind Energy Center's collection substation and point of interconnection, which has been studied by MISO.

Emmons-Logan Energy Storage executed an Energy Storage Agreement (ESA) with an offtaker on April 21, 2025. The ESA has a term of 25 years. This agreement is expected to alleviate transmission congestion and mitigate pricing volatility.

1.2.2 Grid Resilience

Utility-scale BESS facilities enhance grid resilience during extreme weather events and disruptions by providing immediate backup power, stabilizing grid operations, and integrating renewable energy. BESS facilities can store energy during low demand and release it during peak demand, maintaining grid stability and reducing outages. BESS facilities also support critical infrastructure during emergencies. Quick response times and demand management capabilities make BESS essential for ensuring continuous, reliable power, even in adverse conditions.

1.2.3 Alternative Methods to Service the Need

Due to the unique challenges and requirements of energy storage, it is unlikely that alternative technologies, such as hydrogen storage, compressed air energy storage, flywheel energy storage, pumped hydro storage, thermal energy storage, or natural gas/biogas backup, would fully replicate the capabilities and versatility provided by a BESS. Therefore, it is unlikely that an alternative to a BESS would meet the same need.

1.3 SCHEDULE

A summary of the anticipated schedule for the Project is provided in Table 1.3-1.

TABLE 1.3-1
Anticipated Time Schedule

Activity	Anticipated Time
Land acquisition	Emmons-Logan Energy Storage has executed an option for Purchase and Sale Agreement with a private landowner to acquire the site for the Project.
Obtaining the Certificate of Site Compatibility	Fourth Quarter of 2025
Starting construction	Second Quarter of 2026
Completing construction	Fourth Quarter of 2026
Integration, commissioning, and testing operations	Fourth Quarter of 2026
Commencing commercial operation	December 2026
Beginning any expansions or additions	None

1.4 PROJECT LOCATION

Emmons-Logan Energy Storage selected the Project location based on its proximity to the Wind Energy Center infrastructure, including the collection substation, and Emmons-Logan Wind 230-kV transmission line (Figure 1.4-1). By siting the Project adjacent to the Wind Energy Center, Emmons-Logan Energy Storage aimed to minimize impacts on the surrounding community, enhance operational efficiency, and condense development into a compact area.

The Project Area is located on approximately 24 acres in West Half (W1/2) of the Southwest Quarter (SW1/4) of Section 34, Township 134 North, Range 74 West of the fifth principal meridian, in Emmons County, North Dakota (Figure 1.4-2). The Project Area will be northeast of the intersection of 21st Ave SE and 72nd St SE and approximately 13 miles southwest of Napoleon, 14 miles northeast of Linton, 15 miles southeast of Hazelton, and 21 miles northwest of Wishek. All Project facilities will be located on private land.

Emmons-Logan Energy Storage has executed an option for a Purchase and Sale Agreement with a private landowner for the Project site. The agreement grants Emmons-Logan Energy Storage the exclusive right to purchase the property for the development and operation of the Project at any time before the option expires. Additionally, Emmons-Logan Energy Storage will enter into an agreement with Emmons-Logan Wind to connect the BESS to the existing collection substation via an underground collection system. Emmons-Logan Wind owns the five-acre parcel where the collection substation is located to which the Project will connect.

Emmons-Logan Energy Storage also reviewed a one-mile buffer around the Project Area, referred to as the Study Area, for relevant sections in the environmental analysis (refer to Section 6.0).

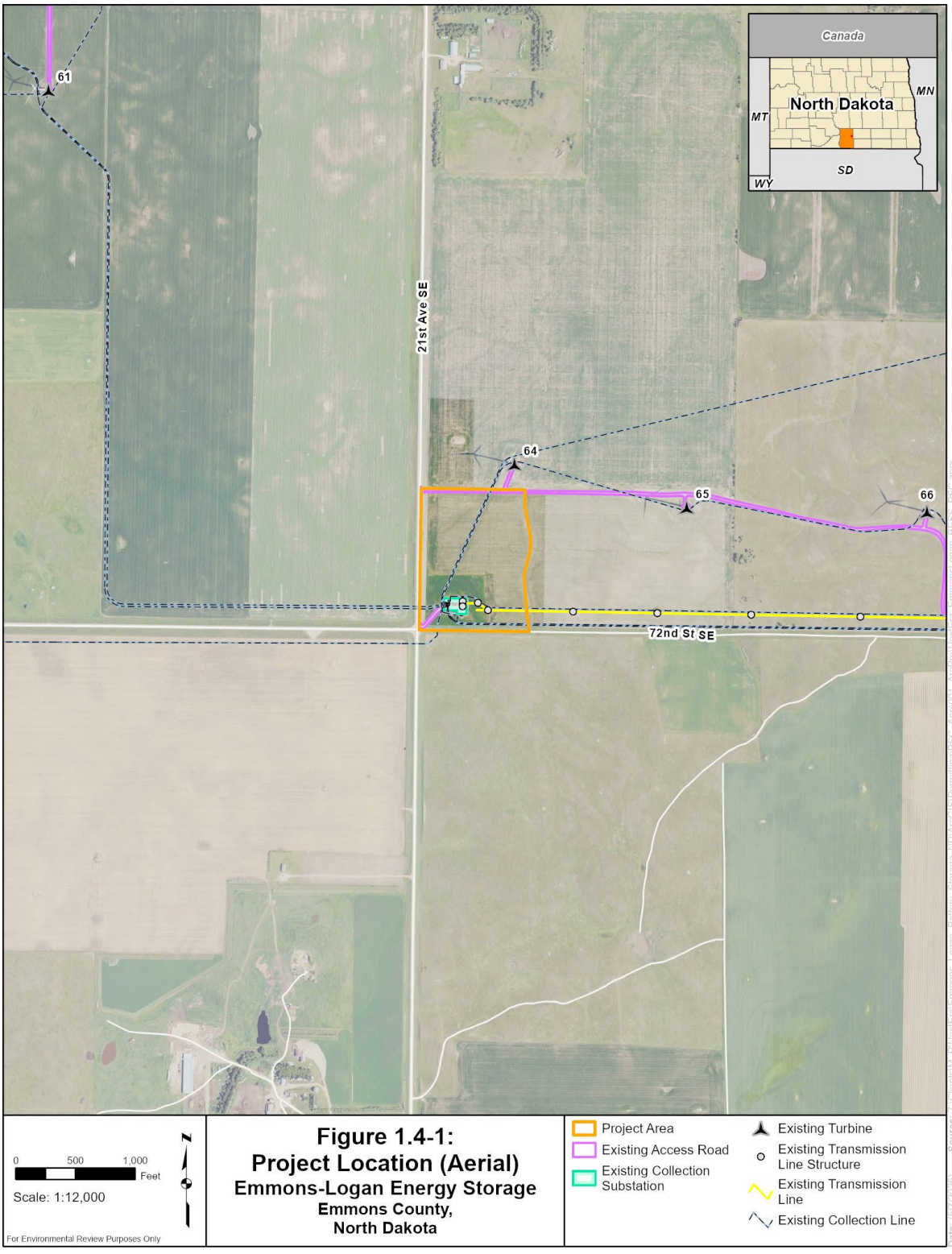
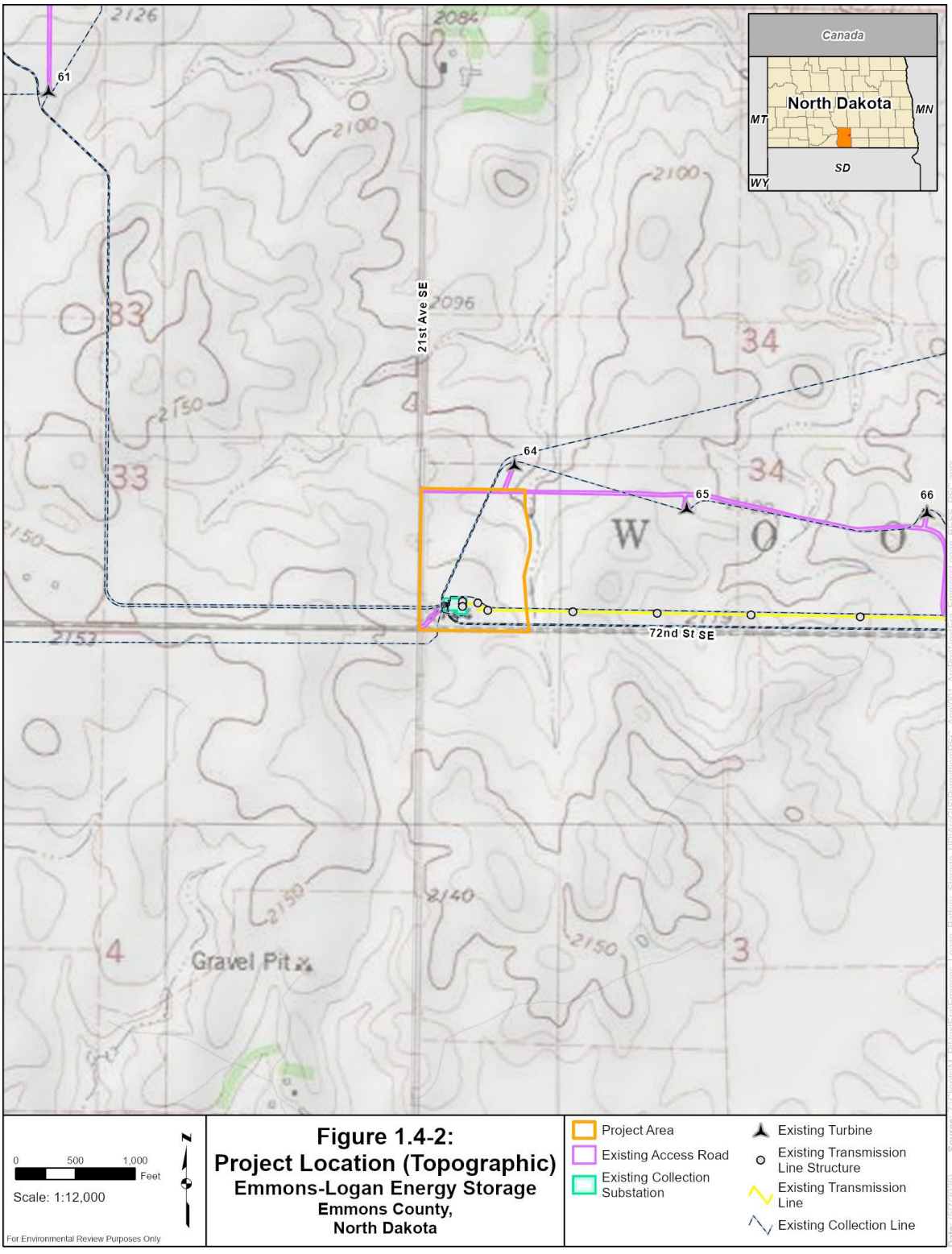


Figure 1.4-1:
Project Location (Aerial)
Emmons-Logan Energy Storage
Emmons County,
North Dakota


Canada
North Dakota
MT
MN
SD
WY
61
64
65
66
21st Ave SE
72nd St SE
Gravel Pit
2126
2084
2100
2096
2150
2153
2140
33
34
4
3
W
O
O
0
500
1,000
Feet
Scale: 1:12,000
For Environmental Review Purposes Only
Figure 1.4-2:
Project Location (Topographic)
Emmons-Logan Energy Storage
Emmons County,
North Dakota
Project Area
Existing Access Road
Existing Collection Substation
Existing Turbine
Existing Transmission Line Structure
Existing Transmission Line
Existing Collection Line

2.0 SITE SELECTION CRITERIA

Emmons-Logan Energy Storage selected the Project Area by considering various factors, such as siting criteria outlined in N.D. Admin. Code 69-06-08-01, considerations specified in N.D.C.C. 49-22-09, proximity to the existing Wind Energy Center, design and construction limitations, economics, site inspections and studies, landowner participation, and communications with local, state, and federal agencies.

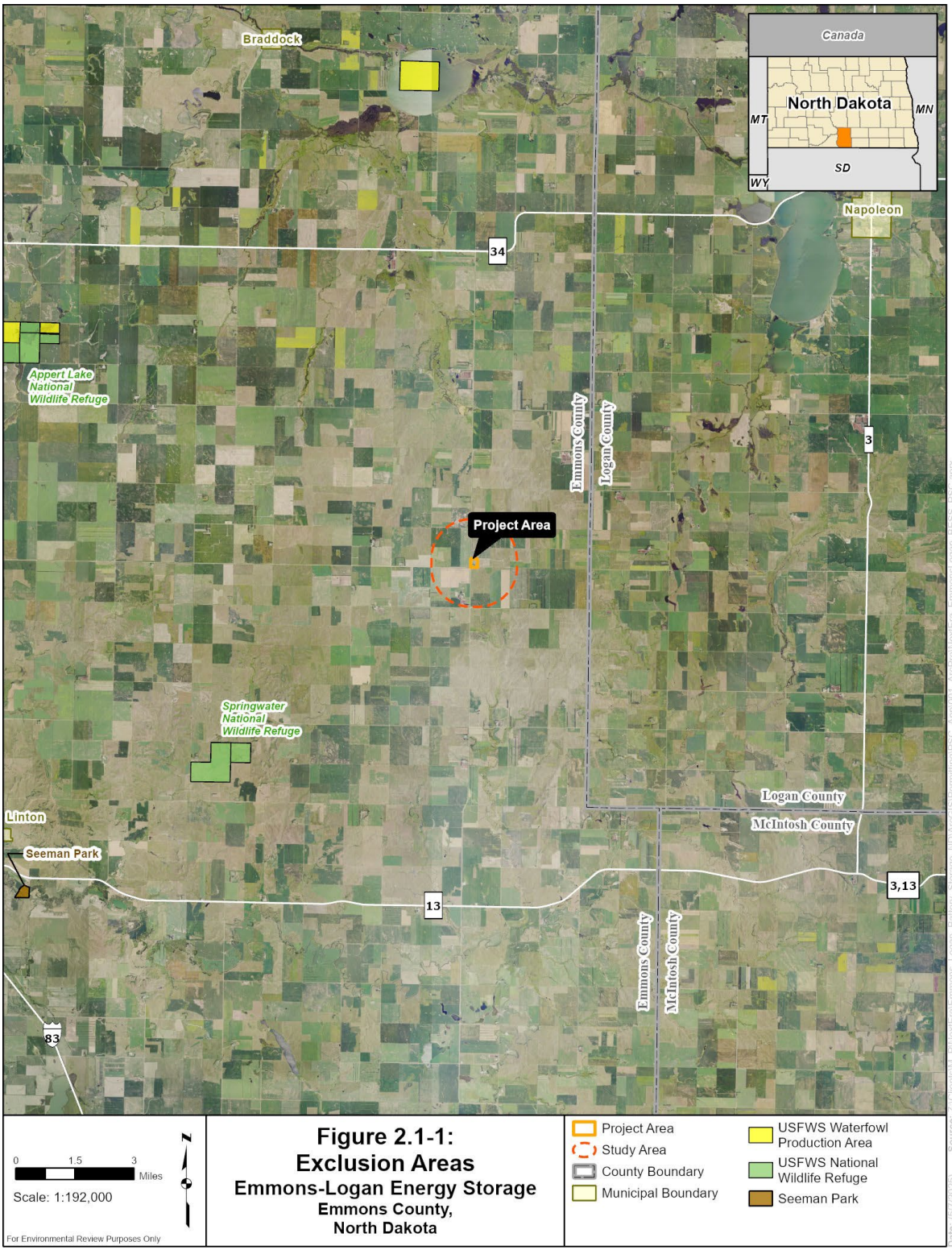
2.1 EXCLUSION AREAS

N.D. Admin. Code 69-06-08-01(1) stipulates that certain "geographical areas must be excluded in the consideration of a site for an energy conversion facility." Table 4.1-1 outlines the geographic areas identified in N.D. Admin. Code 69-06-08-01(1) and provides a description of how the Project excludes these specific geographical areas. Exclusion areas in the Project Area, Study Area, and surrounding area are shown on Figure 2.1-1. N.D. Admin. Code 69-06-08-01(2), which includes additional exclusion areas that are specific to wind energy conversion facilities, does not apply to the Project, as it is not a wind energy conversion facility and is therefore not included in Table 2.1-1.

TABLE 2.1-1

Exclusion Areas

North Dakota Administrative Code 69-06-08-01(1)	Description if Present in or Applicable to the Project	Section Addressed
1. Exclusion areas.		
a. Designated or registered national: parks; memorial parks; historic sites and landmarks; natural landmarks; historic districts; monuments; wilderness areas; wildlife areas; wild, scenic, or recreational rivers; wildlife refuges; and grasslands.	Not present. The Project Area is not located within any federal lands or areas.	6.5
b. Designated or registered state: parks; forests; forest management lands; historic sites; monuments; historical markers; archaeological sites; grasslands; wild, scenic, or recreational rivers; game refuges; game management areas; management areas; and nature preserves.	Not present. The Project Area is not located within any state lands or areas.	6.5
c. County parks and recreational areas; municipal parks; parks owned or administered by other governmental subdivisions; hardwood draws; and enrolled woodlands.	Not present. The Project Area is not located within parks owned or administered by various government entities, hardwood draws, or enrolled woodlands	6.5, 6.8
d. Areas critical to the life stages of threatened or endangered animal or plant species.	Not present. No areas critical to the life stage of threatened or endangered species are identified within the Project Area.	6.8, Appendix D
e. Areas where animal or plant species that are unique or rare to this state will be irreversibly damaged.	Not present. No state unique or rare animal or plant areas are identified within the Project Area.	6.8, Appendix D
f. Areas within 1,200 feet of the geographic center of an intercontinental ballistic missile launch or launch control facility.	Not present. The nearest intercontinental ballistic missile launch or launch control facility is approximately 95 miles northwest of the Project Area.	6.3
g. Areas within thirty feet [9.14 meters] on either side of a direct line between an intercontinental ballistic missile launch facility and a missile alert or launch control facilities to avoid microwave interference. This restriction only applies to aboveground structures, not to surface features, such as roads, or belowground infrastructure.	Not present. The nearest intercontinental ballistic missile launch facility, missile alert facility, or launch control facility is approximately 95 miles northwest of the Project Area.	6.3


Braddock
Canada
North Dakota
MT
MN
SD
WY
Napoleon
34
Appert Lake National Wildlife Refuge
Emmons County
Logan County
3
Project Area
Springwater National Wildlife Refuge
Logan County
McIntosh County
Linton
Seeman Park
3,13
13
Emmons County
McIntosh County
83
0 1.5 3 Miles
Scale: 1:192,000
For Environmental Review Purposes Only
Figure 2.1-1:
Exclusion Areas
Emmons-Logan Energy Storage
Emmons County,
North Dakota
Project Area
Study Area
County Boundary
Municipal Boundary
USFWS Waterfowl Production Area
USFWS National Wildlife Refuge
Seeman Park

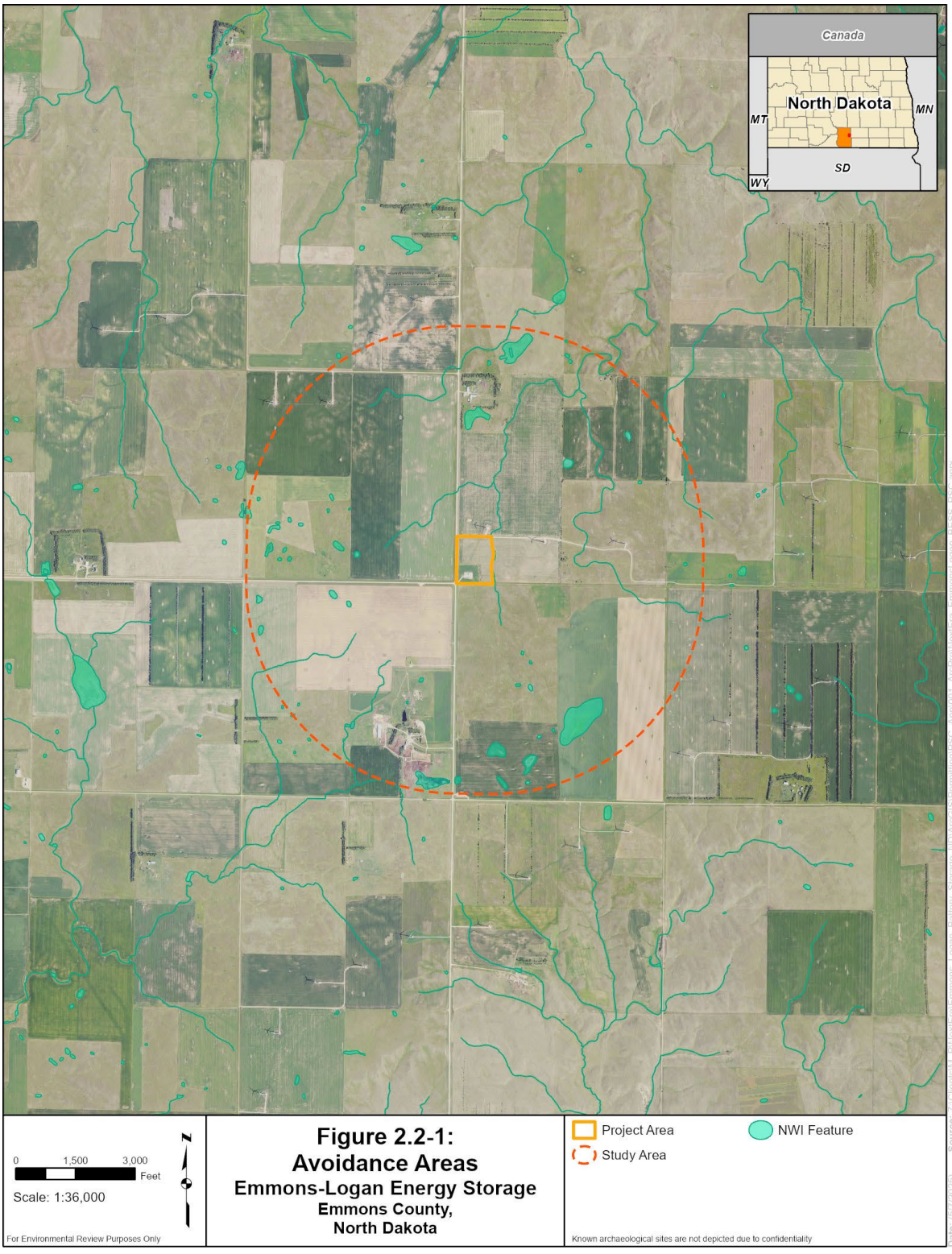
2.2 AVOIDANCE AREAS

N.D. Admin. Code 69-06-08-01(3) stipulates that specified "geographical areas may not be approved as a site for an energy conversion facility unless the applicant shows that under the circumstances there is no reasonable alternative. In determining whether an avoidance area should be designated for a facility, the Commission may consider, among other things: the proposed management of adverse impacts; the orderly siting of facilities; system reliability and integrity; the efficient use of resources; and alternative sites. Economic considerations alone will not justify approval of these areas. A buffer zone of a reasonable width to protect the integrity of the area must be included. Natural screening may be considered in determining the width of the buffer zone." Table 2.2-1 outlines the geographic areas identified in N.D. Admin. Code 69-06-08-01(3) and provides a description of how the Project avoids these specific geographical areas. Avoidance areas in the Project Area, Study Area, and surrounding area are shown on Figure 2.2-1. N.D. Admin. Code 69-06-08-01(4).

TABLE 2.2-1

Avoidance Areas

North Dakota Administrative Code 69-06-08-01(3)	Description if Present in or Applicable to the Project	Proposed Buffer Zone	Section Addressed
3. Avoidance areas.			
a. Historical resources which are not designated as exclusion areas.	Not present. Within the Project Area there are no historical resources which are not designated as exclusion areas.	No impacts are anticipated, and no buffer zone is proposed.	6.4, Appendix C
b. Areas within the city limits of a city or the boundaries of a military installation.	Not present. Within the Project Area there are no cities or city limits or boundaries of a military installation.	No impacts are anticipated, and no buffer zone is proposed.	6.2
c. Areas within known floodplains as defined by the geographical boundaries of the hundred-year flood.	Not present. No Federal Emergency Management Agency (FEMA) flood rating maps have been developed for the area.	No impacts are anticipated, and no buffer zone is proposed.	6.7, 7.2.6, Appendix F7
d. Areas that are geologically unstable.	Not present. A geotechnical engineering evaluation has been conducted for the Project and will be used to inform design. The geotechnical surveys did not encounter karstic features or voids. The Project Area is not located within any landslide deposits, as indicated by the North Dakota Geological Survey's (NDGS) landslide mapping program.	No impacts are anticipated, and no buffer zone is proposed.	6.6
e. Woodlands and wetlands.	The Project avoids impacts to trees and shrubs, and should unforeseen impacts occur, Emmons-Logan Energy Storage will comply with the Commission's Tree and Shrub Mitigation Specifications. Impacts to wetlands will be avoided.	No impacts are anticipated, and no buffer zone is proposed.	6.5, 6.7, 6.8, Appendix D
f. Areas of recreational significance which are not designated as exclusion areas.	Not present. Within the Project Area there are no areas of recreational significance which are not designated as exclusion areas.	No impacts are anticipated, and no buffer zone is proposed.	6.5


Canada
North Dakota
MT
MN
SD
WY
0 1,500 3,000
Feet
Scale: 1:36,000
For Environmental Review Purposes Only
Figure 2.2-1:
Avoidance Areas
Emmons-Logan Energy Storage
Emmons County,
North Dakota
Project Area
Study Area
NWI Feature
Known archaeological sites are not depicted due to confidentiality
Source: Z:\Clients\M_P\NextEra\Emmons_Logan_Battery_Storage_1\DATA\GIS\Permitting\PSC_App\001_ArcPro\NextEra_EmmonsLogan_BESS_PSC.aprx
Date: (5/7/2025)

2.3 SELECTION CRITERIA

N.D. Admin. Code 69-06-08-01(5) stipulates that "a site shall be approved in an area only when it is demonstrated to the commission by the applicant that any significant adverse effects resulting from the location, construction, and operation of the facility in that area as they relate to the following, will be at an acceptable minimum, or that those effects will be managed and maintained at an acceptable minimum." Table 2.3-1 outlines the areas identified in N.D. Admin. Code 69-06-08-01(5) and provides a description of how the Project facility's location, construction, and operation will avoid adverse impacts or how impacts will be kept at an acceptable minimum or managed effectively.

TABLE 2.3-1

Selection Criteria

North Dakota Administrative Code 69-06-08-01(5)	Description of Project Effect	Section Addressed
5. Selection criteria.		
a. The impact upon agriculture:		
(1) Agricultural production.	Negligible/minimal effect anticipated. The Project will be located entirely within an agriculture field. Only the approximately 10 acres of land necessary for operations will be permanently affected. The Project will shift the land use from agricultural production to an energy storage facility.	1.4, 3.7, 6.5
(2) Family farms and ranches.	No adverse effect anticipated. The Project will be located entirely within an agriculture field. The Project will shift the land use from agricultural production to an energy storage facility. Emmons-Logan Energy Storage has entered into an option to purchase the land from the existing landowner.	1.4, 3.7, 6.5
(3) Land which the owner demonstrates has soil, topography, drainage, and an available water supply that cause the land to be economically suitable for irrigation.	No adverse effect anticipated. No irrigation occurs within the Project Area. The landowner has not expressed concerns related to the land being economically suitable for irrigation within the Project Area.	NA
(4) Surface drainage patterns and ground water flow patterns.	No adverse effect anticipated. The Project will be designed to facilitate unrestricted flow of surface drainage and surface groundwater from the upper portions to the lower portion of the watershed.	6.7, Appendix D
(5) The agricultural quality of the cropland.	Negligible/minimal effect anticipated. The Project will be located entirely within an agriculture field. Only the land necessary for operations will be permanently affected. The Project will shift the land use from agricultural production to an energy storage facility. Temporarily disturbed areas will be restored as practicable. In the event of soil compaction during construction, Emmons-Logan Energy Storage will address and alleviate the compaction.	6.5, 6.6
b. The impact upon the availability and adequacy of:		
(1) Law enforcement	No adverse effect anticipated.	NA
(2) School systems and education programs	No adverse effect anticipated.	NA
(3) Governmental services and facilities	No adverse effect anticipated.	6.2
(4) General and mental health care facilities	No adverse effect anticipated.	NA
(5) Recreational programs and facilities	Negligible/minimal effect anticipated. Recreational impacts will be auditory and visual in nature and limited to individuals using land in and near the Project Area for hunting, fishing, or nature observation.	6.5

TABLE 2.3-1

Selection Criteria

North Dakota Administrative Code 69-06-08-01(5)	Description of Project Effect	Section Addressed
(6) Transportation facilities and networks	Negligible/minimal effect anticipated. Vehicle traffic will experience a temporary increase during construction. During Project operations and maintenance (O&M), road use will generally be similar to other area traffic.	6.2
(7) Retail service facilities	No adverse effect anticipated. Local services such as motels, restaurants, and convenience stores are likely to experience an increase in business during Project construction.	NA
(8) Utility services	No adverse effect anticipated. Emmons-Logan Energy Storage will coordinate with the system operator and the local utilities for utility services.	1.2.1, 6.2
c. The impact upon:		
(1) Local institutions	No adverse effect anticipated.	Not applicable
(2) Noise-sensitive land uses	Negligible/minimal effect anticipated. Noise sensitive land uses near the Project include inhabited residences. Acoustic modeling results indicated that predicted sound level will not exceed 45 decibel, A-weighted (dBA) within 100 feet of an inhabited residence, school, or place of business.	6.3, Appendix B
(3) Light-sensitive land uses	Negligible/minimal effect anticipated. Light sensitive land uses near the Project include inhabited residences and wildlife. Lighting will be only in areas where it is required for safety, security, or operations.	7.2.1
(4) Rural residences and businesses	Negligible/minimal effect anticipated. The nearest rural residence is located approximately 0.6 miles north of the Project Area and approximately 0.7 miles north of the nearest BESS facility component. Rural businesses such as motels, restaurants, and convenience stores are likely to experience an increase in business during Project construction.	6.1
(5) Aquifers	No adverse effect anticipated. North Dakota Department of Water Resources (NDDWR) water well logs reviewed in the vicinity of the Project Area indicated groundwater depths ranging from 95 to 240 feet below the surface in deep aquifers, beneath typical foundation depths.	6.7
(6) Human health and safety	Negligible/minimal effect anticipated. General safety risks related to the construction and operation of an energy storage facility are anticipated and will be mitigated in accordance with workplace safety regulations.	6.3
(7) Animal health and safety	Negligible/minimal effect anticipated. The Project will be located entirely within an agriculture field. The Project will negligibly impact animal health and safety by shifting the land use from agricultural production to an energy storage facility.	6.8
(8) Plant life	Negligible/minimal effect anticipated. The Project will be located entirely within an agriculture field. The Project will impact plant life by changing the Project location's land use from agricultural production an energy storage facility. However, no grassland habitat will be impacted by the Project.	6.8
(9) Temporary and permanent housing	No adverse effect anticipated. Temporary housing such as motels are likely to experience an increase in business during Project construction. Permanent housing such as residences are likely to not experience any change.	6.1
(10) Temporary and permanent skilled and unskilled labor	No adverse effect anticipated. The Project will create up to approximately 150 temporary construction jobs over the approximately 9- to 12-month construction period, with the number of workers on-site at any given time varying depending on the phase of construction. The Project will require two to three full time employees during O&M.	6.1

TABLE 2.3-1

Selection Criteria

North Dakota Administrative Code 69-06-08-01(5)	Description of Project Effect	Section Addressed
d. The cumulative effects of the location of the facility in relation to existing and planned facilities and other industrial development.	No adverse effect anticipated. The Project has been sited to avoid conflict with existing development plans of federal, state, local, and private businesses (where known), addressing potential cumulative effects on surrounding infrastructures. The Project is strategically positioned to complement the existing Wind Energy Center, minimizing cumulative effects.	NA
e. The impact upon military installations, assets, and operations.	No adverse effect anticipated. No military installations, assets, or operations occur within the vicinity of the Project Area.	6.3

2.4 POLICY CRITERIA

N.D. Admin. Code 69-06-08-01(6) states that "(t)he commission may give preference to an applicant that will maximize benefits that result from the adoption of the following policies and practices, and in a proper case may require the adoption of such policies and practices. The commission may also give preference to an applicant that will maximize interstate benefits." Table 2.4-1 summarizes how the Project will comply with the policy criteria specified in N.D. Admin. Code 69-06-08-01(6).

TABLE 2.4-1

Policy Criteria

North Dakota Administrative Code 69-06-08-01(6)	Description of Project Adoption	Section Addressed
6. Policy Criteria		
a. Recycling of the conversion byproducts and effluents.	The Project is designed in a manner that does not necessitate the recycling of conversion byproducts and effluents.	NA
b. Energy conservation through location, process, and design.	The Project optimizes energy conservation through its location by strategically placing it next to the existing Wind Energy Center, which will be collocated with existing infrastructure and will allow surplus energy to be efficiently stored. Additionally, the Project's energy-efficient design and streamlined processes will enhance overall energy conservation by minimizing energy losses during storage and distribution, ensuring that stored energy is utilized with maximum efficiency.	NA
c. Training and utilization of available labor in this state for the general and specialized skills required.	Emmons-Logan Energy Storage has utilized several local firms in developing and studying the Project and compiling this application and will continue to use local labor to the extent practicable.	6.1
d. Use of a primary energy source or raw material located within the state.	The energy source of the Project will come from surplus energy on the grid.	NA
e. Not relocating residents.	The Project will not cause any residents to be relocated, and there are no residences within the Project Area.	NA
f. The dedication of an area adjacent to the facility to land uses such as recreation, agriculture, or wildlife management.	Emmons-Logan Energy Storage will not dedicate any areas to other uses as part of the Project.	NA
g. Economies of construction and operation.	The Project will achieve economies of construction and operation through strategic planning and efficiency measures. By optimizing construction processes and implementing cost-effective operational strategies, the Project aims to minimize expenses and enhance overall economic efficiency throughout its operation lifecycle.	2.7

TABLE 2.4-1

Policy Criteria

North Dakota Administrative Code 69-06-08-01(6)	Description of Project Adoption	Section Addressed
h. Secondary uses of appropriate associated facilities for recreation and the enhancement of wildlife.	The Project does not include associated facilities that would be appropriate for recreation or enhancement of wildlife.	NA
i. Use of citizen coordinating committees.	The use of citizen coordinating committees is not anticipated for this Project.	NA
j. A commitment of a portion of the energy produced for use in this state.	Electric energy released by the Project will be managed by the system operator, MISO, and will be sent to the local electrical grid.	NA
k. Labor relations.	Labor relations will not be negatively affected by the Project.	NA
l. The coordination of facilities.	The Project will coordinate with existing facilities by seamlessly integrating with the existing Wind Energy Center, utilizing the existing transmission line, and connecting to the pre-existing collection substation. This coordinated effort will ensure optimal utilization of resources, improve overall system efficiency, and facilitate a cohesive and integrated energy infrastructure.	NA
m. Monitoring of impacts.	The construction contractor will employ best management practices during construction to monitor soil impacts and segregate topsoil. A storm water pollution prevention plan (SWPPP) will be prepared for the Project.	6.5.2, 6.6.2, 6.7.2
n. A commitment to installing light mitigation technology for wind energy conversion facilities subject to commercial availability and federal aviation administration approval.	Not applicable.	NA

2.5 FACTORS TO BE CONSIDERED

N.D.C.C. 49-22-09 states that "(t)he commission shall be guided by, but is not limited to, the following considerations, where applicable, to aid the evaluation and designation of sites, corridors, and routes." Table 2.5-1 provides the considerations specified in N.D.C.C. 49-22-09 and an evaluation of each consideration specific to the Project.

TABLE 2.5-1

Factors to be Considered

Consideration	Evaluation	Section Addressed
1. The commission shall be guided by, but is not limited to, the following considerations, where applicable, to aid the evaluation and designation of sites, corridors, and routes:		
a. Available research and investigations relating to the effects of the location, construction, and operation of the proposed facility on public health and welfare, natural resources, and the environment.	Research and investigations relating to the effects of the location, construction, and operation of the proposed facility on public health and welfare, natural resources, and the environment are included throughout this application and appendices.	Throughout the application
b. The effects of new energy conversion and transmission technologies and systems designed to minimize adverse environmental effects.	Emmons-Logan Energy Storage will utilize the most current available technologies to site, construct, and operate the Project to minimize or avoid potential adverse environmental impacts. Section 3.0 includes a description of the Project design technologies. Mitigation, minimization, and/or avoidance measures to be implemented for each resource are described in each corresponding subsection within Section 6.0.	3.0, 6.1.2, 6.2.2, 6.3.2, 6.4.2, 6.5.2, 6.6.2, 6.7.2, 6.8.2

TABLE 2.5-1

Factors to be Considered

Consideration	Evaluation	Section Addressed
c. The potential for beneficial uses of waste energy from a proposed energy conversion facility.	Not applicable. Energy storage does not produce waste energy. Therefore, the Project does not have the potential for beneficial use of waste energy.	NA
d. Adverse direct and indirect environmental effects which cannot be avoided should the proposed site be designated.	Adverse direct and indirect environmental effects that cannot be avoided should the proposed site be designated include permanent impacts to cropland that will remain for the life of the Project. Impacts for each resource are described in each corresponding subsection within Section 6.0.	6.1.2, 6.2.2, 6.3.2, 6.4.2, 6.5.2, 6.6.2, 6.7.2, 6.8.2
e. Alternatives to the proposed site which are developed during the hearing process and which minimize adverse effects.	Emmons-Logan Energy Storage believes that the proposed site is the most viable alternative. A description of the site selection criteria and considerations used to select the proposed site are discussed in Section 2.0. Alternative methods to service the need are described in Section 1.2.3.	1.2.3, 2.0
f. Irreversible and irretrievable commitments of natural resources should the proposed site be designated.	Irreversible and irretrievable resource commitments are related to the use of non-renewable resources and the effects that the use of these resources would have on future generations. Irreversible effects primarily result from use or destruction of a specific resource that cannot be replaced within a reasonable time frame. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of the action. There are few commitments of natural resources associated with the construction and operation of the Project that are irreversible and irretrievable. Irreversible and irretrievable natural resources are primarily related to the construction and operation of the Project. The Project would result in the conversion of approximately 10 acres of cropland for the construction and operation of the Project. This land would be unavailable for agricultural production for the life of the Project.	3.7, 6.5
g. The direct and indirect economic impacts of the proposed facility.	Emmons-Logan Energy Storage will purchase the land where the Project is located, providing a benefit to the landowner. The Project will create approximately two to three full-time O&M jobs, who are expected to reside locally. The Project will create up to 150 temporary construction jobs over the approximately 9- to 12-month construction period, with the number of workers on-site at any given time varying depending on the phase of construction. Socioeconomic impacts associated with the Project are expected to be positive, with an influx of wages and expenditures made at local businesses during the construction period.	2.7, 6.1
h. Existing plans of the state, local government, and private entities for other developments at or in the vicinity of the proposed site, corridor, or route.	The proposed site does not include any existing plans of the state, local government, or private entities for other developments. Correspondence with the state and local government are summarized in Section 7.0 and Appendix F includes copies of the correspondence.	7.0, Appendix F
i. The effect of the proposed site on existing scenic areas, historic sites and structures, and paleontological or archaeological sites.	No effects are anticipated as all historic sites, historic structures, and archaeological sites identified through a Class I Literature Search and a Class III Cultural Resources Inventory, and all designated scenic areas and known paleontological sites will be avoided. A description of cultural resources is included in Section 6.4 and Appendix C.	6.4, Appendix C
j. The effect of the proposed site on areas which are unique because of biological wealth or because they are habitats for rare and endangered species.	No effect anticipated as all threatened and endangered species habitats identified through the USFWS Information for Planning and Consultation (IPaC) tool will be avoided. No habitat for threatened or endangered species was identified during surveys. A description of rare and unique natural resources is included in Section 6.8 and Appendix D.	6.8, Appendix D

TABLE 2.5-1

Factors to be Considered

Consideration	Evaluation	Section Addressed
k. Problems raised by federal agencies, other state agencies, and local entities.	As part of development of the Project, Emmons-Logan Energy Storage and its representatives have maintained close coordination with federal agencies, state agencies, and local entities through a combination of in-person meetings, emails, mailers, and phone calls. Correspondence with federal agencies, other state agencies, and local entities are summarized in Section 7.0 and Appendix F includes copies of the correspondence.	7.0, Appendix F

2.6 DESIGN AND CONSTRUCTION LIMITATIONS

The Project will be designed and constructed in accordance with industry standards and regulatory requirements, ensuring safety, efficiency, and environmental compliance. Design considerations will include factors such as capacity, voltage requirements, integration with the existing grid infrastructure, and safety features, such as fire protection systems and emergency shutdown protocols. Construction limitations will be managed through planning, adhering to construction schedules, and quality control measures to ensure that the Project meets all specified design criteria and operational expectations.

2.7 ECONOMIC CONSIDERATIONS

Economics were considered when selecting a location for the Project. The Project will create approximately two to three full-time O&M jobs. These employees are expected to reside locally. Additionally, the Project will create up to 150 temporary construction jobs over the approximately 9- to 12-month construction period, with the number of workers on-site at any given time varying depending on the phase of construction.

The estimated total cost to construct the Project is approximately $181 million.

2.8 COUNTY CRITERIA

Emmons-Logan Energy Storage is committed to transparency and community involvement. Consistent with this commitment, Emmons-Logan Energy Storage has conducted meetings with the Emmons County Commission to inform the County of the Project and to provide comprehensive updates on the Project's progress. Emmons-Logan Energy Storage is prioritizing close coordination with Emmons County throughout development.

Emmons-Logan Energy Storage introduced the Project to the Board of County Commissioners of Emmons County on October 4, 2024, to discuss various topics, including development, grid reliability and schedule. Emmons-Logan Energy Storage met again with the County on February 4 and April 1, 2025, to discuss permitting as well as provide updates on the Project. Emmons-Logan Energy Storage attended the county commission meeting on April 1, 2025, to discuss various aspects of the Project including the Conditional Use Permit, application costs, setbacks, and established industry standards and safety codes that the Project must comply with. Emmons-Logan then followed up with the county auditor on April 3, 2025 to discuss the Project.

Emmons-Logan Energy Storage will continue to meet with county officials as the Project moves forward. The Project has been designed to comply with or exceed the regulations required by the

Zoning Regulations of Emmons County, North Dakota. A Conditional Use Permit application for the Project has been submitted to Emmons County. The Conditional Use Permit will be submitted to the Commission after it is issued.

3.0 PROJECT DESIGN

The Project is designed to enhance grid stability and optimize energy distribution through the strategic storage and release of electrical power. The flow of energy between the grid and the Project is managed dynamically. When the grid has excess energy (*e.g.*, during periods of low demand), this energy will be absorbed by the BESS for later distribution. When the grid has capacity for additional energy, the Project will supply energy directly to the grid. This system ensures that energy is efficiently transferred and stored, minimizing waste and allowing for flexible energy dispatch during times of high or low demand. The market settlement process will track and reconcile energy transactions, ensuring proper compensation for stored and discharged energy in accordance with market rules.

The Project includes the construction of energy storage system containers, which will house the battery modules. Each battery module is equipped with a battery management system (BMS) that continuously monitors and regulates critical parameters, such as voltage, temperature, and state of charge, to maintain operational integrity and safety.

The Project will also include the construction of a Power Conversion System (PCS) to convert the direct current (DC) stored within the BESS to alternating current (AC) suitable for grid integration. The PCS will ensure the efficient and reliable transfer of energy between the BESS and the grid. Additionally, an electrical collection system will be constructed to connect the BESS to the Wind Energy Center's existing collection substation. The collection system will facilitate the efficient transfer of energy from the Project to the grid.

Emmons-Logan Energy Storage will tie into the existing collection substation by installing the necessary control and safety equipment to facilitate the safe transfer of energy. The existing substation will undergo minor modifications to accommodate the Project's connection to the grid. This may include support structures, circuit breakers, reactors, fence expansion, and grading, with all interconnection components dependent upon final design. A preliminary site design is illustrated in Figure 3.0-1; this preliminary design is subject to change as detailed design progresses.

The energy supplied to the BESS will originate from the grid through the collection substation and transmission line shared with the Wind Energy Center. The activity of the Wind Energy Center and BESS will be accounted for individually. The Wind Energy Center will deliver all energy to the MISO system, and the BESS will withdraw all energy from the MISO system. The energy is stored until the BESS receives a dispatch signal and then the energy is transmitted to the grid via the existing collection substation and transmission line to the Montana-Dakota Utilities Company 230-kV "Napoleon" Substation. The simplified process flow is depicted in Figure 3.0-2.

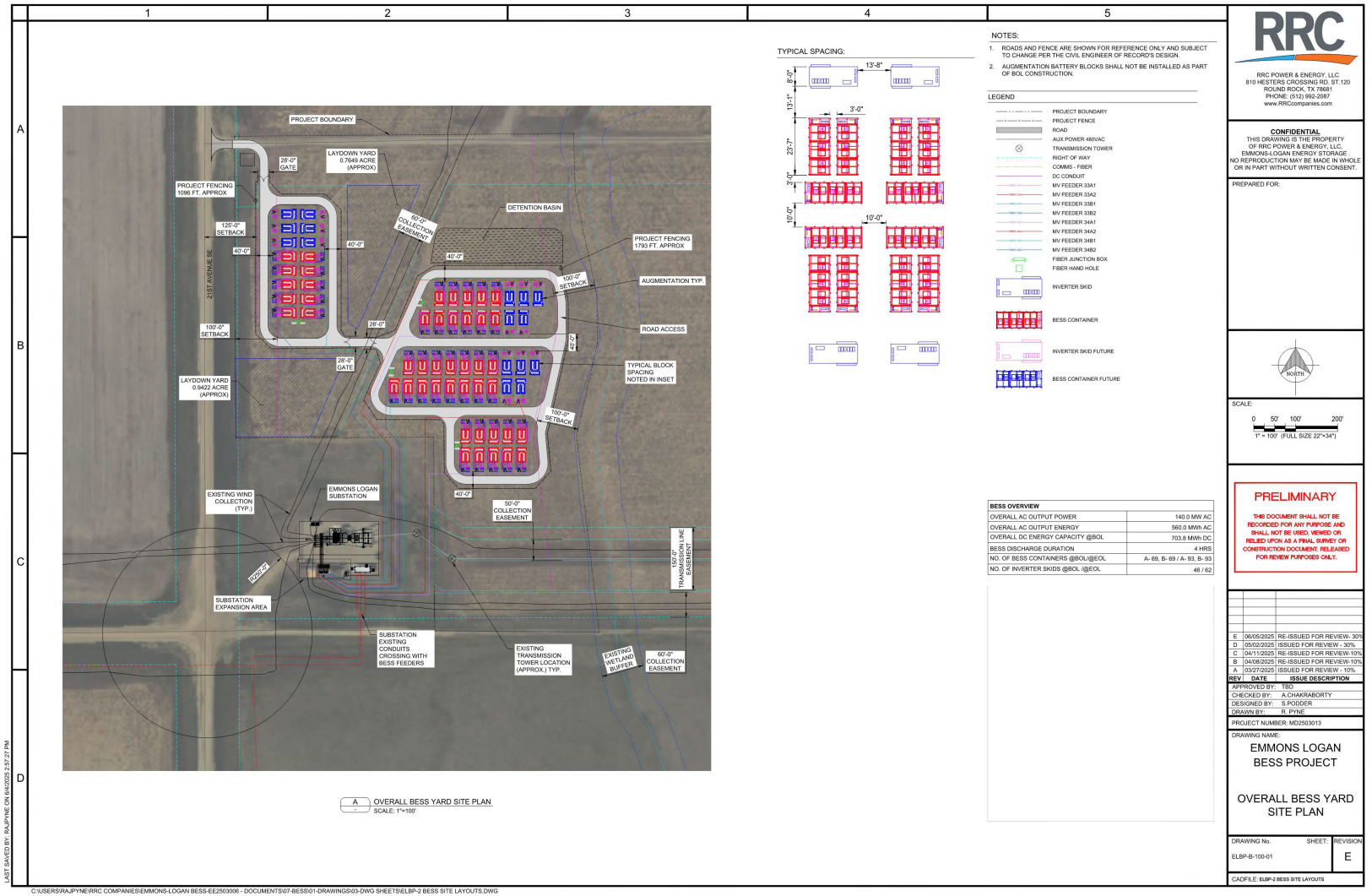


Figure 3.0-1 Preliminary Site Plan

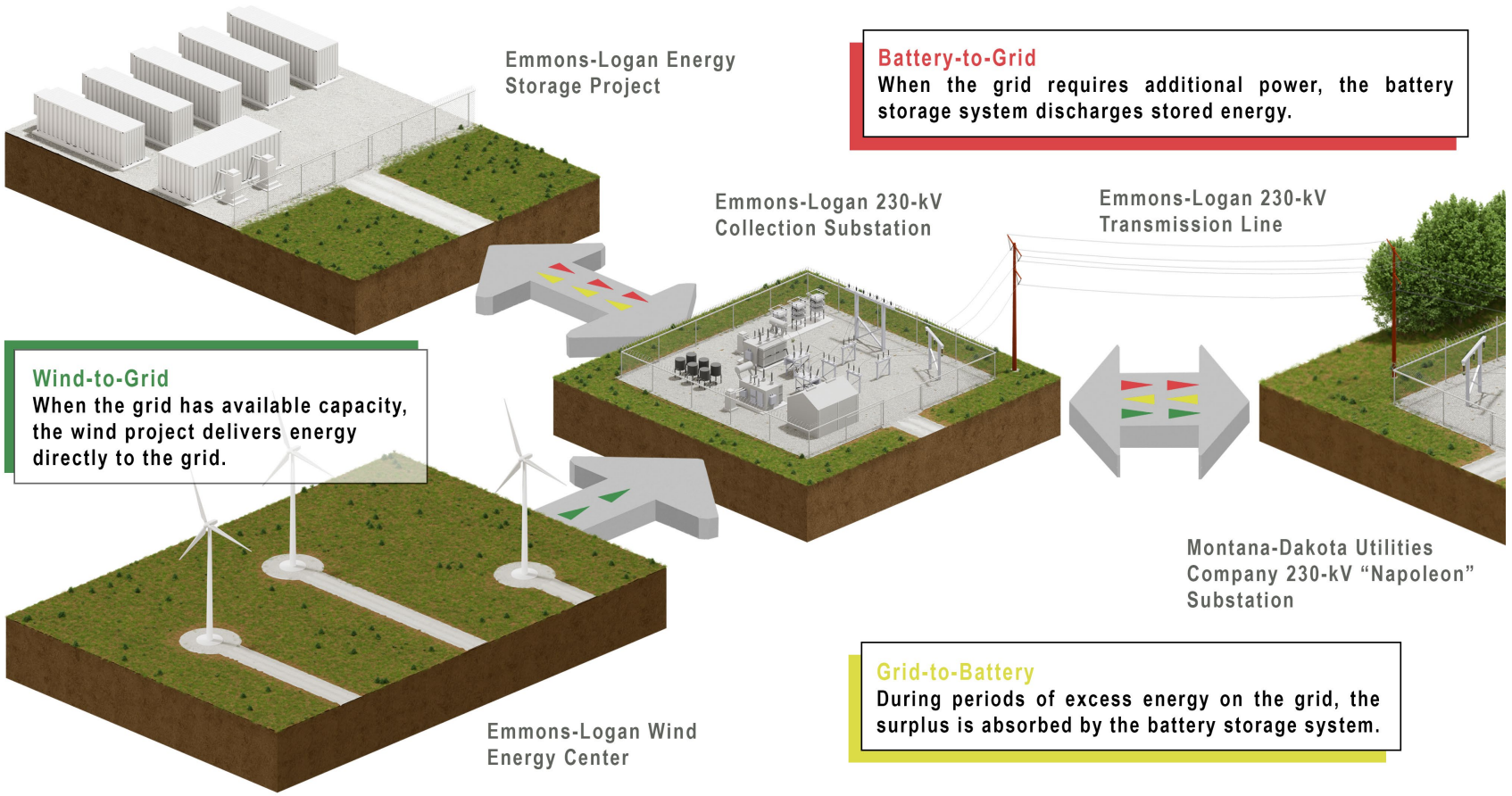


Figure 3.0-2 Battery Energy Storage System Path of Energy Diagram

3.1 BATTERY ENERGY STORAGE SYSTEM

3.1.1 Battery Modules

Individual lithium-ion, or similar technology, battery cells form the core of the BESS. Battery cells are assembled either in series or parallel in sealed battery modules. The BESS will include battery modules in self-supporting racks that are electrically connected either in series or parallel. Individual self-supporting racks are then connected in series or parallel to deliver the BESS power rating. Emmons-Logan Energy Storage has not finalized the battery type for the Project and will select the battery type based on the technology available at the time of procurement and prior to construction.

3.1.2 Energy Storage System Cabinets and Battery Management Systems

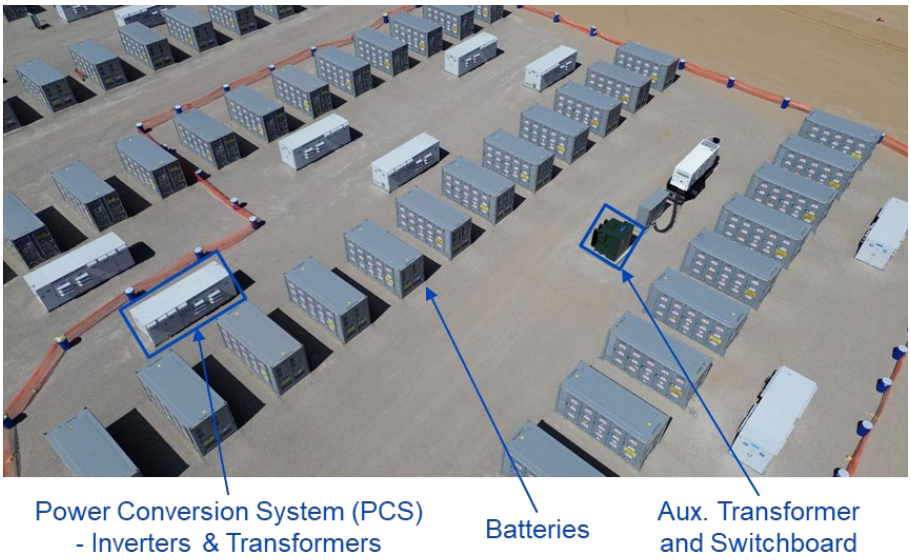
Multiple self-contained energy storage system cabinets will house the batteries and the BMS. The BMS is used in conjunction with the site-wide programmable logic controller (PLC) to monitor battery voltage, current, temperature, charge, discharge, thermal management, fault diagnosis, and more. Together, the BMS and PLC are a multi-level control system designed to provide a hierarchical system of controls for the battery modules and PCS up to the point of connection with the collection substation. The BMS and PLC ensure that the BESS effectively responds to dispatch instructions and provide a secondary safety system designed to safely shut down the BESS in the event of an emergency. Examples of a BESS and self-contained energy storage system cabinets are shown in Figure 3.1.2-1.

Each self-contained energy storage system cabinet will be equipped with a thermal management system for thermal management of the batteries. Power for the thermal management systems will be provided through excess capacity in the batteries when charging and discharging or via the grid when idle.

To maintain the Project's contractually required energy capacity over its operational life, periodic battery augmentation is planned to offset the gradual capacity degradation in the original battery systems. Battery systems are initially sized to meet the full nameplate energy requirement from the start of operations, accounting for auxiliary loads and other energy losses. However, as batteries naturally degrade over time, new battery containers will be integrated within the existing footprint to uphold the contracted energy levels. The nameplate capacity will not be increased by augmentation but will remain the same. The facility's design accounts for planned augmentation, with additional capacity expected approximately every three to four years, depending on the actual degradation as measured by periodic capacity tests and findings from routine inspections. These inspections and installation of additional capacity are part of the operations and maintenance program and are described below in Section 5.1.

Based on the current design, Emmons-Logan Energy Storage anticipates approximately 138 initial battery containers (beginning of life or BOL shown on Figure 3.0-1) plus an additional 48 augmentation containers (end of life or EOL shown on Figure 3.0-1) for a total of 186 containers. The final number of containers may change depending on final design and technology changes at the time of augmentation.

Figure 3.1.2-1 Battery Energy Storage System Example



3.2 POWER CONVERSION SYSTEM

The PCS (also referred to as the inverters as shown on Figure 3.0-1) will be located in the BESS and will consist of an inverter, protection equipment, DC and AC circuit breakers, filter equipment, equipment terminals, and a connection cabling system. Electric energy is transferred from the existing power grid to the batteries during a battery charging cycle and from the batteries to the grid during a battery discharge cycle. The PCS converts electric energy from AC to DC when energy is transferred from the grid to the battery and from DC to AC when energy is transferred from the battery to the grid. The energy conversion is enabled by a bidirectional inverter that connects the DC battery system to the AC electrical grid. The PCS will also include a transformer that converts the low-voltage AC side output of the inverter to medium AC voltage, facilitating interconnection and improving overall BESS efficiency. The transformer and associated protection equipment also safeguard the PCS in the event of system electrical faults. Emmons-Logan Energy Storage anticipates approximately 46 initial PCS plus an additional 16 augmentation PCS for a total of 62 PCS. The final number of PCS may change depending on final design and technology changes at the time of augmentation.

3.3 CONNECTION TO THE EXISTING FACILITY

The existing collection substation will undergo minor modifications to accommodate the Project's connection to the grid. A preliminary site layout is provided in Figure 3.0-1, which illustrates the proposed modifications to the substation; this layout is subject to refinement as detailed engineering progresses. Emmons-Logan Energy Storage will tie into the existing collection substation by installing the necessary control and safety equipment to facilitate the safe transfer of energy. This may include support structures, circuit breakers, and reactors, with all interconnection components dependent upon final design. The substation modifications will be completed on the same schedule as the Project. Utilizing the existing substation eliminates the need to construct a separate facility, thereby reducing the Project's overall footprint.

3.4 ANCILLARY FACILITIES

3.4.1 Supervisory Control and Data Acquisition System

The Project will generally be operated remotely, with operational control and 24/7 monitoring performed off-site through the Project's SCADA system, which will be operated and monitored from NextEra Energy Resources' renewable operations control center. The SCADA and associated systems will monitor key battery metrics, including state of charge, battery health, current, voltage, temperature, and alarm indicators for off-normal conditions. In the event of an anomaly or issue with a battery unit, the SCADA system will immediately alert trained personnel in the area. If necessary, the BESS can be remotely shut down within one minute. See Section 5.1 for additional details about how the SCADA system functions as it relates to O&M.

3.4.2 Electrical Collection System

The electrical collection system will transmit electricity from the collection substation to the BESS when charging and from the Project to the collection substation when discharging. Energy to and from the batteries will be routed through a series of underground collection lines, which make up the electrical collection system. The electrical collection system will be designed to meet applicable requirements of the National Electrical Safety Code. The electrical collection system will be directly buried.

3.4.3 Site Access and Parking

Access to the Project will be provided via the existing wind turbine access road off 21st Avenue SE. Onsite parking spaces will be provided in open gravel areas, offering parking necessary for O&M personnel when onsite.

3.4.4 Fencing and Security

Permanent security fencing will be installed along the perimeter of the BESS site, consisting of an estimated 7-foot-tall chain-link fence topped with a 1-foot section of three-strand barbed wire. The fencing will be installed in accordance with industry standards and will comply with the National Electrical Code (NEC). The fencing will be designed to prevent the public from gaining access to electrical equipment. Access to the BESS will be facilitated through a secured drive-through swing gate.

3.4.5 Signage

Warning signs indicating high voltage at the BESS will be posted at the access gate and at intervals along the perimeter fencing. The entrance gate will feature a sign reading "Emmons-Logan Energy Storage." Additionally, emergency services and safety signs will be placed throughout the BESS site as needed. Signage will include Emmons-Logan Energy Storage's contact information for first responders.

3.4.6 Stormwater Facilities

Emmons-Logan Energy Storage will manage stormwater in the BESS site through the installation of stormwater management facilities (*e.g.*, retention basins). These facilities will be designed to control runoff and reduce erosion during periods of heavy rainfall. The locations of these facilities will be within the Project Area and are to be determined depending on final design.

3.5 TEMPORARY FACILITIES

Temporary facilities may be required for the construction phase of the Project, such as a concrete batch plant, construction laydown area for any equipment and construction management facility, and/or intersection improvements to facilitate over-length turning. Any temporarily affected areas will be restored to preconstruction conditions, to the extent practicable after construction has been completed.

3.6 COMPLIANCE WITH INDUSTRY STANDARDS AND SAFETY CODES

Emmons-Logan Energy Storage will ensure that all aspects of the Project comply with established industry standards and safety codes to safeguard the surrounding community and the environment. The safety of the O&M staff, neighbors, and the public is the highest priority.

Emmons-Logan Energy Storage will comply with the NEC, also referred to as National Fire Protection Association (NFPA) 70, which defines comprehensive standards for the safe installation of electrical wiring and equipment. The NEC is designed to protect people and property from electrical hazards. Emmons-Logan Energy Storage will meet NEC requirements by ensuring the proper installation of all electrical conductors, equipment, and raceways associated with the Project. Procedures will be updated regularly to reflect the most current NEC revisions, which are updated every three years to incorporate new technologies and safety measures.

Emmons-Logan Energy Storage also will comply with NFPA 855, the Standard for the Installation of Stationary Energy Storage Systems. This includes implementing necessary precautions to ensure the safety of BESS installations by minimizing risks associated with fire, electrical hazards, and system failures. Emmons-Logan Energy Storage will design the system according to NFPA safety standards, ensuring that County and industry setbacks between the energy storage units and surrounding properties are met, and installing fire protection systems. Security barriers and access controls will be installed in accordance with NFPA 855 guidelines to enhance operational safety and prevent unauthorized access.

Emmons-Logan Energy Storage's energy storage system will be certified under UL 9540, the standard for verifying the safety of energy storage systems and equipment. UL 9540 certification ensures that the Project meets the required safety standards for fire, electrical, mechanical, and environmental hazards. Emmons-Logan Energy Storage will ensure that its systems undergo comprehensive testing and meet nationally recognized safety protocols as prescribed by UL 9540.

Through compliance with NFPA 70, NFPA 855, and UL 9540, Emmons-Logan Energy Storage will construct and operate the Project in full adherence to industry standards for safety and reliability.

3.7 PROJECT FOOTPRINT IMPACT

Within the Project Area, permanent effects refer to the final operational footprint, which includes components such as the energy storage system cabinets, internal access roads, and the PCS. These permanent features will occupy approximately 10 acres. These effects will persist for the operational life of the Project and will be removed at the time of decommissioning of the Project.

Temporary effects are associated with construction activities, such as the installation of underground systems and the use of construction laydown areas. These areas are expected to be reclaimed following the completion of construction.

Overall, the estimated footprint of the Project during construction, including both temporary and permanent effects, will cover approximately 15 acres. Of this, 5 acres are expected to be reclaimed after construction is complete, while 10 acres will remain as permanent operational effects.

4.0 CONSTRUCTION

4.1 SUPPLY CHAIN

Through the company's integrated supply chain, NextEra Energy Resources' subsidiaries work with established and reputable vendors, prioritizing Project suitability, availability, and cost, and NextEra Energy Resources' subsidiaries' contracts mandate that all battery supplies and components be produced without the use of forced labor. Additionally, these contracts require the battery suppliers to adhere to a non-forced labor compliance program and provide documentation of the supply chain, from raw materials to finished products.

4.2 CONSTRUCTION ACCESS AND DELIVERIES

Material and equipment needed to construct the BESS will reach the site through on-road truck delivery on public roads. A Road Use Agreement will be developed in coordination with the Emmons County Road Department regarding haul routes and county road use and repair during Project construction. The majority of truck deliveries will be for BESS components (*e.g.*, energy storage system cabinets and controller, PCSs) and aggregate material (*e.g.*, gravel, rock).

Typically, components will be hauled to the site using low-bed transfer trucks. Low-bed transport trucks also would transport construction equipment to the BESS site, unless the equipment can be driven (*e.g.*, boom trucks). The size of low-bed transport trucks used will depend on the component or equipment being transported. Aggregate material would be delivered via bottom dump trucks or transfer trucks.

4.3 SITE PREPARATION

Construction will begin with site preparation. Although the Project site is fairly level, grading and minor earthwork will occur to support the installation of storm water management facilities (*i.e.*, retention basins), perimeter fencing, foundations, and internal access roads. Road surfaces will be at-grade to allow water to sheet flow across the site. During site preparation, temporary staging area(s) will be designated within the BESS site to serve as the storage area(s) for materials and equipment during construction. The construction contractor will determine the specific location of temporary staging area(s).

Site preparation and grading will be accomplished using various equipment that could include scrapers, graders, dozers, compaction equipment, and water trucks (to control dust). Water consumption during construction would be needed for dust suppression and earthwork. Water would likely be delivered by truck from an off-site source and stored in on site temporary water tank or through an onsite well.

4.4 COMPONENT INSTALLATION

The BESS components will be off-loaded from low-bed transport trucks and installed using cranes, boom trucks, forklifts, rubber-tired loaders, rubber-tired backhoes, and other small- to medium-sized construction equipment, as needed. Equipment foundations for the energy storage system will be driven steel pilings.

4.5 PERSONNEL AND TRAFFIC

The Project will create up to 150 temporary construction jobs over the approximately 9- to 12-month construction period, with the number of workers on-site at any given time varying depending on the

phase of construction. The maximum average daily number of one-way worker vehicle trips would be 110. Emmons-Logan Energy Storage anticipates that construction crews would work 8 to 12 hours per day, with work occurring Monday through Saturday. Work on Sundays would be used only as necessary to meet scheduled milestones and to accelerate the construction schedule. Emmons-Logan Energy Storage will comply with applicable North Dakota labor laws.

5.0 OPERATIONS, MAINTENANCE, AND DECOMMISSIONING

5.1 OPERATIONS AND MAINTENANCE

The Project will operate 365 days per year and be monitored remotely through a SCADA system. NextEra Energy Resources operates a control center in Juno Beach, Florida that monitors the readiness of its subsidiaries' energy storage facilities nationwide 24 hours a day, 7 days a week. If an issue is detected at a BESS location, the system can be shut down remotely, and a local technician in the Project Area can be deployed to resolve the issue. The Project team will respond to all emergencies following the Emergency Response Plan (ERP) in Appendix E. The ERP establishes procedures for emergency response management, evacuation procedures, response to fire incidents and natural disasters, and security and cybersecurity, among other safety topics. Public safety is further discussed in Section 6.3.

The full-time O&M staff responsibilities will include routine inspections, system monitoring, and maintenance activities to support the safe and efficient operation of the energy storage system. The O&M staff for the BESS will be based out of the existing Wind Energy Center O&M facility located approximately seven miles west of the Project at 1491 71st St SE Linton, ND 58552.

Typically, one major maintenance inspection of the BESS occurs annually. Only occasional, onsite maintenance is expected to be required following commissioning, including replacement of inverter power modules and filters, and miscellaneous electrical repairs on an as-needed basis. During normal O&M, Emmons-Logan Energy Storage anticipates one to two workers will inspect the site approximately one to two times per week. Inspection scheduling and monitoring will be supported by the control center's SCADA system, which tracks system performance and flags any irregularities for prompt on-site evaluation.

To maintain the Project's required energy capacity over its operational life, periodic battery augmentation will be planned to offset the gradual capacity reduction in the original battery systems. Battery systems are initially sized to meet the full nameplate energy requirement from the start of operations, accounting for auxiliary loads and other energy losses. However, as batteries naturally degrade over time, new units will be integrated within the existing footprint to uphold the contracted energy levels. The facility's design supports augmentation, with additional batteries expected approximately every three to four years, depending on usage and findings from routine inspections. These inspections are part of a preventive maintenance program to ensure optimal performance.

The added capacity will be accomplished by installing either new battery containers only ("DC augmentation"), or new battery containers with new inverters ("AC augmentation"). New battery containers with or without new inverters will be added within the existing facility boundary on the existing prepared graveled area. Augmentation will include building new foundations, trenching to connect the new equipment to the existing systems, and testing of the new equipment. Augmentation locations are shown on the preliminary site plan on Figure 3.0-1. On-site augmentation activities typically take 2 to 4 months to complete by a temporary crew of 6 to 8 contractors.

5.2 DECOMMISSIONING

The Project will be decommissioned at the end of its life, with recycling considered for components that are capable of and suitable for recycling, as most of its components are recyclable. The materials used in battery energy storage facilities retain value even after more than 20 years of use. Many of NextEra Energy Resources' subsidiaries' battery-manufacturing suppliers offer to reclaim their batteries for recycling, allowing the parts to be reused in new products. In addition to being

repurposed for new battery cells, recycled materials can be utilized in a variety of consumer products, including lithium grease, concrete additives, and some glass products. NextEra Energy Resources' subsidiaries require vendors to provide recycling certificates to ensure compliance with all applicable regulations in the recycling and disposal of battery storage equipment. In line with U.S. Environmental Protection Agency guidelines, batteries are not disposed of in municipal landfills. The disposal requirements for lithium-ion batteries are outlined in Part 273 of Title 40 of the Code of Federal Regulations.

Fuel, hydraulic fluids, and oils will be transferred directly to a tanker truck from the respective tanks and vessels. Storage tanks and vessels will be rinsed and transferred to tanker trucks. Other items that are not feasible to remove at the point of generation, such as lubricants, paints, and solvents, will be kept in a locked utility structure with integral secondary containment that meets applicable requirements for hazardous waste storage until removal for proper disposal and recycling. It is anticipated that all oils and batteries will be recycled at an appropriate facility. Site personnel involved in handling these materials will be trained to properly handle them. Transportation of the removed hazardous materials will comply with applicable regulations for transporting hazardous materials, including those set by the U.S. Department of Transportation and U.S. Environmental Protection Agency.

Consistent with best practices and industry standards, Emmons-Logan Energy Storage will engage a North Dakota-licensed engineer to develop a comprehensive decommissioning plan. The decommissioning plan will outline the process for retiring the Project at the end of its useful life and include a cost estimate based on the parameters of the plan. The decommissioning plan will generally align with Emmons-Logan Wind's Wind Energy Center Decommissioning Plan and Cost Estimate, where applicable, and will include the following requirements:

- Decommissioning will begin within 12 months after the Project's useful life ends and will be completed within 24 months once initiated.
- Removal of above-surface facilities and infrastructure that have no ongoing purpose.
- Removal of underground cables to a depth of 24 inches (2 feet).
- Removal of foundations, buildings, and ancillary equipment to a depth of 48 inches (4 feet).
- The site will be graded to restore the area to near as practicable to pre-construction conditions, with topsoil respread to the proper density consistent and compatible with the surrounding area.
- Grading and reseeding will follow Natural Resource Conservation Service recommendations.

6.0 ENVIRONMENTAL ANALYSIS

6.1 SOCIOECONOMICS

6.1.1 Description of Resources

According to Job Service North Dakota Labor Market Information Center (NDLMI), Emmons County's 2023 resident population was 3,224, a ten-year numeric decrease of 8 percent (NDLMI, 2025). The unemployment rate for Emmons County in November 2024 was 3.7 percent. One year prior, the unemployment rate was 2.7 percent. There were 35 job openings in Emmons County in January 2025. On average in the second quarter of 2024, the private industry in Emmons County employing the largest number of workers was healthcare and social assistance.

In Emmons County, agriculture is an important part of the economy with 510 farms located in the county (U.S. Department of Agriculture [USDA], 2022). The total market value of agricultural products produced in Emmons County was $265,177,000, 86 percent of which was from crops and 14 percent from livestock sales. The primary livestock in Emmons County is cattle and the principal crops include wheat, oats, and corn.

In Emmons County, wind energy production has had a recent effect on the local economy through job creation and additional local tax revenue. In 2019, the Wind Energy Center began commercial operations.

In February 2025, Emmons County had five homes for sale, some of which were located in Linton, Strasburg, and the Beaver Creek Recreation Area (Zillow, 2025). Lodging facilities in Emmons County include hotels, motels, and recreational vehicles grounds in Linton.

6.1.2 Impacts/Mitigation

The Project will have positive economic impacts for the local population, including payment for the purchase of the land, employment, and property and sales tax revenue. Emmons-Logan Energy Storage estimates that the total cost for the Project will be approximately $181 million. Economic losses from farmland that is taken out of production for operation of the Project are anticipated to be minimal in comparison to the additional income provided by the Project. Emmons-Logan Energy Storage will purchase the land where the Project is located, providing a benefit to the landowner.

Businesses near the Project would not be significantly disrupted by construction or operation of the Project. The Project will create up to 150 temporary construction jobs over the approximately 9- to 12-month construction period, with the number of workers on-site at any given time varying depending on the phase of construction. To the extent that local construction contractors are used for portions of the construction, total wages and salaries paid to construction contractors and workers in Emmons County will contribute to the total personal income of the region. Expenditures made for equipment, energy, fuel, operating supplies, and other products and services will benefit businesses in the county and state. During construction, out-of-town laborers will likely use lodging facilities in and around the cities in Emmons and Logan counties.

It is likely that general skilled labor is available either in the county or the state to serve the basic infrastructure and site development needs. Specialized labor will be required for certain components of Project development. It is likely that this labor will be imported from other areas of the state, the region, or other states. Balancing the use of local construction contractors and imported specialized construction contractors will likely alleviate any labor relations issues.

The Project will create approximately two to three full-time O&M jobs. These employees are expected to reside locally. Operation of the proposed Project would not result in a large increase in the number of permanent residents in the communities near the Study Area.

Long-term beneficial impacts to Emmons County's tax base will contribute to the local economy as a result of the construction and operation of the Project. Socioeconomic impacts associated with the Project are expected to be positive, with an influx of wages and expenditures made at local businesses during the construction period. Based on this assessment, Emmons-Logan Energy Storage has concluded that no mitigation measures are required.

6.2 PUBLIC SERVICES

6.2.1 Description of Resources

Local Government Services

Within the Study Area is a network of established roads and utilities that provide access and necessary services to cities, communities, homesteads, and farms. There are no incorporated city limits or unincorporated cities within the Study Area. The Study Area is located approximately 14 miles northeast of Linton, 16 miles southeast of Hazelton, and 21 miles northwest of Wishek. The county seat of Emmons County is Linton.

Electrical Services

KEM Electric Cooperative provides rural electrical service in the Study Area.

Roads and Traffic

Public roads within and near the Study Area include county roads, township roads, section lines, private roads, and wind turbine access roads. The Study Area lies within the North Dakota Department of Transportation (NDDOT) District Boundary of Bismarck (NDGIS, 2025). There are no traffic count data available near the Study Area from the North Dakota Department of Transportation (NDDOT, 2025).

Rural and Regional Water Systems

The South-Central Regional Water District supplies potable water to communities near the Study Area (NDDWR, 2025). Emmons-Logan Energy Storage will evaluate obtaining water for construction from an onsite water well or obtain water from a nearby source and truck the water to the construction site. Emmons-Logan Energy Storage will obtain the appropriate permits, agreements, and/or approvals as necessary for water needed onsite.

Cellular Service

In Emmons County, cellular service is supported by several major carriers with coverage that includes both urban and rural areas. Verizon and AT&T are the primary providers offering coverage throughout the region.

6.2.2 Impacts/Mitigation

Local Government Services

No impact to local government services is anticipated. Therefore, Emmons-Logan Energy Storage has determined that no mitigation is required.

Electrical Services

The Project will self-supply electricity stored from the BESS during active operation or use station service from KEM Electric Cooperative while idle. Therefore, Emmons-Logan Energy Storage has determined that no mitigation is required.

Roads and Traffic

Emmons-Logan Energy Storage will coordinate with the Emmons County Road Department to obtain a Road Use Agreement for the use of county roads during construction. Additional operating permits will be issued by the state or county for over-sized truck movements.

There will be a temporary increase in vehicular traffic during construction activities. The maximum construction workforce is expected to generate approximately 110 average daily number of one-way worker vehicle trips on each road near the Study Area. While there may be some noticeable increase in heavy vehicle traffic in discrete locations for limited amounts of time, any impacts to public use of roadways in the Study Area will be negligible and temporary, and resolved with the completion of construction. Specific truck routes will be dictated by delivery location. Therefore, Emmons-Logan Energy Storage has determined that no mitigation is required.

Rural and Regional Water Systems

Construction is not expected to significantly impact local water supply. Construction will require water for foundations, backfill, and compaction; road construction; and dust control. The EPC will manage dust control during construction including preventing the spread of dust. Emmons-Logan Energy Storage estimates that approximately 4.5 million gallons of water will be hauled via water trucks and stored onsite in a temporary storage tank for dust control during construction. Any additional water needed for construction of the Project will be dependent on final site investigation and weather. The operation of the Project is not anticipated to require appropriation of surface water or permanent dewatering.

There are several water well records within or near the Study Area. These records provide details about the drilling and construction of the wells, including well depth, diameter, static water level (if present), and a well log describing the encountered soil horizons. Not all wells are active, as some may have been plugged for various reasons such as a lack of water. The wells can serve a variety of purposes, including domestic, stock, irrigation, monitoring, and testing. Due to the age of some records, some well geolocations may be inaccurate, and others may not have been recorded. No effects on the water supply are anticipated, and therefore, Emmons-Logan Energy Storage has determined that no mitigation is required.

Cellular Service

BESS facilities do not cause disruptions in cellular phone signals. BESS facilities operate within a different frequency range than cellular phone signals, ensuring there is no interference. No impact

to existing cell service is anticipated, and therefore, Emmons-Logan Energy Storage has determined that no mitigation is required.

6.3 HEALTH AND SAFETY

6.3.1 Description of Resources

Sound

The existing acoustic environment is defined primarily by the presence of the Wind Energy Center, traffic sounds from the nearby roadways, sounds from intermittent aircraft overflights, and sound from agricultural operations. In addition to anthropogenic sound sources, the windy conditions of this site define a somewhat elevated ambient sound level, which increases with wind speed. Windy conditions can generate sound caused by the rustling of grass and tree leaves and wind interaction with natural or man-made formations/structures.

Electric and Magnetic Fields

Power frequency electric and magnetic fields (EMF) are created wherever electricity flows, which includes the wiring in homes and schools, power lines, and electrical equipment and devices. Leading U.S. and international scientific organizations, such as the National Cancer Institute and the World Health Organization, have evaluated EMF research. These organizations generally conclude that overall, the body of scientific research does not show that exposure to EMF causes or contributes to any type of cancer, disease, or illness (National Institute of Environmental Health Sciences [NIEHS], 1999).

Hazardous Materials/Hazardous Waste

Potentially hazardous materials associated with the Project include the batteries, as well as fluids and chemicals used in cooling systems and fire protection equipment. The primary hazardous materials in a BESS are the electrolytes within the batteries, which can vary depending on the battery chemistry but often include lithium-based compounds. In addition to the batteries, the cooling systems may use glycol or other refrigerants, and fire protection systems may contain fire suppression chemical agents.

Public Safety

The Study Area is located in a region characterized by low population density, and there are no cities or towns within the Study Area. The Study Area falls within the jurisdiction of both the Napoleon and Emmons County Emergency Medical Services boundaries, as well as the Napoleon and Linton Fire Protection Districts (NDGIS, 2025). The Project Area is located within the Napoleon County Emergency Medical Services boundary and the Napoleon Fire Protection District. The boundary between service boundaries shifts just south of 72nd Street SE just south of the Project Area. These boundaries define the designated ambulance and fire department response services for incidents reported through the 9-1-1 emergency system. The nearest hospital is Linton Regional Medical Center in Linton, North Dakota.

Military Operations

No military installations and ranges, military training routes, special use airspace, or intercontinental ballistic facilities are present within the Study Area (OASD, 2025). The nearest military installation

is Camp Grafton located approximately 108 miles northeast and the nearest intercontinental ballistic facility is located approximately 95 miles northwest of the Study Area.

6.3.2 Impacts/Mitigation

Sound

There are no applicable federal or local laws, ordinances, regulations, or standards applicable to sound levels generated by the Project. The Commission does not have established sound level limits for an energy storage facility. The Commission's rules, N.D. Admin. Code Section 69-06-08-01(4), specify that sound levels from a wind facility may not exceed 45 dBA within 100 feet of an inhabited residence or a community building. While this state and regulatory limit does not apply to the Project, Emmons-Logan Energy Storage accounted for this regulatory standard when developing the design goal of 45 dBA at 100 feet from identified noise-sensitive receptors. A predictive operational acoustic model was completed for the Project. The predictive operational acoustical modeling demonstrated that the Project will not generate exceedances of the design goal within 100 feet of the studied receptor locations (Appendix B).

Project construction may cause short-term, unavoidable sound impacts. The sound levels resulting from construction activities vary significantly depending on several factors, such as the type and age of equipment, the specific equipment manufacturer and model, the operations being performed, and the overall condition of the equipment and exhaust system mufflers.

Construction activity will generate traffic that may temporarily increase sound, such as trucks traveling to and from the site on public roads. Traffic sound is categorized into two types: sound from temporary traffic during delivery, haulage of components, and construction, and sound from ongoing O&M activities, which is expected to be minor. Based on this assessment, Emmons-Logan Energy Storage has concluded that no mitigation measures are required.

Electric and Magnetic Fields

Low-level power frequency EMF will occur around the BESS (in the battery cells and inverters), along the collector lines, and at the collection substation. All Project facilities will be located away from residences as required by state and county regulations. At these distances, EMF levels will be below background levels. Given the above, there are no adverse impacts to residences, and therefore, Emmons-Logan Energy Storage has determined that no mitigation is required.

Hazardous Materials/Hazardous Waste

Emmons-Logan Energy Storage will conduct a Phase I Environmental Site Assessment. The results of the assessment will be used to avoid and minimize risk associated with potential recognized environmental conditions in the Project Area and surrounding areas. Significant findings are not anticipated due to the known historic uses of the property.

As with any construction activity, there is the possibility of accidentally spilling fuel, hydraulic fluid, or other hazardous substances during construction. Any petroleum waste generated will be handled and disposed of in accordance with local, state, and federal regulations.

If construction or operation of the Project involves storing more than 1,320 gallons of oil or other hazardous substances, a Spill Prevention, Control, and Countermeasure (SPCC) Plan will be required. This plan would outline the procedures for safe storage, spill prevention practices, and

emergency response protocols to ensure environmental safety. The need for an SPCC Plan will be assessed based on the final design of the Project.

Public Safety

Project construction and operation will have minimal impacts to the security and safety of the local communities. Security measures will be taken during the construction and operation of the Project, including temporary and permanent (safety) fencing, warning signs, and locks on equipment. The safety of the O&M staff, neighbors, and the public is the highest priority.

Emmons-Logan Energy Storage will implement several measures to mitigate risks to public safety. Batteries used at the Project will undergo rigorous industry testing and certification to ensure that cell and module designs are robust. Each container will be equipped with fire protection and control systems that comply with NFPA standards. The Project will have a thermal management system to maintain operations within a prescribed temperature range. The Project will utilize sensors to detect and alarm in the event of abnormal conditions, and each BESS will be equipped with a BMS that can automatically shut down an affected unit.

Emmons-Logan Energy Storage has prepared a draft ERP (Appendix E). Emmons-Logan Energy Storage has engaged with, and will continue to engage with, local first responders and fire officials to coordinate response efforts in the unlikely event of a fire. This coordination includes the following key actions:

- Orientation: A general orientation of the Project will be provided to first responders once key design details and access points have been established.

- ERP Training: Emmons-Logan Energy Storage, in collaboration with the Power Generation Division (PGD) of NextEra Energy Resources, will coordinate with applicable local emergency responders for ERP training closer to the commissioning phase of the Project. This training will help prepare first responders for managing potential incidents at the Project.

- Annual Refresher ERP Training: To maintain readiness, Emmons-Logan Energy Storage will offer annual refresher ERP training, as required by NFPA and the International Fire Code. This ensures ongoing preparedness and reinforces best practices for safety and fire protection systems at the Project.

Following the occurrence of an extraordinary event, Emmons-Logan Energy Storage will notify Emmons County Emergency Management and the Commission. Emmons-Logan Energy Storage will, within 30 calendar days of an extraordinary event, submit a report to Emmons County Emergency Management describing the cause of the occurrence and the steps taken to avoid future occurrences.

Military Operations

No military installations, assets, or operations are present within the Study Area. Therefore, Emmons-Logan Energy Storage has determined that no mitigation is required.

6.4 CULTURAL RESOURCES

6.4.1 Description of Resources

A Class I and Class III cultural resources inventory was conducted for the Project Area. The Class I inventory involved a review of documentation on file at the North Dakota State Historic Preservation Office (SHPO), regarding archaeological or historic sites and historic architectural resources that may exist within one mile of the Project Area. This inventory also included a review of previous cultural resources inventories conducted within the same radius. The Class III inventory encompassed a pedestrian survey of the entire Project Area. No cultural resources were identified during the Class III inventory. A redacted version of the Cultural Resources Inventory and addendum report are provided in Appendix C.

The Class I and Class III inventory report for the Project was submitted to the North Dakota SHPO. In a letter dated January 9, 2024, and December 19, 2024, the State Historical Society of North Dakota (SHSND) determined that there are “no significant sites affected by this project provided it takes place in the location and in the manner described”. A copy of SHSND’s effect determinations letter is provided in Appendix F3.

6.4.2 Impacts/Mitigation

No archaeological or historic sites, or historic architectural resources were identified during the Class III inventory of the Project Area. Before construction begins, Emmons-Logan Energy Storage will prepare an Unanticipated Discoveries Plan, which will outline the steps to be taken if previously unrecorded cultural resources or human remains are encountered during construction.

6.5 LAND USE

6.5.1 Description of Resources

Land Cover

The Study Area and surrounding landscape is primarily agricultural, with fields dedicated to the production of crops such as sunflowers, corn, and soybeans, along with rangeland used for cattle grazing. Additionally, the Study Area includes the existing Wind Energy Center and associated collection substation.

The land cover within the Study Area was analyzed using geographic information system (GIS) data from the U.S. Geological Survey's (USGS) National Land Cover Database (NLCD, 2021). Table 6.5.1-1 provides a summary of existing land cover within the Project Area and Study Area. Land cover within the Study Area is shown on Figure 6.5-1.

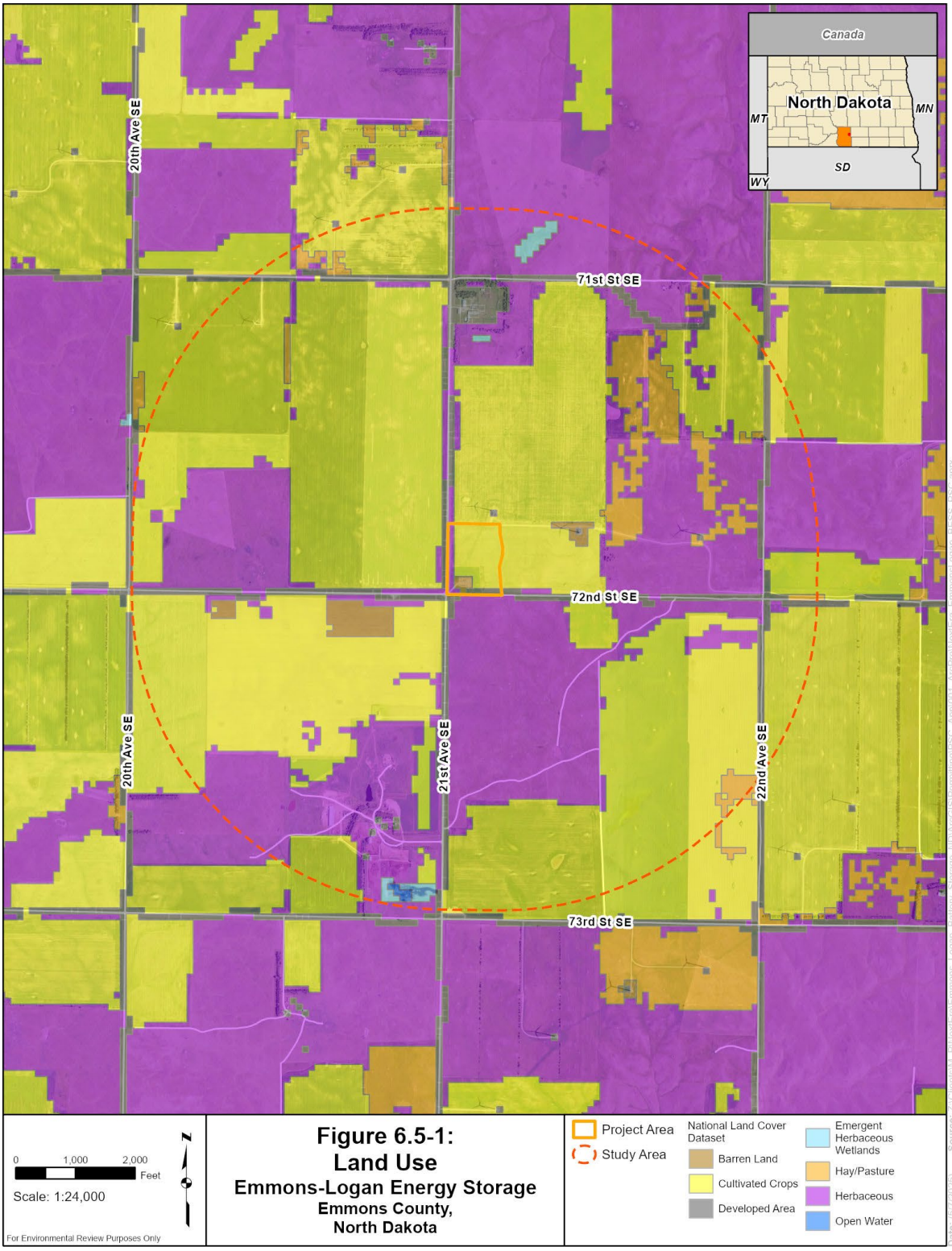


Figure 6.5-1:
Land Use
Emmons-Logan Energy Storage
Emmons County,
North Dakota

TABLE 6.5.1-1

Land Cover within the Project Area and Study Area

Land Use Category	Project Area (acres)	Study Area (acres)
Barren Land	1.6	21.7
Cultivated Crops	18.0	1,487.0
Developed, High Intensity	0.0	0.5
Developed, Low Intensity	0.2	20.8
Developed, Medium Intensity	0.0	1.9
Developed, Open Space	1.4	83.2
Emergent Herbaceous Wetlands	0.0	10.8
Hay/Pasture	0.0	83.1
Herbaceous	3.2	828.7
Open Water	0.0	1.6

Source: Multi-Resolution Land Characteristics Consortium. 2021. National Land Cover Database Class Legend and Description. Accessed May 2025. Available online at: https://www.mrlc.gov/data/legends/national-land-cover-database-class-legend-and-description.

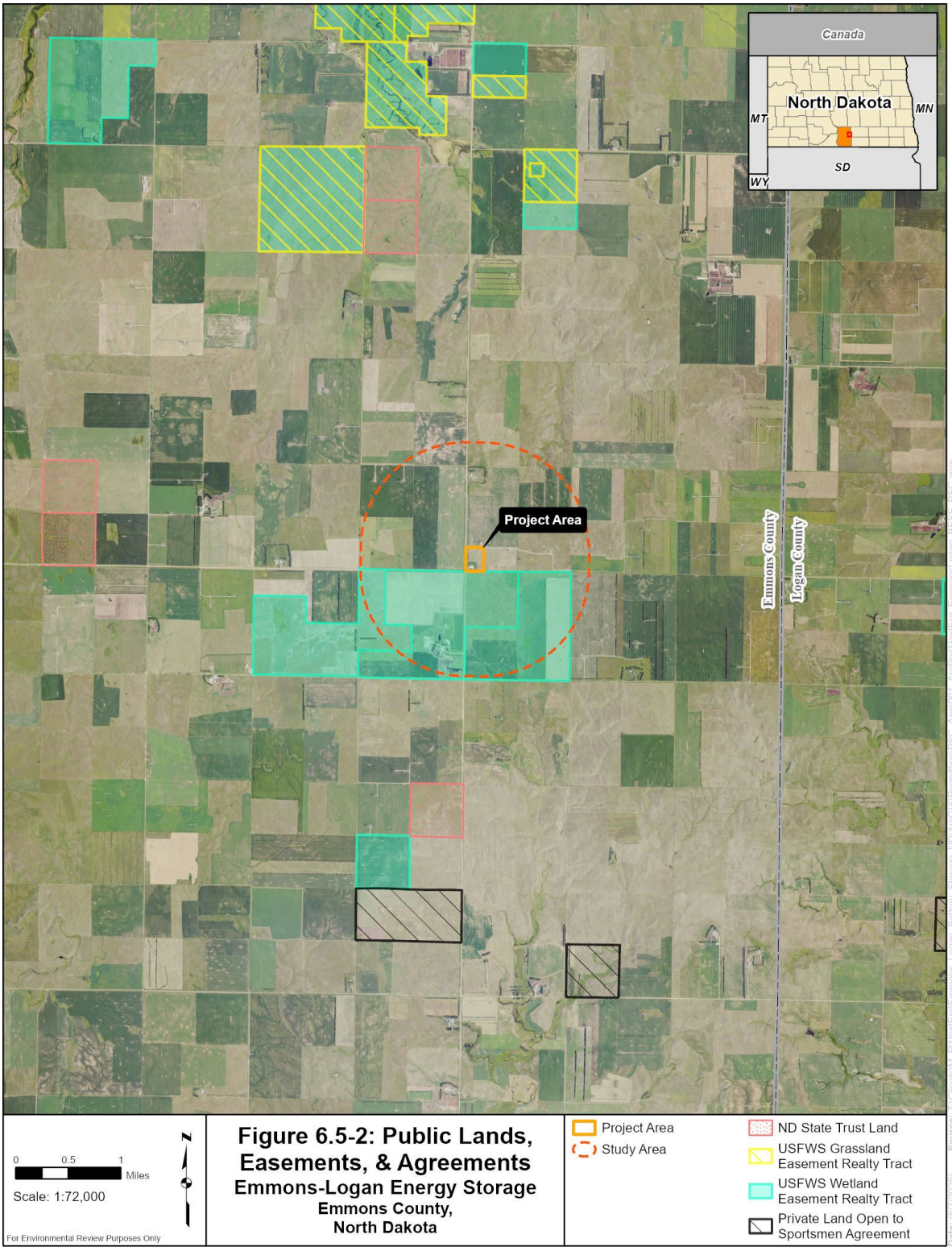
Agricultural lands, including cultivated crops and hay/pasture, are the most common land cover area within the Project Area and Study Area. Agricultural land within the Study Area primarily supports crop production and livestock grazing. Common crops include wheat, oats, and corn, with areas dedicated to forage crops like alfalfa to support cattle operations.

The Project is located within the Level IV ecoregion Missouri Coteau Slope, a more detailed subdivision of the broader Missouri Coteau ecoregion (Bryce et al. 1996). This ecoregion consists of gently rolling to moderately steep slopes that transition between the upland Missouri Coteau and lower surrounding plains. It is characterized by a mix of native prairie, wetlands, and cropland, with numerous prairie potholes that support waterfowl and other wildlife. The region's soils are generally loamy and well-drained, supporting grasses such as western wheatgrass and green needlegrass, along with scattered shrub communities.

Public Lands

The Study Area is not located within any designated or registered national sites, including parks, memorial parks, historic sites and landmarks, natural landmarks, historic districts, monuments, wilderness areas, wildlife areas, wild, scenic, or recreational rivers, wildlife refuges, and grasslands (NDGIS, 2025). The Study Area is not located within any designated or registered state sites, such as parks, forest management lands, historic sites, monuments, historical markers, grasslands, wild, scenic, or recreational rivers, game refuges, game management areas, management areas, or nature preserves. The Study Area is not located within any county parks and recreational areas, municipal parks, parks administered by other governmental subdivisions, hardwood draws, or enrolled woodlands.

The Project Area is not located within school trust land properties, which are managed by the North Dakota Department of Trust Lands (NDDTL) (NDGIS, 2025). The Project Area is not located within any federal, state, or local land. The closest publicly owned land parcel is managed by NDDTL and is approximately 1.0 mile south of the Study Area.


Canada
North Dakota
MT
MN
SD
WY
Project Area
Emmons County
Logan County
0 0.5 1
Miles
Scale: 1:72,000
For Environmental Review Purposes Only
Figure 6.5-2: Public Lands, Easements, & Agreements
Emmons-Logan Energy Storage
Emmons County, North Dakota
Project Area
Study Area
ND State Trust Land
USFWS Grassland Easement Realty Tract
USFWS Wetland Easement Realty Tract
Private Land Open to Sportsmen Agreement
Source: Z:\Clients\M_Private\Era\Emmons_Logan_Battery_Storage_ND\ArcGIS\Permitting\PSC_App\001_AGProj\NextEra_EmmonsLogan_BESS_PSC.aprx
Date: (5/7/2025)

Easements and Agreements

Within the Study Area, there are no Private Land Open to Sportsmen (PLOTS) agreements (NDGIS, 2025). The nearest PLOTS agreement is located approximately 2.0 miles south of the Study Area.

The U.S. Fish and Wildlife Service (USFWS) does hold wetland easements within the Study Area. These easements are legal agreements between landowners and the USFWS to protect wetlands that are vital to wildlife habitat. The USFWS owns the perpetual rights to certain wetland basins within wetland easements which cannot be burned, drained, filled, or leveled without authorization under a Special Use Permit from the USFWS. The upland portions of wetland easements may be developed without a permit as long as the wetland basins are avoided. Approximately 1,075 acres of wetland easements exist within the Study Area (USFWS, 2025b). There are no USFWS grassland easements within the Study Area; the nearest USFWS grassland easement is approximately 2.0 miles north of the Study Area.

The Project Area is not located within any PLOTS agreements or USFWS easements.

6.5.2 Impacts/Mitigation

Land Cover

Once construction activities have been completed, temporary construction areas will be able to be restored to their previous use. Emmons-Logan Energy Storage will protect existing trees and shrubs by avoiding tree removal whenever possible. Based on recent surveys and the preliminary design, no tree and shrub removal is anticipated during construction of the Project. If removal is necessary, Emmons-Logan Energy Storage will replace trees and shrubs consistent with the Commission's Tree and Shrub Mitigation Specifications. Emmons-Logan Energy Storage proposes the following mitigation measures:

- Develop and implement a noxious weed prevention plan.
- Avoid all direct, permanent impacts to unbroken grassland.
- Avoid tree and shrub removal.
- Provide construction contractors with static constraint maps and facilitate compliance through onsite environmental construction monitoring.

Public Lands

No Project facilities will be located on public lands. Any potential impacts to public lands would be visual in nature and would conform with existing development in the surrounding landscape. Therefore, Emmons-Logan Energy Storage has determined that no mitigation is required.

Easements and Agreements

No Project facilities will be located on PLOTS agreements or easements. Any potential impacts to PLOTS agreements or USFWS easements would be visual in nature and would conform with existing development in the surrounding landscape. Therefore, Emmons-Logan Energy Storage has determined that no mitigation is required.

6.6 GEOLOGICAL AND SOIL RESOURCES

6.6.1 Description of Resources

Geology and Soils

The Study Area is located within the Missouri Plateau, Glaciated section of the Great Plains Physiographic province. The Missouri Plateau can be further divided into glaciated and unglaciated sections. The glaciated portion of the Missouri Plateau contains typical glacial features such as moraines and kettle ponds.

Emmons-Logan Energy Storage completed a subsurface exploration and geotechnical engineering study for the Project. The purpose of the study was to:

- Explore subsurface soil, bedrock, and groundwater conditions.
- Conduct field and laboratory tests to characterize the subsurface soil and bedrock properties at selected locations across the site.
- Install piles and conduct load tests to assess geotechnical parameters.
- Provide geotechnical engineering recommendations for the design and construction of foundation systems and access roadways.

As indicated in the boring and test pit logs, the soil stratigraphy within the Project Area generally consists of 2 to 3 inches of topsoil, underlain by alternating layers of clay and sand, with topsoil depth varying across the site. Bedrock, identified as limestone, was encountered at approximately 15 feet below ground surface.

A topographic survey of the Project Area was conducted by the contracted Professional Land Surveyor. The surveyed topographic features show elevation ranges from 2,095 to 2,135 feet above mean sea level.

Mineral Resources

The Study Area contains no active sand or gravel mines (North Dakota State Soil Conservation Committee, 2023). The Study Area contains no active oil and gas wells (NDDMR, 2025). The Study Area is not located within an area of economic coal deposits or area of mined coal as mapped by the NDGS (NDGS, 2025).

Landslide Deposits

The Study Area avoids unstable land surfaces and geologic hazards, including landslide deposits mapped by the NDGS (NDGS, 2025).

6.6.2 Impacts/Mitigation

Geology and Soils

The geotechnical study provided insights into the soil, bedrock, and groundwater conditions across the site that will inform final design. While the study identified variations in subsurface properties, no significant geotechnical issues were found that would prevent the Project from being constructed.

Impacts to soils will be limited to areas removed from their current use by the occupancy of Project structures. Soil disturbance activities including grading for the BESS and road, and excavation activities for foundations and underground collection lines have the potential to contribute to soil erosion through the exposure of soils. Areas temporarily affected during construction will be restored to preconstruction conditions, to the extent practicable after construction has been completed.

Emmons-Logan Energy Storage proposes the following mitigative measures:

- Use the Project's SWPPP during construction to mitigate disturbed soils and prevent erosion.
- Maintain appropriate water and soil conservation practices during construction through the implementation of best management practices (BMPs). These practices include silt fencing, temporary reseeding, permanent seeding, mulching, filter strips, erosion blankets, grassed waterways and sod stabilization, and separation of topsoil and subsoil.
- Construction crews will receive training on the Project SWPPP and BMPs to ensure compliance with environmental regulations and prevent stormwater contamination.
- Utilize standard dust control measures to reduce generation of fugitive dust due to surface disturbance.

The maximum depth of construction is estimated at 12 to 15 feet below ground surface. This depth may vary depending on final Project design. No impacts to geological resources are anticipated due to the limited depth of Project construction.

Mineral Resources

No existing mines or coal leases will be impacted by the Project. Therefore, Emmons-Logan Energy Storage has determined that no mitigation is required.

Landslide Deposits

No existing unstable land surfaces, geologic hazards, or landslide deposits will be impacted by the Project. Therefore, Emmons-Logan Energy Storage has determined that no mitigation is required.

6.7 WATER RESOURCES

6.7.1 Description of Resources

Groundwater

Emmons-Logan Energy Storage completed a subsurface exploration and geotechnical engineering study for the Project. No groundwater in any of the borings and test pits were encountered during the survey.

Published historical water well logs from the North Dakota Department of Water Resources were reviewed in the vicinity of the Project site (NDDWR, 2025). Most water wells in the nearby vicinity of the Project Area were installed in deep aquifers below typical foundation depths. A recent well in 2021 recorded a groundwater level of approximately 217 feet below the ground surface. Additionally, water well logs recorded between 2003 and 2021 documented groundwater levels ranging from 95 feet to 240 feet below the ground surface.

Surface Waters

The Project Area does not contain any wetlands, but the surrounding landscape within the Study Area contains small, isolated prairie pothole wetlands. No waterways or streams are located within the Project Area. The Study Area is located within two watersheds, Headwaters Long Lake Creek and Clear Creek.

A wetlands and other waters delineation survey was conducted in support of the Project (Appendix D). Wetlands and other waters delineations followed methodology from the U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (Environmental Laboratory 1987) and Regional Supplement to the USACE Wetland Delineation Manual: Great Plains Region (Version 2.0) (USACE 2010). The USFWS National Wetlands Inventory (NWI) and U.S Geological Survey National Hydrography Dataset (NHD) were used to identify potential surface waters within the Project Area as a precursor for field delineations (USFWS, 2024, USGS, 2024). No wetlands or other waters were delineated in support of the Project.

Floodplains

No digital data FEMA Flood Insurance Rate Maps are available for the Study Area (U.S. Department of Homeland Security [USDHS], FEMA, 2025). The NDDWR Risk Assessment MapService (NDRAM) Base Level Engineering flood data within the Study Area identifies scattered areas with a 1% annual chance of flood risk. Within the Project Area, this flood risk is primarily associated with the NWI feature (NDDWR, NDRAM 2025). The 1% annual chance of flood risk, also known as the 100-year flood, refers to the probability of flooding occurring in a given year.

In response to the agency notification letter, the NDDWR stated that no FEMA National Flood Insurance Program (NFIP) floodplains are identified or mapped at the Project location. Based on the current Flood Insurance Rate Map and state minimum standards, NFIP-related permits are not likely required. However, flood risk is noted through the NDRAM and Base Level Engineering data and should be considered in the design process. Further details regarding the NDDWR response are provided in Section 7.2.6.

6.7.2 Impacts/Mitigation

Groundwater

The subsurface exploration and geotechnical engineering study for the Project concluded that groundwater may not have an impact on the design and construction of foundations shallower than 20 feet below ground. If shallow groundwater is disturbed by construction, it is anticipated that it would resume its natural course of flow upon construction completion and would not be significantly impacted. Based on the relatively small amount of increased impervious surface, the Project would not contribute to significant impacts on groundwater flow or recharge.

Temporary dewatering of groundwater (*i.e.*, locally lowering groundwater levels in the vicinity of the excavation) may be required during construction of foundations. If dewatering of excavations is necessary during foundation construction and the water is known to be uncontaminated, all water would be discharged according to items outlined in the SWPPP. If discharge water is suspected to be contaminated, an application for a temporary discharge permit (NDG-070000) will be submitted to the North Dakota Department of Environmental Quality (NDDEQ).

Groundwater contamination risk is minimized by the multiple layers of containment within the BESS. Each individual battery cell is separated and pressure-sealed, and several battery cells are

contained within a larger battery module. These modules are housed in fully enclosed containers. Under normal operation and decommissioning, all battery materials are contained. Multiple layers of safety protocols and protections are implemented to prevent any environmental contamination. Based on this assessment, Emmons-Logan Energy Storage has concluded that no mitigation measures are required.

Surface Waters

The Project will not require appropriation of surface water or permanent dewatering. The Project has been designed to avoid impacts to wetlands and other surface waters.

Emmons-Logan Energy Storage proposes the following avoidance and mitigation measures:

- The Project will be designed to avoid impacts to wetlands and other waters.
- The Project will be built to allow unrestricted flow of stormwater runoff.
- Wetlands will be delineated and flagged prior to construction when in close proximity to construction.
- Emmons-Logan Energy Storage will maintain appropriate water and soil conservation practices during construction through the implementation of BMPs outlined in the SWPPP. These practices include silt fencing, temporary reseeding, permanent seeding, mulching, filter strips, erosion blankets, grassed waterways, and sod stabilization.
- Coverage under the NDDEQ's National Pollutant Discharge Elimination System (NPDES) general construction permit will be obtained prior to the start of construction.
- Emmons-Logan Energy Storage will provide construction contractors with static constraint maps and ensure compliance through onsite environmental construction monitoring.

Floodplains

Project facilities will be located and constructed in such a manner that no impacts are anticipated to floodplains based on the FEMA Flood Insurance Rate Maps. Based on this assessment, Emmons-Logan Energy Storage has concluded that no mitigation measures are required.

6.8 WILDLIFE AND RARE AND UNIQUE NATURAL RESOURCES

6.8.1 Description of Resources

Federally Listed Species

The USFWS Information for Planning and Consultation (IPaC) tool was reviewed to determine if federally listed threatened and endangered species or their designated critical habitat have been previously documented within the Study Area. The IPaC data was initially gathered prior to field surveys in 2023 (USFWS, 2023) and again in 2025 to verify that the species list had not changed (USFWS, 2025c). The IPaC data indicated that four federally listed species may occur within the Study Area: piping plover (*Charadrius melodus*, threatened), rufa red knot (*Calidris canutus rufa*, threatened), whooping crane (*Grus Americana*, endangered), and Dakota skipper (*Hesperia dacotae*, threatened). USFWS designated critical habitat is not present within the Study Area.

Prior to field surveys, background data were collected for preliminary review and to aid in the field inventory of biological resources for each species. Field evaluations were conducted to confirm the

presence or absence of potentially suitable habitat for the federally listed species within the Study Area by Merjent on April 22, 2024, and October 24, 2024.

The piping plover is listed as threatened under the Endangered Species Act. The closest federally designated critical habitat is on the Missouri River located approximately 27 miles west of the Study Area (USFWS, 2025a). The Study Area is located outside the primary range and within the possible range of the piping plover (Dyke et al., 2015). There were no sandy or gravelly beaches, sandbars, or alkaline wetlands delineated within the Project Area. With the absence of preferred nesting habitat, it is unlikely that piping plovers may occur within the Project Area.

The rufa red knot is listed as threatened under the Endangered Species Act. There were no sandy or gravelly beaches, sandbars, or alkaline wetlands delineated within the Project Area. With the absence of preferred nesting habitat, it is unlikely that rufa red knots may occur within the Project Area.

The whooping crane is listed as endangered under the Endangered Species Act. The Project Area is located within the defined 50 percent occurrence frequency band of the whooping crane migration corridor (Pearse et al. 2018). Although suitable habitat for the whooping crane was identified around the Project Area, and it is possible that whooping cranes may occur within the Project Area, these habitat features are not necessarily unique within the landscape.

The Dakota skipper is listed as threatened under the Endangered Species Act. No observations of Dakota skipper at the township level have occurred historically within the last 30 years in the Study Area (USFWS, 2022). The Study Area is located outside the primary range of the Dakota skipper (Dyke et al., 2015). The Project Area contains cropland and therefore potential preferred habitat is not likely to be present.

Further details regarding threatened and endangered species survey methods and results are provided in Appendix D.

Avian Species

Migratory birds are federally protected under the Migratory Bird Treaty Act (MBTA), and bald eagles are protected under the MBTA and Bald and Golden Eagle Protection Act (BGEPA). According to the MBTA, it is illegal to “pursue; hunt; take; capture; kill; attempt to take, capture, or kill; possess; offer for sale; and export, import, or transport birds, their parts (*e.g.*, feathers), and active nests (and the eggs or young within).” BGEPA protects and conserves bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) from intentional take of an individual bird, chick, egg, or nest, including alternate and inactive nests. Unlike the MBTA, BGEPA prohibits disturbance that may lead to biologically significant impacts, such as interference with feeding, sheltering, roosting, and breeding or abandonment of a nest.

Avian species are common visitors to agricultural fields. According to a 2009 study, at least 30 North Dakota bird species use agricultural fields. Horned lark (*Eremophila alpestris*), killdeer (*Charadrius vociferus*), red-winged blackbird (*Agelaius phoeniceus*), and Canada goose (*Branta canadensis*) where observed most often in an agricultural field (Galle et al. 2009). No trees or forested areas are present within the Project Area; therefore, avian species that use trees or forested areas as habitat are unlikely to be present. Similarly, because of the lack of open water and absence of wetlands in the Project Area, no wetland- or water-dependent avian species are likely to be limited or absent, including waterfowl and waterbirds. Species of migratory birds associated with grassland would also be limited or absent.

A line-of-sight and public road survey for nesting raptors was conducted for the Study Area on April 22, 2024. The survey used 10x power magnification binoculars to scan tree lines and wooded areas

from the Project Area and public roads. The raptor nest survey identified one non-eagle raptor nest within the Study Area. The non-eagle raptor nest was unoccupied at the time of the surveys. No raptor nests were documented within the Project Area.

Further details regarding threatened and endangered species survey methods and results are provided in Appendix D.

Grasslands and Woodlands

The Project location was strategically chosen to avoid impacting unbroken grassland and woodland areas, focusing instead on placement within existing cropland. The selected Project Area consists of cropland, which reduces the potential for habitat fragmentation and maintains the ecological integrity of the surrounding grasslands. Details regarding the tree and shrub inventory are provided in Appendix D.

6.8.2 Impacts/Mitigation

Federally Listed Species

Emmons-Logan Energy Storage conducted environmental studies and designed the Project so that the Project would have minimal environmental impacts. No suitable habitat for piping plover, rufa red knot, Dakota skipper, or whooping crane was observed during field surveys within the Project Area. The surveys assessed wetland and grassland conditions, and no features indicative of preferred habitat for these species were identified. The Project Area consists primarily of existing cropland and is located adjacent to current energy infrastructure. USFWS designated critical habitat is not present within the Study Area.

Additionally, Emmons-Logan Energy Storage proposes the following mitigation measures:

- Construction contractors will receive training, spatial data, and static constraint maps to identify restricted areas for construction equipment.

- Contractors will be educated on threatened and endangered species. If any are identified, construction activities will pause until the species moves through the Project Area.

Avian Species

Emmons-Logan Energy Storage will conduct a pre-construction raptor nest survey within the Study Area to identify any newly built raptor nests. A separate nest clearance survey will also be completed within the Project Area before construction to minimize effects on nesting migratory birds.

Grasslands and Woodlands

The siting of the Project avoids impacts to native habitats that wildlife species rely on, such as unbroken grassland, woodlands, and wetlands. The tree and shrub inventory recorded a total of 20 Siberian elm (*Ulmus pumila*) trees within at the eastern boundary of the agriculture field just outside the Project Area. The Project avoids impacts to trees and shrubs, and should unforeseen impacts occur, Emmons-Logan Energy Storage will comply with the Commission's Tree and Shrub Mitigation Specifications.

7.0 STAKEHOLDER ENGAGEMENT

As part of development of the Project, Emmons-Logan Energy Storage and its representatives have maintained close coordination with agencies, as well as other groups and organizations through a combination of in-person meetings, mailers, and phone calls.

7.1 PROJECT NOTIFICATION LETTERS

In October 2024, Emmons-Logan Energy Storage distributed Project notification letters to local, state, and federal agencies and stakeholders in accordance with N.D. Admin. Code 69-06-01-05. These letters provided the following: a detailed overview of the Project; a request of information concerning any sensitive resources, ongoing or planned development, or property interests within or near the Study Area that the agency may possess; asked for relevant permits; and enclosed a Study Area map.

Table 7.1-1 provided below details the specifics of the Project notification exchange between Emmons-Logan Energy Storage and the stakeholders per N.D. Admin. Code 69-06-01-05. Appendix F1 contains a template of the notification letter.

TABLE 7.1-1

Project Notification Letters

Stakeholder Per North Dakota Administrative Code 69-06-01-05	Letter Sent	Response Received	Section Addressed
North Dakota Aeronautics Commission	October 25, 2024	No response	NA
North Dakota Attorney General	October 25, 2024	No response	NA
North Dakota Department of Agriculture	October 25, 2024	No response	NA
North Dakota Department of Health	October 25, 2024	No response	NA
North Dakota Department of Human Services	October 25, 2024	No response	NA
North Dakota Department of Labor and Human Rights	October 25, 2024	No response	NA
North Dakota Department of Career and Technical Education	October 25, 2024	No response	NA
North Dakota Department of Commerce	October 25, 2024	No response	NA
Energy Infrastructure and Impact Office	October 25, 2024	No response	NA
North Dakota Game and Fish Department	October 25, 2024	November 29, 2024	7.2.1, Appendix F2
North Dakota Industrial Commission	October 25, 2024	No response	NA
Office of Governor Doug Burgum	October 25, 2024	No response	NA
North Dakota Department of Transportation	October 25, 2024	October 25, 2024	7.2.2, Appendix F3
State Historical Society of North Dakota	October 25, 2024	January 9, 2024, November 20, 2024	7.2.3, Appendix F4
North Dakota Indian Affairs Commission	October 25, 2024	No response	NA
Job Service North Dakota	October 25, 2024	January 10, 2025	7.2.4, Appendix F5
North Dakota Department of Trust Lands	October 25, 2024	No response	NA
North Dakota Parks and Recreation Department	October 25, 2024	No response	NA
Natural Resources Conservation Service	October 25, 2024	November 13, 2024	7.2.5, Appendix F6
North Dakota Department of Water Resources	October 25, 2024	November 22, 2024	7.2.6, Appendix F7
U.S. Department of Defense	October 25, 2024	No response	NA
U.S. Fish and Wildlife Service	October 25, 2024	No response	NA
U.S. Army Corps of Engineers	October 25, 2024	November 1, 2024	7.2.7, Appendix F8

TABLE 7.1-1

Project Notification Letters

Stakeholder Per North Dakota Administrative Code 69-06-01-05	Letter Sent	Response Received	Section Addressed
Federal Aviation Administration	October 25, 2024	November 6, 2024	7.2.8
Emmons County	October 25, 2024	No response	7.2.11
North Dakota Transmission Authority	October 25, 2024	November 12, 2024	7.2.9, Appendix F9
North Dakota Pipeline Authority	October 25, 2024	No response	NA
North Dakota Department of Environmental Quality	October 25, 2024	November 14, 2024	7.2.10, Appendix F10
North Dakota Geological Survey	October 25, 2024	No response	NA
North Dakota Forest Service	October 25, 2024	No response	NA
Bureau of Land Management	October 25, 2024	No response	NA
Military Aviation and Installation Assurance Siting Clearinghouse	October 25, 2024	No response	NA
91st Missile Maintenance Squadron	October 25, 2024	No response	NA
Minot Air Force Base	October 25, 2024	No response	NA
Grand Forks Air Force Base	October 25, 2024	No response	NA

7.2 STAKEHOLDER CORRESPONDENCE SUMMARIES

The following sections provide high-level summaries of stakeholder outreach activities conducted throughout the development of the Project, including through the notification letters. Where applicable, the section includes a conclusion outlining how the Emmons-Logan Energy Storage conformed to any specific requests, approvals, or feedback received during the outreach process. Stakeholder meetings were conducted through a blend of in-person sessions and virtual platforms, supported by ongoing email communications that facilitated discussions, updates, and clarifications throughout the development of the Project. Appendices E2-10 contains copies of notification letter responses, high-level stakeholder correspondence, meeting notes, and other correspondence received to date.

7.2.1 North Dakota Game Fish Department & U.S. Fish and Wildlife Service

On March 15, 2023, Emmons-Logan Energy Storage attended a meeting with the North Dakota Game and Fish Department (NDGFD) to discuss proposed NextEra Energy Resources development projects in North Dakota, including the Project.

On June 13, 2024, Emmons-Logan Energy Storage attended a meeting with the NDGFD and USFWS to discuss proposed NextEra Energy Resources development projects in North Dakota, including the Project.

On June 27, 2024, Emmons-Logan Energy Storage held a virtual conference call with the USFWS to discuss proposed NextEra Energy Resources development projects in North Dakota, including the Project.

On August 21, 2024, Emmons-Logan Energy Storage attended a meeting with the USFWS to discuss proposed NextEra Energy Resources development projects in North Dakota, including the Project. Emmons-Logan Energy Storage noted that the Project is located on cropland and adjacent to the existing collection substation, with no foreseeable wildlife issues.

On November 29, 2024, the NDGFD responded to the notification letter, highlighting the importance of responsibly developing energy projects, particularly with the introduction of new technologies like battery storage in North Dakota. The NDGFD emphasized the need for thorough due diligence in site selection and construction to minimize potential risks to wildlife. The NDGFD provided recommendations to avoid and mitigate impacts, including adhering to specific site selection criteria, consolidating facilities to reduce habitat fragmentation, and considering wildlife-friendly plantings. Additionally, the NDGFD stressed the importance of developing safety and recycling plans for the batteries and requested to be kept informed throughout the project's progress to offer informed feedback to the Commission.

On February 21, 2025, Emmons-Logan Energy Storage responded to the NDGFD's letter from July 22, 2024. The response letter addressed each of the NDGFD's points in detail. Emmons-Logan Energy Storage stated that the Project will comply with North Dakota Administrative Code Section 69-06-08-01. Regarding adherence to the *Wind Energy Development in North Dakota – Best Management Practices*, Emmons-Logan Energy Storage selected a site within existing cropland and adjacent to current energy infrastructure to reduce potential effects on wildlife. Emmons-Logan Energy Storage confirmed that the Project avoids unstable land surfaces, state and federal lands, and wetlands, and it does not include a drain tile system. The Project design consolidates facilities and access roads to reduce habitat fragmentation. Fencing will meet NFPA 70 standards, also known as NEC, and no lighting is planned. Emmons-Logan Energy Storage will implement a noxious weed management plan. The Project will not impact unbroken grasslands, wetlands, or woodlands as it is located on cropland and therefore, Emmons-Logan Energy Storage does not anticipate the need for voluntary offsets. Safety plans will be developed to address potential risks from the batteries, including fire hazards and chemical leakage. Emmons-Logan Energy Storage also intends to recycle lithium-ion batteries, as many of the components can be repurposed from spent batteries for use in new products. NDGFD responded that they received Emmons-Logan Energy Storage's response letter via email on February 24, 2025.

Copies of correspondence between NDGFD and Emmons-Logan Energy Storage and NDGFD's response to the notification letter is provided in Appendix F2.

7.2.2 North Dakota Department of Transportation

On October 25, 2024, North Dakota Department of Transportation (NDDOT) responded to the notification letter. NDDOT stated that the Project will not have adverse effects on NDDOT highways.

Emmons-Logan Energy Storage will have to obtain permits and documents if the Project needs to work on highway right-of-way.

A copy of NDDOT's response to the notification letter are provided in Appendix F3.

7.2.3 State Historical Society of North Dakota

On January 9, 2024, SHSND responded to the Emmons-Logan Energy Storage Class I and Class III Cultural Resources Inventory report and found it acceptable. The SHSND determined that there are "no significant sites affected by this project provided it takes place in the location and in the manner described".

On November 20, 2024, SHSND responded to the agency notification letter.

On December 19, 2025, SHSND responded to the Emmons-Logan Energy Storage Class I and Class III Cultural Resources Inventory addendum report and noted that they had received it.

On December 19, 2024, SHSND sent a letter stating that within the area surveyed "there are no significant sites affected by the proposed project". However, within the Study Area there are 22 previously identified culturally significant sites and noted that the respective tribes should be consulted regarding the potential effects of noise levels and visual impacts on these sites.

On April 7, 2025, Emmons-Logan Energy Storage responded to the SHSND's letter from December 19, 2024. The response letter addressed potential effects on the 22 previously identified culturally significant sites, all of which were identified by Tribal surveyors during surveys for the existing Wind Energy Center. Emmons-Logan Energy Storage stated that outreach with respective Tribes is ongoing.

Copies of SHSND's effect determinations letter, response to the notification letter, and correspondence between SHSND and Emmons-Logan Energy Storage is provided in Appendix F4.

7.2.4 Job Service North Dakota

On January 10, 2025, Job Service North Dakota (Job Service) responded to the letter via phone call. The representative for Emmons-Logan Energy Storage confirmed there are currently no bids for construction contracts for the Project, and Emmons-Logan Energy Storage anticipates that bids will start sometime in 2025 or 2026. Job Service followed up with an email containing information on regulations for major construction projects in North Dakota.

A copy of Job Service's response to the notification letter is provided in Appendix F5.

7.2.5 Natural Resources Conservation Service

On November 13, 2024, the National Resources Conservation Service (NRCS) responded to the notification letter. The NRCS stated that it appears the Project is not supported by federal funding; therefore, Farmland Protection Policy Act does not apply, and no further action is needed.

In order for participants to continue to receive USDA benefits by stay being in compliance with the Wetland Conservation Provisions of the 1985 Food Security Act, NRCS developed guidelines for wetlands adjacent to agricultural lands that host construction of permanent structures. These guidelines are required to be followed in order for Project's to considered to have minimum impacts and continue to receive USDA funding.

A copy of NRCS's response to the notification letter and details on stated guidelines are provided in Appendix F6.

7.2.6 North Dakota Department of Water Resources

On November 22, 2024, the NDDWR responded to the notification letter, reviewed the environmental impacts associated with the Project, and provided the following comments. No conditional or temporary permit for water appropriation is required. No FEMA NFIP floodplains are identified or mapped at the Project location. No permits relative to the NFIP are likely required based on the current Flood Insurance Rate Map and State minimum standards though flood risk is noted through the NDRAM and Base Level Engineering data, which should be considered in the design process. NFIP permitting decisions fall under the authority of local floodplain administrators. The NDDWR Engineering and Permitting Section determined that no drainage or construction permits are required if no watercourses are modified (*i.e.*, deepened, widened,

rerouted, etc.) and no ponds, sloughs, or lakes with a drainage area of 80 acres or more are drained. NDDWR advised to coordinate with the local floodplain administrators of the zoning authorities impacted.

A copy of NDDWR's response to the notification letter is provided in Appendix F7.

7.2.7 United States Army Corps of Engineers

On November 1, 2024, the USACE responded to the notification letter, outlining that a permit is required if there is any impact on waters of the United States, including rivers, streams, and adjacent wetlands. The USACE provided guidance on the permit application process and emphasized the importance of accurately describing the proposed work and construction methodology. The USACE also requested that all submissions be sent electronically to the North Dakota Regulatory office.

Emmons-Logan Energy Storage does not anticipate needing a permit from the USACE.

A copy of USACE's response to the notification letter is provided in Appendix F8.

7.2.8 Federal Aviation Administration

On November 6, 2024, a representative from Emmons-Logan Energy Storage responded to a voicemail from the Federal Aviation Administration (FAA). During the phone conversation, the FAA stated that no FAA-owned land or navigational facilities were near the Project.

7.2.9 North Dakota Transmission Authority

On November 11, 2024, the North Dakota Transmission Authority (NDTA) responded to the notification letter stating that there are no current concerns regarding the Project.

A copy of NDTA's response to the notification letter is provided in Appendix F9.

7.2.10 North Dakota Department of Environmental Quality

On November 14, 2024, the NDDEQ responded to the notification letter and reviewed the Project with respect to possible environmental impacts. The NDDEQ emphasized the importance of minimizing fugitive dust emissions during construction and addressing any complaints efficiently. NDDEQ requires that aggregate that is used for road construction should not contain erionite. Care must be taken during construction near water bodies to prevent adverse effects, including minimal disturbance of stream beds and banks, as well as the prevention of oil and grease spills. NDDEQ provides additional guidance for projects that involve construction or environmental disturbance near North Dakota state waters. Projects disturbing one or more acres require a stormwater permit until vegetation or other permanent cover is re-established. The NDDEQ encourages efforts to reduce, reuse, and recycle solid waste materials. The USACE may require a water quality certification if the Project is subject to Section 404 permitting. The NDDEQ noted it owns no land in or adjacent to the Project, and it believes the proposed activities are consistent with the State Implementation Plan for the Control of Air Pollution for North Dakota.

Emmons-Logan Energy Storage will follow the NDDEQ recommendations and guidance.

A copy of NDDEQ's response to the notification letter is provided in Appendix F10.

7.2.11 Emmons County

Emmons-Logan Energy Storage introduced the Project to the Emmons County Board of County Commissioners on October 4, 2024. Emmons-Logan Energy Storage met again with the County on February 4 and April 1, 2025, to discuss permitting as well as provide updates on the Project. Emmons-Logan Energy Storage attended the county commission meeting on April 1, 2025, to discuss various aspects of the Project including the Conditional Use Permit, application costs, setbacks, and established industry standards and safety codes that the Project must comply with. Emmons-Logan then followed up with the county auditor on April 3, 2025, to discuss the Project. The conditional use permit was submitted to Emmons County on June 10, 2025.

7.2.12 Local Emergency and Fire Services

On February 18, 2025, Emmons-Logan Energy Storage attended a meeting with the Emmons County Emergency Services Manager to introduce the Project. The Emmons County Emergency Services Manager did not raise any concerns related to the Project at the meeting.

7.2.13 Tribes

On March 19, 2025, Emmons-Logan Energy Storage sent notification letters per a request from the SHSND to the following Tribes:

- Cheyenne River Sioux Tribe
- Chippewa Cree Tribe of Rocky Boy
- Crow Nation
- Flandreau Santee Sioux Tribe
- Fort Belknap Indian Community
- Fort Peck Assiniboine and Sioux Tribes
- Lower Brule Sioux Tribe
- Lower Sioux Indian Community
- Mandan, Hidatsa, Arikara Nation
- Northern Cheyenne Tribe
- Oglala Sioux Tribe
- Rosebud Sioux Tribe
- Santee Sioux Nation
- Shakopee Mdewakanton Sioux Community
- Sisseton Wahpeton Oyate
- Standing Rock Sioux Tribe
- Turtle Mountain Band of Chippewa Indians
- Upper Sioux Community
- Yankton Sioux Tribe

The notification letter provided an overview of the Project, information on Tribal cultural surveys conducted within and adjacent to the Project Area from 2018 and 2019, and an analysis of auditory effects that indicated no appreciable increase beyond conversational levels, given the presence of operating wind turbines and a substation in the immediate area. Appendix F11 contains a template of the notification letter. To date, no Tribes have expressed concerns regarding impacts from the Project.

8.0 POTENTIAL PERMITS AND APPROVALS

Table 8.0-1 outlines the federal, state, and county permits or approvals that have been identified as potentially required for the construction and operation of the Project. Permits dependent on the final Project layout will be applied for after receiving Commission approval, but prior to construction.

TABLE 8.0-1

Potential Permits and Approvals Required for Construction and Operation

Agency	Type of Approval	Status*	Need
Federal Approvals			
U.S. Environmental Protection Agency	Spill Prevention, Control, and Countermeasure Plan	3	Required if more than 1,320 gallons of oil storage is located onsite.
U.S. Fish and Wildlife Service	Special Use Permit	N/A	Not required as no USFWS easements are present.
U.S. Army Corps of Engineers	Nationwide Permit	N/A	Not required. Emmons-Logan Energy Storage does not anticipate impacts to wetlands or Section 10 waters.
	Section 404 Permit	N/A	
	Section 10 permit	N/A	
State of North Dakota			
North Dakota Department of Environmental Quality	National Pollutant Discharge Elimination System Permit: General Construction Storm Water	3	Required for disturbance of over one acre of land and a stormwater pollution prevention plan must be prepared.
North Dakota Department of Transportation	Road Approach/Access Permit	N/A	Not required as the Project will utilize the existing wind turbine access road off 21st Ave SE
North Dakota Department of Trust Lands	Rights-of-Way Easement and special access request	N/A	Not required as the Project is sited off of school trust lands.
North Dakota Department of Water Resources	Drainage Permit	N/A	Not required as the Project will not be required to drain a pond, slough, lake or sheetwater, or any series thereof, that has a watershed area (*i.e.*, drainage area) of 80 acres or more.
	Conditional or Temporary Permit for water appropriation	N/A	Not required. No water appropriation will be required.
	Water Permit	3	Required if drilling a well.
North Dakota Highway Patrol	Overheight/Overweight Permit	3	Required for hauling construction equipment and materials on State Highways.
North Dakota Public Service Commission	Certificate of Site Compatibility	2	Required for a utility-scale energy storage plant designed for operation as a grid resource and capable of 5 megawatts or more of rated power capacity.
	Ten-Year Plan	1	Required for a utility that owns or operates, or plans within the next ten years to own, operate, or start construction on any facility shall develop a ten-year plan. In accordance with N.D.C.C. Section 49-22-04 and N.D. Admin. Chapter 69-06-02, Emmons-Logan Energy Storage has filed a Ten-Year Plan for the Project with the Commission.
State Historical Society of North Dakota	Review of Effect Determinations	1	Required for construction of the Project. The SHSND determined that there are "no significant sites affected by this project provided it takes place in the location and in the manner described."
Local Permits			
Emmons County	Conditional Use Permit	2	Required to construct, operate or maintain the Project.
	Road Use Agreement	3	Required for use of county roads during construction of the Project.

*Status Explanation: 1 Completed and approved, 2 Applied and/or decision pending, 3 Will apply for prior to construction as applicable

9.0 QUALIFICATIONS OF CONTRIBUTORS

The qualifications of each significant contributor involved in the facility site location study and this application are provided below in Table 9.0-1.

TABLE 9.0-1

Qualifications of Contributors

Name and Project Role	Education and Professional Experience
Clay Cameron Director of Project Development NextEra Energy Resources, LLC	Mr. Cameron has over 25 years of experience in project management, including development, construction, budgeting, financial reporting, and federal, state, and local permitting and compliance. His responsibilities include financial feasibility analysis, cost and schedule management, and coordination of functional project teams and customer relationships. He has over 15 years of experience in the utility industry including roles of increasing responsibility in community development, engineering & construction, and project development. He studied business management at Louisiana State University and holds a State of Florida General Contractor license.
Clint Scherb Lead Project Manager Development NextEra Energy Resources, LLC	Clint Scherb has over 10 years of Management experience as an entrepreneur, consultant, disaster relief logistician, project manager, and energy infrastructure developer. Prior experience includes 8 years of service in the United States Marine Corps, as an "ANGLICO Marine", and 12 years in Law Enforcement as a Road Patrol Deputy, SWAT Team member, and Presidential/ Dignitary "Counter Assault Team" Operator. He studied business at Florida Atlantic University.
Dina Brown Environmental Services Project Manager NextEra Energy Resources, LLC	Ms. Brown has over 25 years of environmental experience in the planning, permitting, management and closure of energy industry projects. She has had direct responsibility for permitting and compliance with the Clean Water Act, National Environmental Policy Act, Resource Conservation and Recovery Act, Endangered Species Act, National Historic Preservation Act, Clean Air Act, as well as numerous state regulatory programs. She has a Master of Science in Forest Science from Oregon State University and a Bachelor of Science in Civil/Environmental Engineering from Texas A&M University. She is a Certified Professional Soil Scientist.
Dustin Wernicke Senior Environmental Specialist NextEra Energy Resources, LLC	Mr. Wernicke has over 14 years of environmental experience in the planning, permitting, and management of energy and infrastructure projects. He has had direct responsibility for compliance with the Clean Water Act, National Environmental Policy Act, Endangered Species Act, and numerous state regulatory programs. He holds a Bachelor of Science in Renewable Natural Resources from Texas A&M University. He is certified in Wetland Delineation, Interpreting and Measuring Indicators of Rangeland Health, and 40 Hour HAZWOPER.
Alexander Murphy Senior Project Management Consultant NextEra Energy Resources, LLC	Mr. Murphy has three years of sourcing experience managing an annual spend exceeding $140 million across three states in the Northeast. Additionally, he has three years of project management experience overseeing the development, scheduling, budgeting, permitting, procurement, construction, and commissioning of large-scale power utility projects. He manages BESS projects within the NextEra Engineering and Construction Business Unit and holds a Bachelor of Science in Business Management from Worcester Polytechnic Institute, a PMP certification, and a graduate certificate in Construction Project Management.
Tracy Davis Managing Attorney NextEra Energy Resources, LLC	Ms. Davis has over 20 years of experience practicing energy regulatory law and has served as in-house counsel for NextEra Energy Resources for the past eleven years. Her responsibilities include representation of NextEra Energy Resources subsidiaries and affiliates before state regulatory commissions, including the North Dakota Public Service Commission. She has a Bachelor of Arts and a Doctor of Jurisprudence from the University of Texas at Austin.
Lindsey Churchill, PhD, PWS Project Manager Merjent, Inc.	Dr. Churchill has 17 years of environmental permitting experience in wetland and natural resources. Her responsibilities included project management, application preparation, and oversight of surveys. She has a PhD in Natural Resources Management from North Dakota State University, a Master of Science in Natural Resources Management from NDSU, and Bachelor of Science in biology and mathematics from the University of Jamestown. She is registered as a Professional Wetland Scientist and a USACE-certified wetland delineator.
Dirk Churchill Environmental Specialist Merjent, Inc	Mr. Churchill has 13 years of experience in environmental assessment, permitting, and compliance services. His responsibilities included application preparation and leading wetland surveys. He has a Bachelor of Science in Natural Resources from North Dakota State University. He is a USACE-certified wetland delineator.
Jim Heideman GIS Analyst Merjent, Inc.	Mr. Heideman is a GIS Specialist with 12 years of experience in environmental consulting, focusing on cultural resource management and environmental permitting. He has been the GIS lead scopes with the role of creating/managing spatial data, publishing and hosting ArcGIS Online services, post-processing and analyzing spatial data, and preparing technical report figures.

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Appendix A

Emmons-Logan Energy Storage, LLC Practices and Commitment to the Environment

Emmons-Logan Energy Storage, LLC Practices and Commitment to the Environment

Emmons-Logan Energy Storage, LLC (Emmons-Logan Energy Storage), a wholly owned, indirect subsidiary of NextEra Energy Resources, LLC (NextEra Energy Resources), is committed to identifying, avoiding, and minimizing impacts to environmental and cultural resources throughout the life of the Emmons-Logan Energy Storage Project (Project). Emmons-Logan Energy Storage, as part of the NextEra Energy Resources family, is directed to:

- design, construct, operate, and maintain its facilities in an environmentally sound and responsible manner;
- prevent pollution, minimize waste, and conserve natural resources;
- avoid, minimize, and/or mitigate impacts to habitat and wildlife; and,
- engage stakeholders to build trust and work together toward common goals for environmental stewardship and protection.

Throughout Project development, Emmons-Logan Energy Storage has conducted environmental reviews following federal and state agency rules, guidance, and recommendations. Project development will continue to involve ongoing data collection and coordination with federal, state, and local agencies to ensure that the Project complies with environmental laws and minimizes its environmental footprint to the greatest extent practicable.

Appendix B

Acoustic Assessment

Acoustic Assessment

Emmons-Logan Energy Storage

AECOM Project number: 60710184

June 12, 2025

Delivering a better world

EL 000071

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1. Introduction

Emmons-Logan Energy Storage, LLC (Emmons-Logan Energy Storage), a wholly owned, indirect subsidiary of NextEra Energy Resources, LLC (NextEra Energy Resources), has started the evaluation of the Emmons-Logan Energy Storage Project (Project) in Emmons County, North Dakota. The Project will be a 140-megawatt (MW) battery energy storage system (BESS) with a four-hour duration by storing excess available energy from the grid. The analysis presented in this report was conducted with the goal of addressing potential sound impacts for the Project.

The Project includes approximately 186 battery storage units with associated inverters. The following analysis examines the potential sound impact of Project operations at nearby habitable structures.

1.1 Study Area and Existing Environment

The Project area encompasses approximately 19 acres in Emmons County. Roadways in the project vicinity include: 21st Avenue SE, 72nd Street SE, and 73rd Street SE. The four nearest noise-sensitive land uses are adjacent to 21st Avenue SE.

The land use within the study area is primarily agricultural, with rural farmstead residences and ancillary structures dispersed within one mile of the Project. Determination of habitable structures for existing structures was limited to publicly available knowledge via aerial imagery databases as well as a site visit completed on April 22, 2024. During the site visit, Project personnel traveled along public roads while noting potentially habitable structures. A total of 4 receptors were identified in the Project vicinity that are considered either inhabited, capable of habitation, or acting as a community building. For purposes of conservatism in this analysis, all structures that were identified as capable of habitation were considered active residential structures and considered potential sound-sensitive receptors.

The topography in this region is characterized by rolling grassy terrain, interspersed with many natural lakes and ponds. Emmons County would generally be considered a rural agricultural area and would therefore be expected to have low ambient sound levels. Existing sound sources in the area are likely dominated by natural wind-generated sounds, distant traffic sound from roadways, sounds from agricultural operations, wildlife sounds such as insects and birdcall, and during periods of elevated wind speeds, sounds from wind turbine operations.

1.2 Acoustical Terminology

For purposes of document brevity, AECOM assumes the reader is familiar with basic acoustical principles. Readers desiring an expanded introduction to acoustics fundamentals beyond what is presented in this section should consult industry-accepted reference texts such as *Noise & Vibration Control Engineering* (Beranek & Ver 1992) or *Engineering Noise Control* (Bies & Hansen 2003). Fundamental concepts and terms related to acoustics, as discussed in this technical report, are summarized in Appendix A.

2. Regulatory Setting & Acoustic Impact Criteria

A review was conducted of Federal, State, and Local laws, ordinances, regulations, and standards (LORS), applicable to sound levels generated by Project construction and operation. This review did not identify any applicable LORS at the federal level. At the state level, North Dakota Administrative Code (N.D.A.C.) Section 69-06-08-01(4) establishes sound limits that apply to wind energy conversion facilities.

There are no established sound level limits for an energy storage facility. While the state regulatory limit for wind energy conversion systems does not apply to the Project, Emmons-Logan Energy Storage accounted for this regulatory limit when developing the design goal of 45 dBA at 100 feet from identified noise-sensitive receptors.

2.1 State of North Dakota

The North Dakota Administrative Code (N.D.A.C.) Section 69-06-08-01(4) reads as follows:

> *A wind energy conversion facility site must not include a geographic area where, due to operation of the facility, the sound levels within one hundred feet of an inhabited residence or a community building will exceed forty-five dBA. The sound level avoidance area criteria may be waived in writing by the owner of the occupied residence or the community building.*

Project aerial mapping was reviewed and a site visit was completed to identify structures, including residential and community buildings, within the Project impact vicinity. Sound levels produced by the Project were predicted at a minimum distance of 100 feet from identified habitable structures and were assessed against the NDAC maximum sound level of 45 dBA for wind energy conversion facilities.

2.2 Emmons County

All four receptors are located within Emmons County, which has not established any restrictions on sound from BESS facilities or any other noise source. In the absence of a local standard, impact assessment will rely wholly on the design goal stated above.

3. Sound Prediction Methodology & Results

3.1 Modeling Software and Calculation Methods

The DataKustik CadnaA® Noise Prediction Model (Version 2025) was used to estimate the aggregate SPLs from Project operations at the identified receptor locations. CadnaA is a Microsoft Windows-based software program that predicts sound levels near sound sources based on the International Organization for Standardization (ISO) 9613-2 standard for outdoor sound propagation calculation. The model uses these industry-accepted propagation algorithms and accepts full (1/1) octave band and one-third (1/3) octave band sound power level (Lw, in dB re: one picowatt), provided by the equipment manufacturer and other sources.

The software's calculations account for classical sound wave geometric divergence, acoustical reflections, source directivity, meteorological effects, and attenuation factors resulting from air absorption, basic ground effects, and barrier/shielding from structures and/or topography. Topographical information was imported into the model using the official U.S. Geological Survey's National Elevation Dataset to accurately represent existing topography in the Project area.

3.2 Modeling Input Parameters

3.2.1 Predictive Model Configuration Settings

The sound propagation prediction model developed for this analysis assumed an outdoor air temperature of 50 degrees Fahrenheit (ºF), relative humidity of 70%, and three orders of acoustic reflections. The average ground absorption coefficient, which can range from zero (0, for acoustically reflective surfaces, such as water or pavement) to unity (1, for acoustically absorptive ground coverings, such as loose, porous soils or snow), was set to an average of 0.5. This input parameter is notably conservative in comparison to actual site conditions which are expected to exhibit higher ground absorption coefficients of 0.7 to 0.9 due to the prevalence of natural grasslands, agricultural soils, and seasonal snow cover.

As sound waves propagate from the source, their energy is continuously degraded by atmospheric absorption. Atmospheric absorption rates improve as acoustical frequency increases and vary with temperature and moisture content. While acoustical energy loss due to this environmental factor is generally modest at distances less than 1,000 feet, over greater distances the result will be a substantial reduction of high-frequency sound and the apparent preservation of low-frequency sound that attenuates (due to ground and atmospheric absorption) at much lower rates.

3.2.2 Receiver Input

Representative receiver points were modeled for the four nearest identified residential structures in the study area. Each receiver point was modeled at a height of 4 meters (relative to the ground), which could be typical of the height of a second-story listener. Per the NDAC sound limit regulation, sound levels from Project operations are to be assessed “within 100 feet of an inhabited residence,” thus, the modeled receiver points were placed at this distance in the direction of the proposed Project site.

3.2.3 Source Input

The Project plans to install 186 LG JF2 DC Link 5.1 battery storage units and 62 GE Vernova Flex Inverter units. The Project will additionally incorporate an electrical substation, which is currently anticipated to have two primary transformers. Performance specifications and proprietary sound data for the battery storage and inverter units were provided by the manufacturers for the purpose of this study. Transformer sound levels were derived from noise specifications of equipment from similar projects.

The sound level data received for the battery storage units was used to calibrate and assign the source sound power levels in the model. Based on the data received, the highest contributor of sound is anticipated to be the Vernova Flex Inverter units.

Inverters were modeled with a louvered vertical area source on each long dimension of the unit. The battery storage unit featured seven louver sources, one on one of the short dimensions of the unit (representing one 2-kilowatt (kW) Heating, Cooling, and Ventilation [HVAC] unit) and six on one of the long dimensions of the unit (three 2-kW HVAC units and three 7-kW chiller units). The source components of the battery storage and inverter units were then calibrated to the sound pressure level data provided in the manufacturer-provided test reports.

Table 1 displays the various sound power level inputs for each piece of Project equipment used in the prediction model.

Table 1. Octave-Band Sound Power Level Inputs

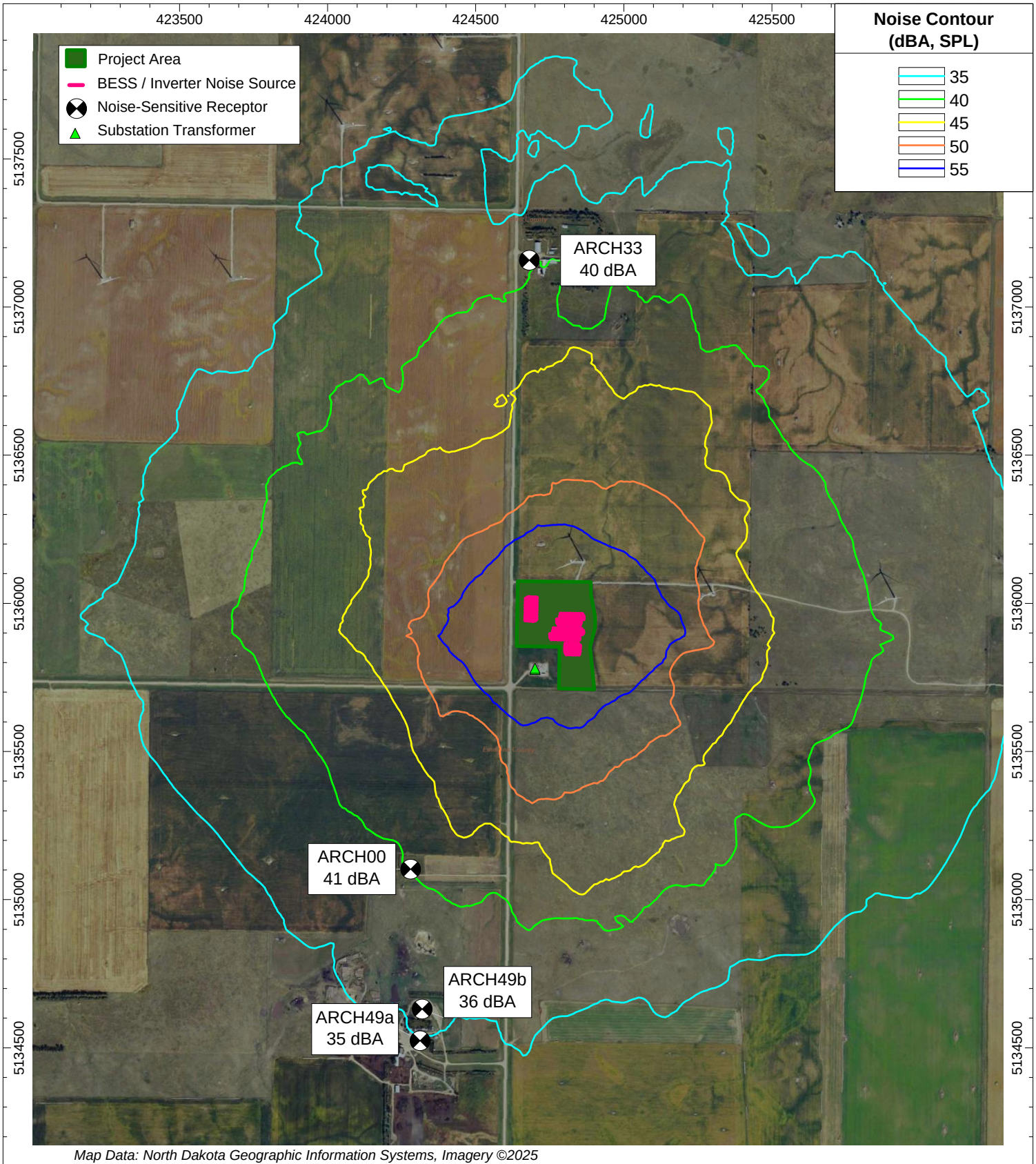
	A-Weighted Octave-Band Center Frequency, Hz									
Source	31.5	63	125	250	500	1000	2000	4000	8000	Total, dB(A)
LG JF2 DC Link 5.1, 2 kW HVAC Unit	32	49	55	66	70	72	71	69	62	77
LG JF2 DC Link 5.1, 7 kW Chiller Unit	23	43	67	70	76	74	71	67	60	80
GE Vernova Flex Inverter	63	71	78	82	94	92	90	88	76	98
Substation Transformer	82	88	90	85	85	79	74	69	62	94

3.3 Modeling Results

Predicted levels in this section are presented in tabulated form in Table 2 and as sound level contour plots in Figure 1, which depicts the propagation of Project operational sound upon the Project area as color-coded isopleths (Project-attributed sound level "contours" that depict equivalent predicted sound levels).

Table 2. Summary of Predicted Operational Sound Levels at Occupied Structures

Receptor ID	Receptor Address	Approximate Distance to Project, feet	Predicted BESS Noise Level, dB(A)
ARCH 00	7275 21st Ave SE, Kintyre, ND	2,600	41
ARCH 33	7130 21st Ave SE, Kintyre, ND	3,400	40
ARCH 49a	7275 21st Ave SE, Kintyre, ND	4,300	35
ARCH 49b	7273 21st Ave SE, Kintyre, ND	4,000	36



Map Data: North Dakota Geographic Information Systems, Imagery ©2025

N

Date Created: 6/12/2025

Created by: DMB

Figure 1

Predicted Operational Noise Levels
Emmons-Logan BESS

AECOM Delivering a better world

Acoustics & Noise Control Practice

Predicted Project Operation Noise Contours
Emmons-Logan Energy Storage
Emmons County, ND

EL 000078

4. Conclusion

Project operational sound has been predicted and assessed against the design goal of 45 dBA within 100 feet of a receptor structure. The predictive operational acoustical modeling, performed with CadnaA software (and its algorithm basis per ISO 9613-2) and inclusive of conservative parameter assumptions, demonstrates that the Project will not generate exceedances of the 45 dBA design goal within 100 feet of any receptor locations.

5. Literature Cited

International Organization for Standardization (ISO), 1996, “Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation.” ISO 9613-2:1996(E).

State of North Dakota, Energy conversion facility siting criteria, 69-06-08, North Dakota Administrative Code. Last accessed on April 29, 2025: https://ndlegis.gov/information/acdata/pdf/69-06-08.pdf

Appendix A Glossary of Acoustical Terminology

- **Sound** – For this analysis, sound is a physical phenomenon generated by vibrations that result in waves that travel through a medium, such as air, and result in auditory perception by the human brain.
- **Noise** – Noise typically is regarded as unwanted or disruptive sound. Whether something is perceived as a noise event is influenced by the type of sound, the perceived importance of the sound, and its appropriateness in the setting, the time of day, and the type of activity during which the noise occurs and the sensitivity of the listener. Local jurisdictions may have legal definitions of what constitutes “noise” and such environmental parameters to consider.
- **Frequency** – Sound frequency is measured in hertz (Hz), which is a measure of how many times each second the crest of a sound pressure wave passes a fixed point. For example, when a drummer beats a drum, the skin of the drum vibrates a number of times per second. When the drum skin vibrates 100 times per second, it generates a sound pressure wave that oscillates at 100 Hz, and this pressure oscillation is perceived by the ear/brain as a tonal pitch of 100 Hz. Sound frequencies between 20 and 20,000 Hz are within the range of sensitivity of the best human ear.
- **Amplitude or Level** – Amplitude is measured in decibels (dB), using a logarithmic scale. A sound level of zero dB is approximately the threshold of human hearing and is barely audible under extremely quiet listening conditions. Normal conversational speech has a sound level of approximately 60 dB. Sound levels above approximately 110 dB begin to be felt inside the human ear as discomfort and eventually pain at 120 dB and higher levels. The minimum change in the sound level of individual events that an average human ear can detect is about 1 to 2 dB. A 3 to 5 dB change is readily perceived. A change in sound level of about 10 dB is usually perceived by the average person as a doubling (or if decreasing by 10 dB, halving) of the sound’s loudness.
- **Sound pressure** – Sound level is usually expressed by reference to a known standard. This document refers to sound pressure level (SPL), which is expressed on a logarithmic scale with respect to a reference value of 20 micropascals. SPL depends not only on the power of the source, but also on the distance from the source and the acoustical characteristics of the space surrounding the source.
- **Sound power** – Unlike sound pressure, which varies with distance from a source, sound power (and its counterpart sound power level) is the acoustic power of a source, typically expressed in watts.
- **A-weighting** – Sound from a tuning fork contains a single frequency (a pure tone); however most sounds one hears in the environment do not consist of a single frequency. Instead, they are composed of a broad band of frequencies differing in sound level. The method commonly used to quantify environmental sounds consists of evaluating all frequencies of a sound according to a weighting system that reflects the typical frequency-dependent sensitivity of average healthy human hearing at moderate sound levels. This is called “A-weighting,” and the decibel level measured is referred to as dBA. In practice, the level of a sound source conveniently is measured using a sound level meter (SLM) that includes a filter corresponding to the dBA “curve” of decibel adjustment per octave band center frequency from a “flat” or unweighted SPL.
- **Equivalent sound level (L_{eq})** – Environmental sound levels vary continuously and include a mixture of sound from near and distant sources. A single descriptor, L_{eq} may be used to describe such sound that is changing in level from one moment to another. L_{eq} is the energy-average sound level during a measured time interval. It is the “equivalent” constant sound level that would have to be produced by a single, steady source to equal the acoustic energy contained in the fluctuating sound level measured over a specified period of time.

Appendix C

Cultural Resources Report

C1. Cultural Resources Inventory Report

MANUSCRIPT DATA RECORD FORM

1. Manuscript Number: [SHPO assigns]
2. SHPO Reference #:
3. Author(s): Damien Reinhart
4. Title: A Class I and Class III Cultural Resources Inventory of NextEra's Proposed Emmons-Logan Battery Energy Storage System (BESS), Emmons County, North Dakota
5. Report Date: December 7, 2023
6. Number of Pages: 10
7. Type – I, T, E, O: I

   I=Inventory; T=Formal Testing; E=Excavation; O=Other
8. List formally tested or excavated sites (not probes):
9. Acres: 17.1
10. List the legal description* and study unit. For study unit assignment, use the township tables in the *State Plan*, http://history.nd.gov/hp/stateplan_arch.html.
    Study Units: LM, CB, KN, HE, SM, GA, JA, GR, NR, SR, SO, SH, YE

*For *inventory*, *formal testing* and *excavation* projects, *list the CLASS III legal locations only*.

County	Township	Range	Section	Study Unit
EM	134N	74W	34	SM

Negative Class III Survey Form Report
(for surveys 40 acres or less)

Cultural Resource Report Information

Report Title: A Class I and Class III Cultural Resources Inventory of NextEra's Proposed Emmons-Logan Battery Energy Storage System, Emmons County, North Dakota

Funding/Permitting Agency(s): NextEra Energy, Inc. (NextEra)

Cultural Resource Firm/Federal Agency/State Agency: Merjent, Inc./ North Dakota Public Service Commission (PSC)

Report Author: Damien Reinhart

Principal Investigator (Signature and Title): Damien Reinhart Principal Investigator

Report Date: December 7, 2023

Field Personnel: Damien Reinhart

Survey Date: October 16, 2023

Location Information and Survey Conditions

County: Emmons

USGS 7.5' Topographic Quadrangle(s): Schell Buttes NW

Project Type/Title: Battery Energy Storage System

[redacted]

Project Description and Purpose: The proposed Emmons-Logan Battery Energy Storage System (BESS) (Project) is in Emmons County, North Dakota. The Project will store and distribute energy generated by the existing Emmons-Logan Wind Energy Center. The Project will consist of lithium-ion batteries, battery storage containers, inverters, a supervisory control and data acquisition system, a substation/switchyard, fencing, and access roads. The Project will also include a short 230-kilovolt (kV) overhead generation tie line, which would extend to the adjacent Emmons-Logan Wind 230-kV collection substation.

General Project Location (Directions to Project area): The Project area is located approximately 15 miles southeast of Hazelton, North Dakota [redacted]

APE Area (Acres): 53.4 Number of Acres Surveyed: 17.1

Instructions: Submission of this report must include: 1) a paper copy, 2) a PDF version, and 3) the corresponding shapefiles. Submit to the Archaeology & Historic Preservation Division of the State Historical Society of North Dakota at 612 E Boulevard Ave, Bismarck, ND 58505.

Topography: The landscape surrounding the Project area is gently rolling and is surrounded by agricultural fields with some poorly drained soils in low-lying areas.

Soils: Soils in the more northerly portion of the Project area consisted of loam topsoil with clay loam beneath that are well-drained. Soils in the eastern Project area were also clay loams that are well-drained; however, this area had slightly steeper slopes of 6 to 9 percent compared to the 3 to 6 percent slopes along the northern Project area.

Current and Historical Land Use: Mr. Reinhart observed previous disturbance within the Project area, mostly related to agricultural use, as evidenced from the recently harvested canola fields located throughout. Other disturbances include existing buried utilities, a wind turbine and associated access road, the gravel access road to the existing substation, the disturbed and graveled substation area, grading of the property, and periodic mowing of grass along the perimeter of the substation fence. The Project area appears to have been used historically for agriculture prior to construction of the Emmons-Logan Wind Energy Center.

Vegetation (including % visibility): Vegetation within the Project area consisted mainly of harvested canola fields with a general range of bare ground surface visibility (GSV) between 50 to 75 percent, with some exposed soils showing a GSV of 100 percent. The main access and substation areas had been graded and topped with large gravel. Extra care was taken to slowly survey the exposed soils and stones that were visible on the surface. Most of the larger glacial stones that had once been located on the surrounding hills had been collected by farmers and placed on field clearing piles. Evidence of this was noted during the survey as a large pile of field clearing was located within the northern Project area.

Environmental Limitations to Survey: No limitations beyond safety protocols being followed for proximity to an electrical substation. The surrounding fields have obviously been disturbed for most likely a century. The skies were mainly clear, with sun, and moderate winds present during the survey.

Surface and/or Minerals Ownership: Private landowner and private energy.

Other comments: None.

Background and Survey Information

Historic Plats/Atlases/Sources: Historic General Land Office (GLO) maps were also reviewed for the Project area and no evidence of the built environment was identified (see Figure 2). Aerial imagery was viewed for the years 1938, 1952, 1960, 1995, 2018, and 2019. No structures were visible on any of the imagery. It can be challenging to see on some of the imagery, but it appears that the Project area was either left for grazing or utilized for agriculture prior to construction of the current Emmons-Logan Wind Energy Center. The 2019 aerial is the first image that shows the current substation and wind turbines being constructed. This information can be found on the ND Historical Map & Aerial Dissemination Service website at: https://aerial.dwr.nd.gov.

Study Unit: Southern Missouri River Study Unit

Instructions: Submission of this report must include: 1) a paper copy, 2) a PDF version, and 3) the corresponding shapefiles. Submit to the Archaeology & Historic Preservation Division of the State Historical Society of North Dakota at 612 E Boulevard Ave, Bismarck, ND 58505.

Previous Sites within APE[1]: None.

Previous Sites outside APE within 1 mile: Twelve sites, six architectural site leads, two precontact isolated find, and 33 tribally identified precontact stone feature sites have been recorded within 1 mile of the Project area. [redacted] None of the proposed infrastructure that will be constructed for the Project are expected to exceed the current height of what is present within the Project area. None of the previously recorded sites would have their integrity affected and there would be no adverse effects that would alter previous recommendations of eligibility for listing on the NRHP.

The overall site assemblage within the Project area reflects the Euro-American settlement of rural North Dakota at the turn of the 20th century with 11 previously recorded sites or site leads consisting of farms. Seven archaeological sites, two precontact isolated finds, and 33 tribally identified precontact stone features sites have been identified in the 1-mile search area. This indicates moderate to high potential for precontact archaeological resources in the Project area related to precontact resource procurement (i.e., small-scale lithic reduction and/or upland game hunting). Most of these sites were identified in undeveloped landscapes that have remained largely unchanged since they were deposited. The Project area consists of active agricultural fields and previously disturbed energy infrastructure. The likelihood of intact stone features is diminished; however, lithics and other artifacts may still be present in agricultural fields. Historic GLO maps were also reviewed for the Project area and no evidence of the built environment was identified (see Figure 2).

TABLE 1

Previously Identified Archaeological and Historic Sites within 1 Mile of the Project Area

SITE	Site Type
[redacted]	

[1] Any project that includes a site, site lead, or isolated find within the APE is considered a positive find requires a full report.

Instructions: Submission of this report must include: 1) a paper copy, 2) a PDF version, and 3) the corresponding shapefiles. Submit to the Archaeology & Historic Preservation Division of the State Historical Society of North Dakota at 612 E Boulevard Ave, Bismarck, ND 58505.

TABLE 1

Previously Identified Archaeological and Historic Sites within 1 Mile of the Project Area

SITE	Site Type
[redacted]	[redacted]

Previous Surveys within APE: Five previous pedestrian surveys and one architectural survey appear within the records kept at the files present at the State Historical Society of North Dakota for the Project area (018105, 018146, 018353, 018396, and 018424).

Previous Surveys outside APE within 1 mile: The search results indicate that four previous cultural resource inventories that were conducted within 1 mile of the Project area, but outside of the Project area. A total of nine previous surveys in the 1-mile study area, including within the Project area, took place between 1990 and 2019 (see Table 2). Inventories were conducted primarily in support of the Emmons-Logan Wind Energy Center, material borrowing projects, telecommunications, architectural inventory of local farms, and rural water systems.

Instructions: Submission of this report must include: 1) a paper copy, 2) a PDF version, and 3) the corresponding shapefiles. Submit to the Archaeology & Historic Preservation Division of the State Historical Society of North Dakota at 612 E Boulevard Ave, Bismarck, ND 58505.

TABLE 2

Previous Inventories within 1 Mile of the Project Location

Manuscript no.	Title	Author	Year
005390	A Survey of Standing Structures in Emmons County, North Dakota	Schweiger, Kurt P. – Primary Author	1990
007266	Results of Class II and Class III Cultural Resource Inventories for the BEK Communications Cooperative: The Hazelton Exchange in Emmons Co, ND	(Rothwell, Sarah J. – Primary Author) (Larson, Thomas K., and Penny, Dori M. – Contributing Authors)	1998
008319	BEK Kintyre Exchange Upgrade Class II Cultural Resources Inventory, Burleigh, Emmons, McIntosh and Logan Counties, ND	Olson, Byron L.-Primary Author	2002
014407	Logan-McIntosh-Emmons Phase 4 Expansion Project Rural Distribution Lines 2013 Class II-III Cultural Resources Inventories, South Central Regional Water District, North Dakota	(Jackson, Michael A. – Primary Author) (Jackson, Carrie F., Rokke, Nathan J., Toom, Dennis L., and Whitman, Madisson L. - Contributing Authors)	2013
018105	A Class III: Intensive Cultural Resource Survey for the Emmons-Logan 230 kV Transmission Line in Emmons County, North Dakota	(McCarthy, Melinda M. – Primary Author) (Bender, Marcia L., Eiceman, Thomas, and Miller, Heidi – Contributing Authors)	2018
018146	Class III: Intensive Cultural Resource Survey for the Emmons-Logan Wind Energy Center in Emmons and Logan Counties, North Dakota	(McCarthy, Melinda M. – Primary Author) (Bender, Marcia L., Eiceman, Thomas, Healy, Bridget, Huling, Christina, and Kaleigh, Perry – Contributing Authors)	2018
018353	An Addendum to the Class III Intensive Cultural Resource Survey for the Emmons-Logan Wind Energy Center in Emmons and Logan Counties, North Dakota	(McCarthy, Melinda M. - Primary Author); (Bender, Marcia L., Huling, Christina, and Neumiller, Alex - Contributing Authors)	2019
018396	Emmons-Logan Wind Energy Center Turbine and Access Road Addendum: A Class III Intensive Cultural Resource Survey in Emmons and Logan Counties, North Dakota	(McCarthy, Melinda M. - Primary Author); (Bender, Marcia L., Huling, Christina, and Neumiller, Alex - Contributing Authors)	2019
018424	A Class III Architectural Survey – Emmons-Logan Wind Energy Center in Emmons and Logan Counties, North Dakota	(McCarthy, Melinda M. – Primary Author) (Bender, Marcia L., Eiceman, Thomas, and Johnson, Kirsten – Contributing Authors)	2018

Date of File Search: March 13, 2023, and August 8, 2023 (updated)

Survey Methodology (transect intervals): Merjent Archaeologist, Damien Reinhart, conducted a Class III cultural resources inventory within the portions of the Project area that had not been previously subjected to a pedestrian survey on October 16, 2023. The pedestrian survey was conducted with transects spaced no more than 15 meters apart.

Shovel/Auger Probing Methodology: No sites were identified; therefore, no site evaluations were performed. Merjent followed the North Dakota SHPO Guidelines Manual for Cultural Resource Inventory Projects and was prepared to excavate shovel tests, should GSV be deemed too low to allow for a good faith effort to identify historic properties. The GSV was generally above 50 percent and, in many instances, 75-100 percent; hence, no shovel tests for low GSV were performed.

Area Surveyed (Acres): 17.1

Time Expended (Person Hours): 2 hours.

Instructions: Submission of this report must include: 1) a paper copy, 2) a PDF version, and 3) the corresponding shapefiles. Submit to the Archaeology & Historic Preservation Division of the State Historical Society of North Dakota at 612 E Boulevard Ave, Bismarck, ND 58505.

Recommendation: No cultural resources were observed during the inventory. Merjent recommends that the Project be granted a determination of *No Historic Properties Affected* and clearance to proceed as proposed.

Other Comments: Photographs were taken, and global positioning system (GPS) routes and points were recorded. Notes were taken during the inventory and all photographs, GPS and geographic information systems data, and field notes are on file at Merjent's office in Minneapolis, Minnesota. A map of the Project area is attached to this report (see Figure 1), as are photographs of the Project location.

Required Attachments

USGS 7.5' Topographic Quadrangle Map(s) Showing: 1) Project Location; 2) Previously Recorded Sites; 3) Previously Conducted Surveys. Redacted
Project Map(s) Depicting: 1) APE; 2) Survey Limits Redacted
Project Overview Photograph(s) Showing Field Conditions

Instructions: Submission of this report must include: 1) a paper copy, 2) a PDF version, and 3) the corresponding shapefiles. Submit to the Archaeology & Historic Preservation Division of the State Historical Society of North Dakota at 612 E Boulevard Ave, Bismarck, ND 58505.

Photo 1. Overview of northern survey area, facing northeast from southwest corner. A field clearing pile is shown mid-ground.
Photographed by D. Reinhart on October 16, 2023.
Image has not been altered.

Photo 2. Overview of eastern survey area, facing northeast from southwest corner.
Photographed by D. Reinhart on October 16, 2023.
Image has not been altered.

C2. Cultural Resources Inventory Report Addendum

MANUSCRIPT DATA RECORD FORM

1. Manuscript Number: [SHPO assigns]
2. SHPO Reference #:
3. Author(s): Damien Reinhart
4. Title: Addendum to A Class I and Class III Cultural Resources Inventory of NextEra's Proposed Emmons-Logan Battery Energy Storage System (BESS), Emmons County, North Dakota
5. Report Date: November 13, 2024
6. Number of Pages: 10
7. Type – I, T, E, O: I

   I=Inventory; T=Formal Testing; E=Excavation; O=Other
8. List formally tested or excavated sites (not probes):
9. Acres: 10.3
10. List the legal description* and study unit. For study unit assignment, use the township tables in the *State Plan*, http://history.nd.gov/hp/stateplan_arch.html.
    Study Units: LM, CB, KN, HE, SM, GA, JA, GR, NR, SR, SO, SH, YE

*For *inventory*, *formal testing* and *excavation* projects, *list the CLASS III legal locations only*.

County	Township	Range	Section	Study Unit
EM	134N	74W	34	SM

Negative Class III Survey Form Report
(for surveys 40 acres or less)

Cultural Resource Report Information

Report Title: Addendum to A Class I and Class III Cultural Resources Inventory of NextEra's Proposed Emmons-Logan Battery Energy Storage System, Emmons County, North Dakota

Funding/Permitting Agency(s): Emmons-Logan Energy Storage, LLC, a wholly owned, indirect subsidiary of NextEra Energy Resources, LLC

Cultural Resource Firm/Federal Agency/State Agency: Merjent, Inc./ North Dakota Public Service Commission (PSC)

Report Author: Damien Reinhart

Principal Investigator (Signature and Title): Damien Reinhart Principal Investigator

Report Date: November 13, 2024

Field Personnel: Damien Reinhart

Survey Date: October 24, 2024

Location Information and Survey Conditions

County: Emmons

USGS 7.5' Topographic Quadrangle(s): Schell Buttes NW (1980)

Project Type/Title: Battery Energy Storage System

[redacted] [redacted] [redacted]

Project Description and Purpose: The proposed Emmons-Logan Battery Energy Storage System (BESS) (Project) is in Emmons County, North Dakota. The Project will store and distribute excess energy. The Project includes an up to 140-megawatt, four-hour duration battery energy storage system facility with associated inverters, transformers, underground cables, and other ancillary facilities such as fencing, roads, and a supervisory control and data acquisition system. The Project is proposed to connect with the existing Emmons-Logan Wind, LLC 230-kV collection substation (collection substation) at the existing Emmons-Logan Wind Energy Center. The current survey effort was an expansion to include a bigger area that reached the edges of the parcel to the east, south, and west.

General Project Location (Directions to Project area): The Project area is located approximately 15 miles southeast of Hazelton, North Dakota. [redacted].

Instructions: Submission of this report must include: 1) a paper copy, 2) a PDF version, and 3) the corresponding shapefiles. Submit to the Archaeology & Historic Preservation Division of the State Historical Society of North Dakota at 612 E Boulevard Ave, Bismarck, ND 58505.

APE Area (Acres): 87.5 (Including previous survey areas) Number of Acres Surveyed: 10.3

Topography: The landscape surrounding the Project area is gently rolling and is surrounded by agricultural fields with some poorly drained soil in low-lying areas.

Soils: Soils in the current survey area were also clay loams that are well-drained and this area had slightly steeper slopes of 6 to 9 percent compared to the 3 to 6 percent slopes to the north.

Current and Historical Land Use: Mr. Reinhart observed previous disturbance within the Project area, mostly related to agricultural use, as evidenced from the recently harvested corn fields located throughout. Other disturbances include the gravel county road located along the west edge of the current survey area and a two-track road and ditch with culverts along the south edge of the survey area. The Project area appears to have been used historically for agriculture prior to construction of the Emmons-Logan Wind Energy Center.

Vegetation (including % visibility): Vegetation within the Project area consisted mainly of harvested corn fields with a general range of bare ground surface visibility (GSV) between 40 to 60 percent, with many portions of the field displaying exposed soils with GSV of 100 percent. Extra care was taken to slowly survey the exposed soils and stones that were visible on the surface. Most of the larger glacial stones that had once been located on the surrounding hills had been collected by farmers and placed on field clearing piles. Evidence of this was noted during the previous survey as a large pile of field clearing located to the north in the previous survey area. The west edge of the survey area consisted of a gravel county road with ditches on each side. This stretch of survey had been completely disturbed by construction of the road. The south edge of the current survey area consisted of mixed grasses within the disturbed road ditch of a poorly maintained two-track road. Two drainage culverts were noted during the survey. The GSV was generally 40 percent with periodic soil exposures from badgers and rodent burrowing. Exposed soils were inspected but no cultural materials were identified.

Environmental Limitations to Survey: No limitations beyond safety protocols being followed for proximity to an electrical substation. The surrounding fields have obviously been disturbed for most likely a century. The skies were partly cloudy with a light breeze present during the survey.

Surface and/or Minerals Ownership: Private landowner and private energy.

Other comments: None.

Background and Survey Information

Historic Plats/Atlases/Sources: Historic General Land Office (GLO) maps were originally reviewed for the Project area and no evidence of the built environment was identified (see Figure 2). Aerial imagery was viewed for the years 1938, 1952, 1960, 1995, 2018, and 2019 (BLM 2024). The Bureau of Land Management (BLM) information was accessed in October 2024 prior to the current Class III survey and can be found at www.glorecords.gov. No structures were visible on any of the imagery. It can be challenging to see on some of the imagery, but it appears that the Project area was either left for grazing or utilized for agriculture prior to construction of the current Emmons-Logan Wind Energy Center. The 2019 aerial is the first image that shows the current substation and wind turbines being constructed.

Instructions: Submission of this report must include: 1) a paper copy, 2) a PDF version, and 3) the corresponding shapefiles. Submit to the Archaeology & Historic Preservation Division of the State Historical Society of North Dakota at 612 E Boulevard Ave, Bismarck, ND 58505.

The aerial imagery can be found on the ND Historical Map & Aerial Dissemination Service website at: https://aerial.dwr.nd.gov.

Study Unit: Southern Missouri River Study Unit

Previous Sites within APE[1]: None.

Previous Sites outside APE within 1 mile: See the results of the previous file search. No new sites were identified during the current Class I file search update.

Date of File Search: October 22, 2024 (updated)

Survey Methodology (transect intervals): Merjent Archaeologist, Damien Reinhart, conducted a Class III cultural resources inventory within the portions of the Project area that had not been previously subjected to a pedestrian survey on October 24, 2024. The pedestrian survey was conducted with parallel sinuous transects spaced no more than 15 meters apart.

Shovel/Auger Probing Methodology: No sites were identified; therefore, no site evaluations were performed. Merjent followed the North Dakota SHPO Guidelines Manual for Cultural Resource Inventory Projects and was prepared to excavate shovel tests, should GSV be deemed too low to allow for a good faith effort to identify historic properties. The GSV was generally above 50 percent and, in many instances, 75-100 percent; hence, no shovel tests for low GSV were performed.

Area Surveyed (Acres): 10.3

Time Expended (Person Hours): 2 hours.

Recommendation: No cultural resources were observed during the inventory. Merjent recommends that the Project be granted a determination of *No Historic Properties Affected* and clearance to proceed as proposed.

Other Comments: Photographs were taken, and the global positioning system (GPS) routes and points were recorded. Notes were taken during the inventory and all photographs, GPS and geographic information systems data, and field notes are on file at Merjent's office in Minneapolis, Minnesota. A map of the Project area is attached to this report (see Figure 1), as are photographs of the Project location.

Required Attachments

USGS 7.5' Topographic Quadrangle Map(s) Showing: 1) Project Location; 2) Previously Recorded Sites; 3) Previously Conducted Surveys. Redacted
Project Map(s) Depicting: 1) APE; 2) Survey Limits Redacted
Project Overview Photograph(s) Showing Field Conditions

[1] Any project that includes a site, site lead, or isolated find within the APE is considered a positive find requires a full report.

Instructions: Submission of this report must include: 1) a paper copy, 2) a PDF version, and 3) the corresponding shapefiles. Submit to the Archaeology & Historic Preservation Division of the State Historical Society of North Dakota at 612 E Boulevard Ave, Bismarck, ND 58505.

Photo 1. Overview of central survey area, facing north from northeast corner.
Photographed by D. Reinhart on October 24, 2024.
Image has not been altered.

Photo 2. Overview of western survey area, facing north from south end.
Photographed by D. Reinhart on October 24, 2024.
Image has not been altered.

Appendix D

Natural Resources Inventory Report

Natural Resources Inventory Report

Emmons-Logan Energy Storage

EMMONS COUNTY, NORTH DAKOTA

PREPARED FOR:

Emmons-Logan Energy Storage, LLC
700 Universe Boulevard
Juno Beach, Florida 33408

PREPARED BY:

Merjent, Inc.
1 Main Street SE, Suite 300
Minneapolis, Minnesota 55414

MARCH 2025

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ACRONYMS AND ABBREVIATIONS

BGEPA	Bald and Golden Eagle Protection Act
CFR	Code of Federal Regulation
Commission	North Dakota Public Service Commission
dbh	diameter-at-breast height
GIS	geographic information system
GPS	Global Positioning System
IPaC	Information for Planning and Consultation
kV	kilovolt
Merjent	Merjent, Inc.
NHD	National Hydrography Dataset
Emmons-Logan Energy Storage	Emmons-Logan Energy Storage, LLC
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
Project	Emmons-Logan Energy Storage
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

1.0 INTRODUCTION

Emmons-Logan Energy Storage, LLC (Emmons-Logan Energy Storage), a wholly owned, indirect subsidiary of NextEra Energy Resources, LLC, is proposing to construct and operate the Emmons-Logan Energy Storage (Project) in Emmons County, North Dakota. The Project will be a 140-megawatt (MW) battery energy storage system (BESS) with a four-hour duration to store excess energy available on the grid. The Project is proposed to be located adjacent to the existing Emmons-Logan Wind Energy Center (Wind Energy Center).

Merjent, Inc. (Merjent) provided natural resources inventory services in support of the Project including the Project's application to the North Dakota Public Service Commission (Commission) for a Certificate of Site Compatibility, which included a wetland and other waters delineation survey, federally listed species evaluation, tree and shrub inventory, and ground-based line-of-sight raptor nest survey. The area where surveys were conducted includes any location where potential Project infrastructure could be sited and is referred to as the Survey Area and is shown on Figure 1.

Emmons-Logan Energy Storage selected a site within existing cropland and adjacent to current energy infrastructure to reduce potential effects on wildlife. The Survey Area covers approximately 90 acres in Emmons County, North Dakota. All facilities will be located on private land. The Survey Area is located approximately 13 miles southwest of Napoleon, 14 miles northeast of Linton, 15 miles southeast of Hazelton, and 21 miles northwest of Wishek. The Survey Area is located adjacent to 72nd St SE and the Emmons-Logan Wind 230-kilovolt collection substation.

Field surveys were conducted on two occasions: the first to cover the initial project boundary and the second to address an expansion of the boundary. The initial survey took place in April 2024, followed by a second visit in October 2024. Additionally, a portion of the Survey Area was surveyed previously as part of the Wind Energy Center and associated transmission line development, which was commissioned in December 2019.

Representative photographs collected during the natural resources inventory field surveys are included in Appendix A. Geospatial field data was collected using an Android tablet paired with a Trimble R1 GNSS Receiver Global Positioning System (GPS) unit capable of recording data to sub-meter accuracy. Presented in this report is the background, methods, results, and summary of the natural resources inventory.

2.0 BACKGROUND

2.1 WETLAND AND OTHER WATERS

Wetlands are defined in the 1977 Executive Order 11990 – Protection of wetlands and in Section 404 of the Clean Water Act of 1986, as areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. The three parameters that define a wetland, as outlined in the U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual, are hydric soils, hydrophytic vegetation, and hydrology (Environmental Laboratory, 1987). Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, and river overflows. The functions of wetlands include providing habitat for wildlife, improving water quality through filtration and purification, storing floodwaters, and recharging groundwater.

In addition to federal regulations, North Dakota, in accordance with its Administrative Code (Section 69-06-08-01(3)), stipulates that wetlands and woodlands are an avoidance area for projects that require a Certificate of Site Compatibility from the Commission. Projects may only impact wetlands or woodlands if there is no reasonable alternative.

2.2 FEDERALLY LISTED SPECIES EVALUATION

The U.S. Fish and Wildlife Service (USFWS) administers the Endangered Species Act of 1973, which establishes protection of species federally listed as threatened and endangered and their associated designated critical habitats. An endangered species is a species that is in danger of extinction throughout all or a significant portion of its range. A threatened species is a species that is likely to become endangered in the foreseeable future. Critical habitat for these species can be designated if that habitat includes specific areas that are occupied by a species at the time of listing or unoccupied areas that are considered essential to the conservation of a species. North Dakota does not have a state threatened and endangered species list; however, it recognizes those federally listed under the Endangered Species Act.

In addition to federal regulations, North Dakota, in accordance with its Administrative Code (Section 69-06-08-01(1)), recognizes and addresses critical areas for threatened or endangered animals and plant species, including those crucial for their life stages and those where irreversible damage to unique or rare species might occur. Furthermore, the North Dakota Century Code (Section 49-22-09(1)) mandates the consideration of the proposed site's impact on areas uniquely rich in biological diversity or serving as habitats for rare and endangered species.

The USFWS Information for Planning and Consultation (IPaC) tool was reviewed to determine if federally listed threatened and endangered species or their designated critical habitat have been previously documented within the Survey Area. The IPaC data was initially gathered prior to field surveys in 2023 (USFWS, 2023) and again in 2025 to verify that the species list had not changed (USFWS, 2025b). The IPaC data indicated that four federally listed species may occur within the Survey Area: piping plover (*Charadrius melodus*, threatened), rufa red knot (*Calidris canutus rufa*, threatened), whooping crane (*Grus Americana*, endangered), and Dakota skipper (*Hesperia dacotae*, threatened). The Survey Area is not within designated critical habitat.

2.2.1 Piping Plover

The preferred habitat of piping plover is generally characterized as exposed, sparsely vegetated shores and islands of shallow, alkali lakes and impoundments for breeding including salt-encrusted, alkali, or sub-saline semi-permanent lakes, ponds, and rivers with wide shorelines of gravel, sand, or pebbles (Dyke et al., 2015). The piping plover nest in the sand or shoreline, generally near an object such as a clump of grass, rock, or small log but never in heavy vegetation. Piping plover forage on fly larvae, beetles, crustaceans, mollusks, and other small animals near the shoreline or sometimes by the nest.

Critical habitat has been federally designated for the piping plover in North Dakota mainly along the shores of the Missouri River and wildlife refuge areas. Key areas and conditions for piping plover in North Dakota include the Alkali Lakes Core Area, which follows the Missouri Coteau landform from central North Dakota to northeast Montana (Dyke et al., 2015).

2.2.2 Rufa Red Knot

The rufa red knot is noted for its long-distance migrations of more than 9,000 miles between circumpolar breeding habitats and marine wintering habitats in southern latitudes of South America

(USFWS, 2025c). Most of the known migration routes for the rufa subspecies are along coastal regions of Canada and the United States; however, an interior migratory route was identified to and from the Arctic passing through Saskatchewan and Alberta Canada through the Great Plains states to non-breeding areas mostly in Texas and Louisiana along coastal areas of the Gulf of Mexico.

Critical habitat has been federally proposed for the rufa red knot, although there is no proposed critical habitat in North Dakota (USFWS, 2021). In North Dakota during migration, both alkaline and freshwater lakes have been used by rufa red knots. The observations of rufa red knots in North Dakota are scattered throughout the state. Rufa red knots have been observed in the Missouri River system as well as sewage lagoons and large permanent freshwater wetlands. There are no stopover sites consistently used by rufa red knots in North Dakota. The entire state of North Dakota is within the possible range of the rufa red knot (Dyke et al., 2015).

2.2.3 Whooping Crane

Whooping cranes typically migrate from their breeding grounds in the Wood Buffalo National Park in Canada, to their wintering areas in the Aransas National Wildlife Refuge in Texas, moving through Oklahoma, Kansas, Nebraska, North Dakota, and South Dakota (USFWS, 2025d).

A 200-mile-wide migration corridor has been delineated for the whooping crane that contains 95 percent of all verified sightings. Stopover habitat during migration includes a variety of croplands with roosting occurring in shallow, freshwater inland wetlands. This entire migration corridor includes a swath of the central U.S. and extends from southcentral North Dakota along the Missouri River to northwest North Dakota through the Survey Area.

The Survey Area is located within the 50 percent whooping crane migration corridor (Pearse et al., 2018). In general, cropland and wetland areas within the migration corridor are depicted with a high decile rating (Niemuth et al., 2018) with local variations depending on the spatial configuration of suitable foraging and roosting habitats. The decile map separates all acres within North and South Dakota into predicted deciles of use, including areas outside of the whooping crane migration corridor.

2.2.4 Dakota Skipper

Dakota skipper is an obligate of high-quality, untilled prairie habitat dominated by native species. Dakota skipper larvae exclusively feed on native bunch grasses, and adults require native forbs that flower during their flight-period as sources of nectar. The species is not likely to be present in cropped or previously cropped areas, non-native haylands, pasture, grasslands dominated by non-native species, or in areas with significant trees and/or shrub cover. Dakota skipper can occur in two different habitat types, identified as Type A and Type B by the USFWS.

Type A habitat is low, wet-mesic prairie with little topographic relief that occurs on nearshore glacial lake deposits (USFWS, 2022). Type A Dakota skipper habitat is dominated by bluestem grasses, with forbs including black-eyed susan (*Rudbeckia hirta*), wood lily (*Lilium philadelphicum*), bluebell bellflower (*Campanula rotundifolia*), and mountain deathcamas (*Zigadenus elegans*) as sources of nectar.

Type B habitat primarily occurs on rolling terrain over gravelly glacial moraine deposits and is dominated by bluestems and needle or porcupine grasses (*Hesperostipa spp*) (USFWS, 2022). Little bluestem (*Schizachyrium scoparium*) is often the most important species for larvae in this habitat type, but side oats grama (*Bouteloua curtipendula*) and prairie dropseed (*Sporobolus heterolepis*) can also be important. Narrow-leaved purple coneflower (*Echinacea angustifolia*) is

among the most important source of nectar for adults in this habitat type, along with upright prairie coneflower (*Ratibida columnifera*), and common gaillardia (*Gaillardia aristata*).

Dakota skippers have been observed in one township in Emmons County and the surrounding county to the north, Burleigh County. The nearest pre 2019 Dakota skipper township detection is located approximately 19 miles northwest of the Survey Area in Township 137 North, Range 75 West as shown on Figure 3 (USFWS, 2022). No designated critical habitat for Dakota skipper is located within the Survey Area.

2.3 RAPTOR NEST SURVEY

The Migratory Bird Treaty Act was enacted in 1918 for the purpose of prohibiting the use of birds and bird parts in the millinery industry. Under the MBTA, it is illegal "to pursue, hunt, take, capture, kill … possess, offer for sale, sell … purchase … ship, export, import …transport or cause to be transported… any migratory bird, any part, nest, or eggs of any such bird …" (16 United States Code 703). The word "take" is defined by regulation as "to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect" (50 Code of Federal Regulation [CFR] 10.12). The USFWS maintains a list of all species protected by the MBTA at 50 CFR 10.13.

Additionally, bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (BGEPA). The BGEPA protects bald eagles (*Haliaeetus leucocephalus*) and golden eagles (*Aquila chrysaetos*) and their nests throughout their range in the United States. Although it does not designate critical habitat, BGEPA protects individual eagles and nests from disturbance.

2.4 TREE AND SHRUB INVENTORY

The Commission requires that prior to the removal of any tree or shrub for construction, all trees with a diameter-at-breast height (dbh) of one-inch or greater be inventoried, to record the quantity, species, and location. All shrubs and coniferous trees of any diameter must be inventoried to record the quantity, species, and location.

The removed species will be replaced during the planting season with conservation grade saplings at least two years old and at a 2:1 ratio. Any species deemed to be noxious or invasive will be replaced with a similar non-invasive, non-noxious species suitable for the North Dakota growing conditions as provided by the Natural Resources Conservation Service. The tree and shrub replacements will be inspected annually for two consecutive years after replanting occurs. Alternatively, if approved by the Commission, a mitigation plan providing long-term wildlife habitat and conservation benefits may be implemented in lieu of replanting trees and shrubs.

3.0 METHODS

3.1 WETLAND AND OTHER WATERS DETERMINATION

The delineation of wetlands and other waters within the Survey Area began with a comprehensive desktop review using a range of online mapping tools, including Esri World Imagery, U.S. Department of Agriculture (USDA) Web Soil Survey Database (USDA, 2024), U.S. Geological Survey (USGS) National Hydrography Dataset (NHD; USGS, 2024), and USFWS National Wetlands Inventory (NWI; USFWS, 2024). This preliminary analysis set the foundation for subsequent wetland field surveys conducted on April 22, 2024, and October 24, 2024.

Adhering to the guidelines stipulated in the USACE Wetlands Delineation Manual and the Regional Supplement to the USACE Wetland Delineation Manual: Great Plains Region Version 2.0) (USACE, 2010), the field wetland biologist implemented paired sample plots to discern wetland and upland conditions. The criteria for wetland vegetation, soil characteristics, and hydrology were systematically assessed, with the completion of a Wetland Determination Data Form, for each paired plot.

The identification of dominant vegetation involved a detailed approach, encompassing concentric sampling rings for herbaceous, sapling/shrub, and tree species within specified radii. The Cowardin classification system was applied to categorize vegetation, using field references for unidentified plant species.

Soil evaluation encompassed the use of Munsell Soil Color Charts for hue, value, and chroma, complemented by checks for texture, redoximorphic features, and hydric conditions. For each wetland, hydrology was analyzed for all primary and secondary wetland indicators.

The wetland boundaries were accurately mapped by a wetland scientist using GPS, and the collected data were integrated into a geographic information system (GIS) for visualization.

3.2 FEDERALLY LISTED SPECIES EVALUATION

Prior to field surveys, background data were collected for preliminary review and to aid in the field inventory of biological resources for each species. Field evaluations were conducted to confirm the presence or absence of potentially suitable habitat for the federally listed species within the Survey Area by Merjent on April 22, 2024, and October 24, 2024.

3.2.1 Piping Plover

A field habitat assessment was conducted to evaluate the potential presence of suitable habitat for the piping plover within the Survey Area, with a focus on wetlands and water features. The assessment also included a review of landscape characteristics that might influence the suitability of the habitat for nesting and foraging.

3.2.2 Rufa Red Knot

A field habitat assessment was conducted to evaluate the potential presence of suitable habitat for the rufa red knot within the Survey Area, with a focus on wetlands and water features. This included identifying areas where suitable food sources and resting sites might be available during migratory periods.

3.2.3 Whooping Crane

A field habitat assessment was conducted to evaluate the potential presence of suitable habitat for the whooping crane within the Survey Area, with a focus on wetlands and water features. The review also considered whether the area provides adequate roosting and foraging opportunities for the species.

3.2.4 Dakota Skipper

The field habitat assessment for the Dakota skipper focused on land cover types within the Survey Area to identify any potential habitats that may support the species. A suitable habitat assessment

was conducted to locate potentially suitable habitat patches, but no occupancy survey was conducted.

3.3 RAPTOR NEST SURVEY

A line-of-sight and public road survey for nesting raptors was conducted on April 22, 2024, for the Survey Area plus a one-mile buffer around the Survey Area. The survey used 10x power magnification binoculars to scan tree lines and wooded areas from the Survey Area and public roads.

3.4 TREE AND SHRUB INVENTORY

A tree and shrub inventory was completed on October 24, 2024 to record trees and shrubs within the Survey Area. The tree and shrub inventory used methods previously approved by the Commission. All trees and shrubs were recorded within the Survey Area which included areas that could potentially be cleared during construction. The location, number, and species of each tree and shrub were documented for this inventory. Photographs of the trees are presented in the photographic log in Appendix A.

4.0 RESULTS

4.1 WETLAND AND OTHER WATERS DETERMINATIONS

The field survey identified no wetlands within the Survey Area. The digitized NWI feature within the Survey Area, as depicted in Figure 2, was assessed during the field survey. The survey concluded that the NWI feature, classified as Riverine by the NWI, did not meet the criteria for classification as a wetland. The NWI feature did not exhibit other indicators such as scouring or an ordinary high-water mark. Additionally, the NWI feature had been cropped through. Photographs of the NWI feature are presented in the photographic log in Appendix A.

4.2 FEDERALLY LISTED SPECIES EVALUATION

The results of preliminary reviews and field surveys concerning threatened and endangered species is detailed below for each species. During the field surveys, no federally listed species were observed.

4.2.1 Piping Plover

The closest federally designated critical habitat is on the Missouri River located approximately 27 miles west of the Survey Area as shown on Figure 3 (USFWS, 2025a). The Survey Area is located outside the primary range and within the possible range of the piping plover (Dyke et al., 2015).

There were no sandy or gravelly beaches and sandbars, or alkaline wetlands delineated within the Survey Area. With the absence of preferred nesting habitat, it is unlikely that piping plovers may occur within the Survey Area. There was no piping plover potential habitat observed during field surveys within the Survey Area.

4.2.2 Rufa Red Knot

There were no sandy or gravelly beaches and sandbars, or alkaline wetlands delineated within the Survey Area. With the absence of preferred nesting habitat, it is unlikely that rufa red knots may

occur within the Survey Area. There were no potential rufa red knot stopover sites observed during field surveys within the Survey Area.

4.2.3 Whooping Crane

The Survey Area is located within the defined 50% occurrence frequency band of the whooping crane migration corridor (Figure 3) (Pearse et al., 2018). Although suitable habitat for the whooping crane was identified around the Survey Area and it is possible that whooping cranes may occur within the Survey Area, these habitat features are not necessarily unique on the landscape.

4.2.4 Dakota Skipper

No observations of Dakota skipper at the township level have occurred historically within the last 30 years in the Survey Area (USFWS, 2022). The Survey Area is located outside the primary range of the Dakota skipper (Dyke et al., 2015).

Nearly all of the Survey Area consists of cropland, with fringe grasslands appearing in disturbed areas such as field edges and road ditches and therefore potential preferred habitat is not likely to be present. There were no Dakota skipper potentially suitable habitat patches observed during field surveys within the Survey Area.

4.3 RAPTOR NEST SURVEY

The raptor nest survey identified one raptor nest within the one-mile buffer of the Survey Area and was approximately 2-foot in diameter. The average eagle nest is generally 4 to 5 feet wide and at least 2-4 feet deep (USFWS, 2007). This identified nest was too small to be utilized for bald or golden eagles. The raptor nest was unoccupied at the time of the survey. The identified raptor nest location is included in Figure 4. No raptor nests were documented within the Survey Area.

4.4 TREE AND SHRUB INVENTORY

The tree and shrub inventory recorded a total of 20 Siberian elm (*Ulmus pumila*) trees within the Survey Area. These trees were found along the eastern boundary, growing opportunistically. Siberian elm is an aggressive species known to invade and out-compete native vegetation, particularly in disturbed prairies. The trees observed within the Survey Area had a dbh of 3 inches or greater.

5.0 SUMMARY

The Survey Area consists primarily of existing cropland and is located adjacent to current energy infrastructure. During the field survey, the landscape was observed to be largely agricultural, with no wetlands identified within the Survey Area.

The field survey identified no wetlands within the Survey Area. Desktop and field habitat assessments for threatened and endangered species, including the piping plover, rufa red knot, whooping crane, and Dakota skipper, were conducted. No preferred habitat for these species was observed within the Survey Area during the field surveys, and no threatened or endangered species were incidentally observed.

A raptor survey identified one raptor nest within the one-mile buffer of the Survey Area; however, no raptor nests were documented within the Survey Area itself.

The tree and shrub inventory recorded a total of 20 Siberian elm trees within the Survey Area. Should any trees or shrubs require removal, Emmons-Logan Energy Storage will replace them in accordance with the Commission's Tree and Shrub Mitigation Specifications.

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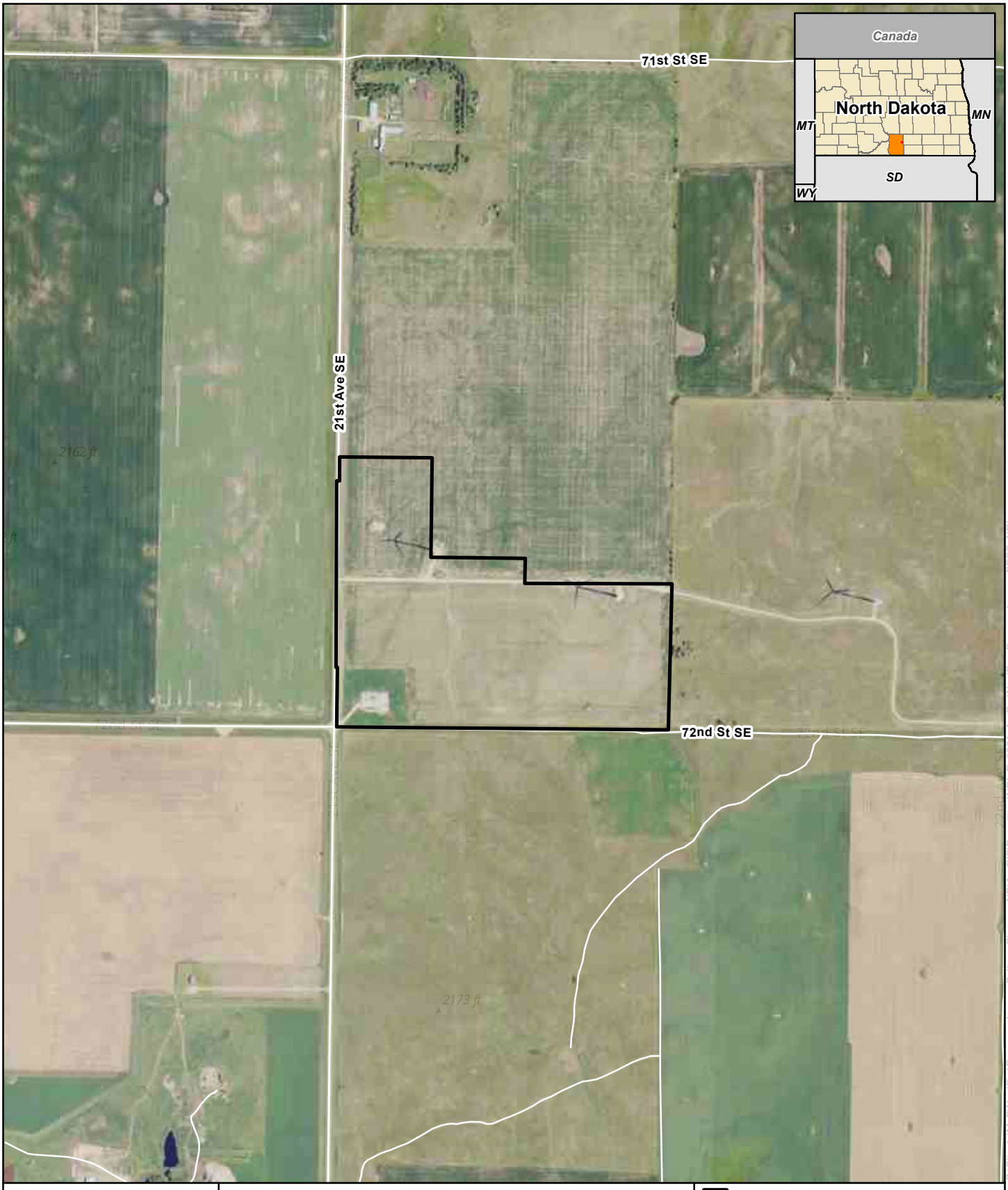
Figures



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For Environmental Review Purposes Only

Figure 1:
Survey Area Location
Emmons-Logan Energy Storage
Emmons County,
North Dakota

Survey Area

Source: Z:\Clients\M_P\NextEra\Emmons_Logan_Battery_Storage_ND\ArcGIS\Permitting\NRI_Rpt\001_ArcPro\NextEra_EmmonsLogan_BESS_NRI.aprx

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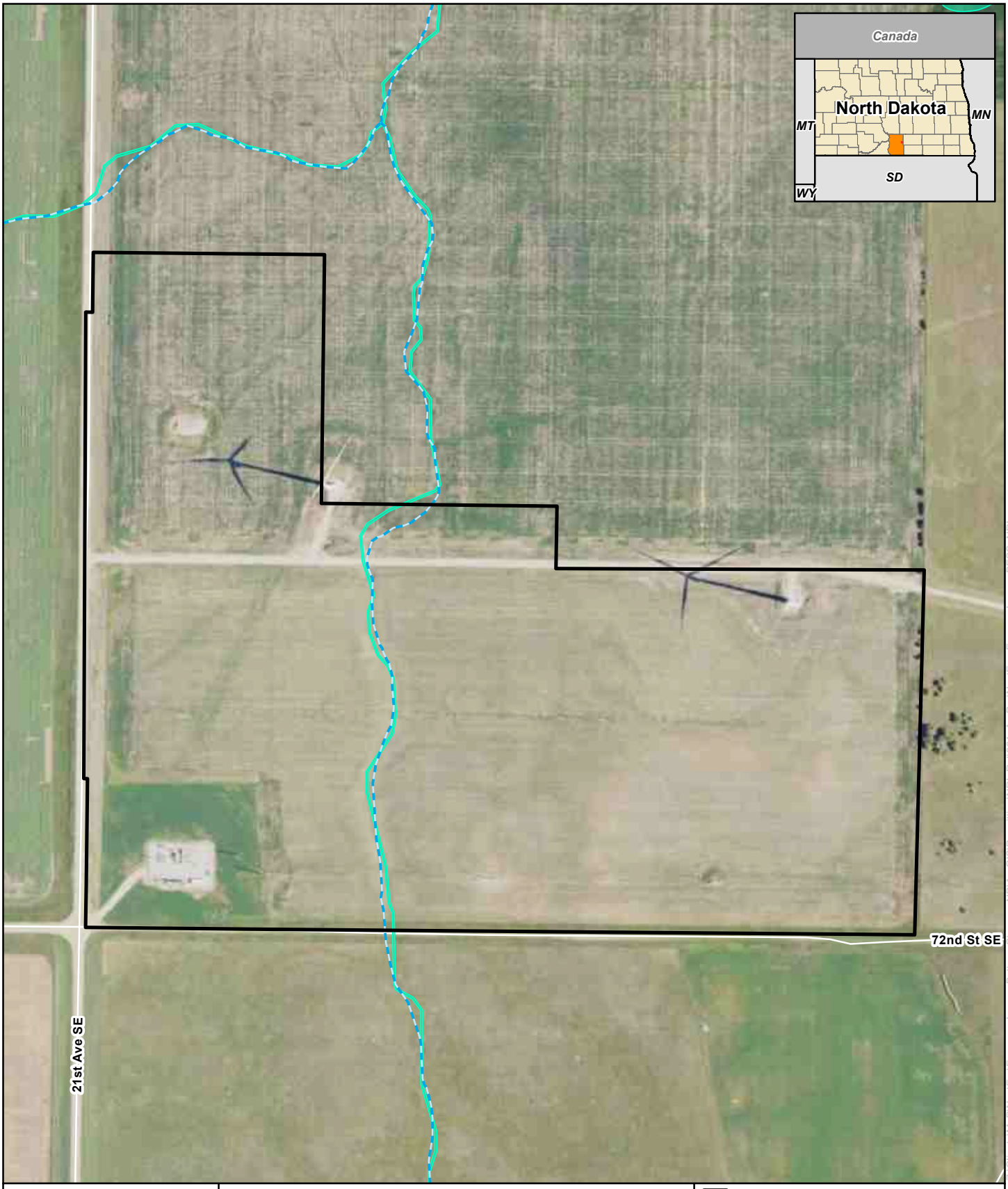

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For Environmental Review Purposes Only

Figure 2:
Wetlands and Other Waters Boundaries
Emmons-Logan Energy Storage
Emmons County,
North Dakota

Survey Area
NHD Waterway
NWI Feature

Source: Z:\Clients\M_P\NextEra\Emmons_Logan_Battery_Storage_ND\ArcGIS\Permitting\NRI_Rpt\001_ArcPro\NextEra_EmmonsLogan_BESS_NRI.aprx

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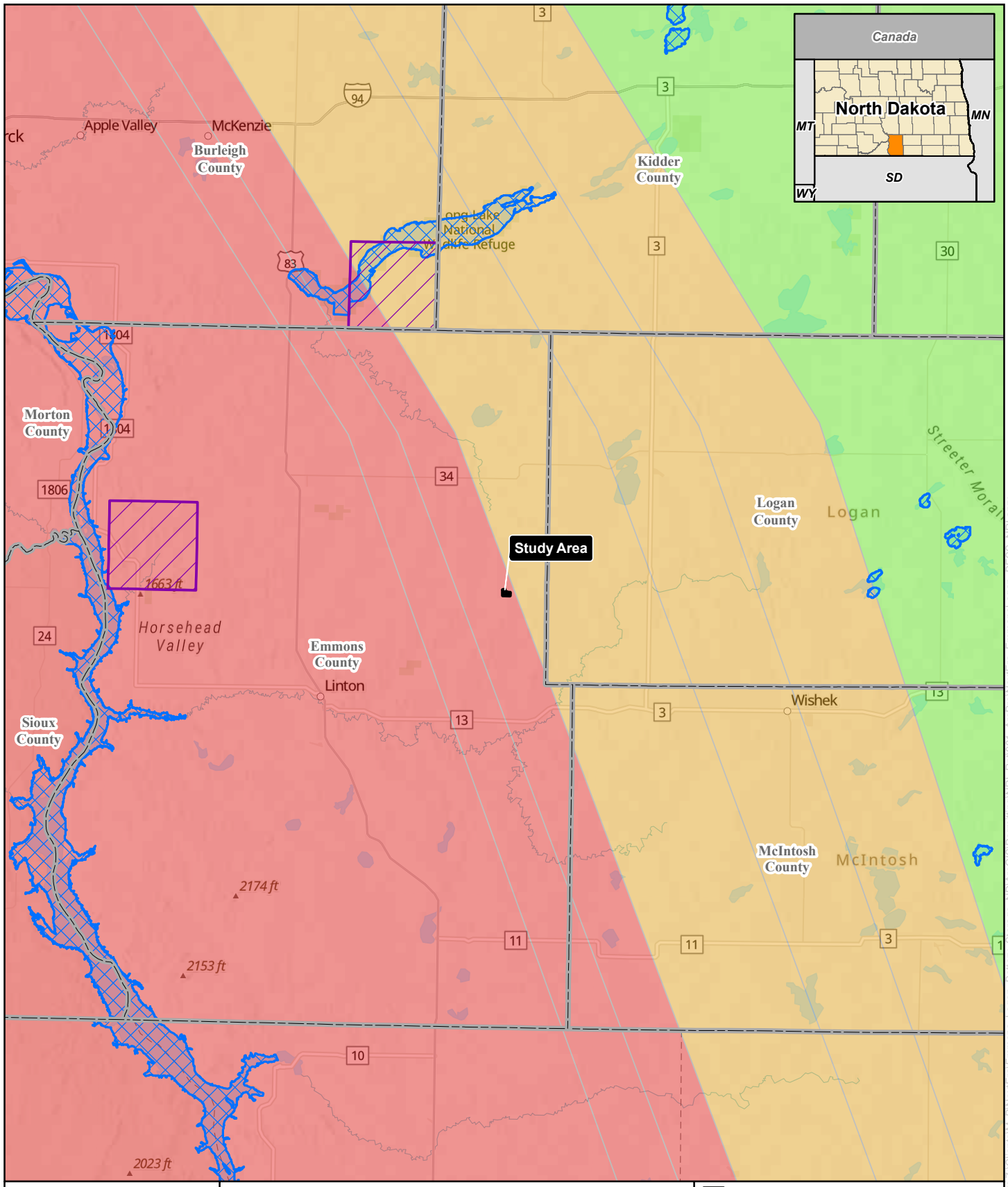

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Scale: 1:550,000

For Environmental Review Purposes Only

Figure 3:
Federally Listed Species Evaluation
Emmons-Logan Energy Storage
Emmons County, North Dakota

- Survey Area
- County Boundary
- Whooping Crane Migration Corridor
  - 50%
  - 75%
  - 95%
- Piping Plover USFWS Critical Habitat
- Dakota Skipper Observations
- Pre 2019 Township Detections

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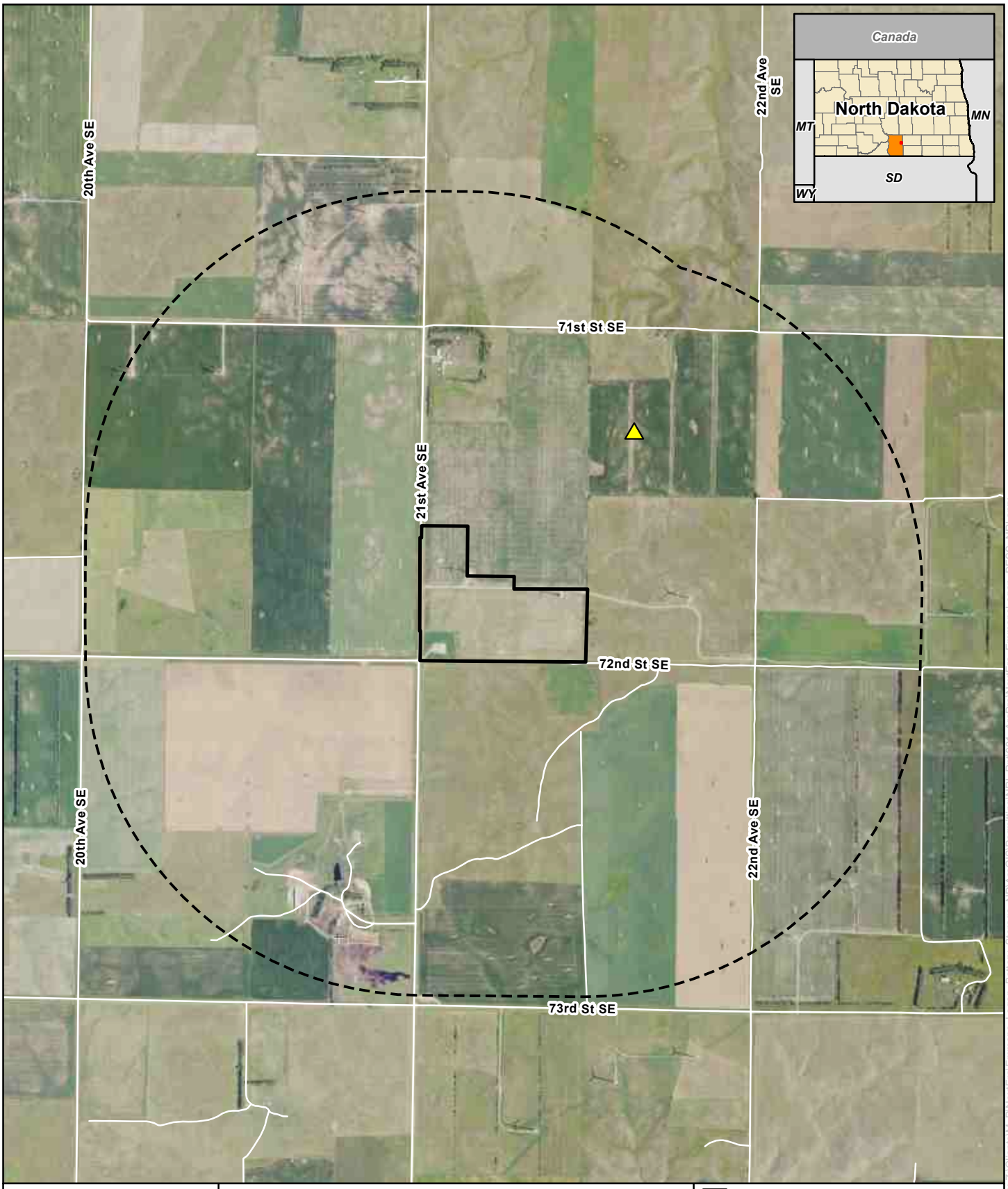

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Scale: 1:24,000

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For Environmental Review Purposes Only

Figure 4:
Raptor Nest Survey
Emmons-Logan Energy Storage
Emmons County, North Dakota

Survey Area
1-mile Buffer
Raptor Nest Location

Source: Z:\Clients\M_P\NextEra\Emmons_Logan_Battery_Storage_ND\ArcGIS\Permitting\NRI_Rpt\001_ArcPro\NextEra_EmmonsLogan_BESS_NRI.aprx

Date: (4/2/2025)

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Scale: 1:4,800

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For Environmental Review Purposes Only

Figure 5:
Tree and Shrub Inventory
Emmons-Logan Energy Storage
Emmons County,
North Dakota

Survey Area

Tree/Shrub

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Date: (4/2/2025)

Appendix A

Field Photographs

Date Taken: October 24, 2024 **Description:** View facing north along the southern section of the NWI feature within the Survey Area. No wetlands were identified. Emmons-Logan Wind Energy Center turbines are visible in the background.	
Date Taken: October 24, 2024 **Description:** View facing west near the north-central portion of the Survey Area, showing the NWI feature (low area). A grain pile is visible in the middleground.	

Date Taken: October 24, 2024 **Description:** View facing northeast from the eastern end of the Survey Area, showing Siberian elms opportunistically growing along the field edge.	
Date Taken: October 24, 2024 **Description:** View facing east from just east of the substation, showing the Emmons-Logan 230-kilovolt transmission line stretching to the horizon with turbines in the background.	

Date Taken: October 24, 2024 **Description:** View facing east from the western end of the Survey Area, showing an access road to the Emmons-Logan Wind Energy Center.	
Date Taken: October 24, 2024 **Description:** View facing south from the northwest corner of the Survey Area, showing a large field clearing rock pile.	

Appendix E

Draft Emergency Response Plan

Business Unit:	Engineering & Construction (E&C)	**Document Owner:**	GM – Safety Services
Document Name:	Site Emergency Action / Response Plan	**Document Revision #:**	0
Document #:	ECMS.002.000	**Date of Issuance:**	08/05/2024

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[Note to reader: This draft plan includes some placeholders and is to be finalized prior to the start of operations.]

Business Unit:	Engineering & Construction (E&C)	**Document Owner:**	GM – Safety Services
Document Name:	Site Emergency Action / Response Plan	**Document Revision #:**	0
Document #:	ECMS.002.000	**Date of Issuance:**	08/05/2024

I. Introduction

1. NextEra Energy (NEE) Engineering & Construction (EC) Business Unit (BU) has established the following procedure so that all Emmons Logan Energy Storage team members understand the practices that are to be followed to be prepared for and to provide immediate and effective response to emergencies that might arise at the facility.

2. Because the safety of team members is the primary concern, the Emmons Logan Energy Storage Emergency Response Coordinator and each team member of the Emmons Logan Energy Storage are committed to providing a safe, healthy work environment and are responsible for ensuring implementation of these procedures.

3. Life safety of team members shall be the highest priority during an event.

II. Scope & Limitations

1. This Procedure applies to all NextEra Energy, Inc., employees, contingent staff, contracted staff, supplier staff supporting NEE EC BU projects & operations.

2. The deviation authority of this procedure is the Document Owner. Deviation request are to be submitted in accordance with the NEE EC BU ECMS.002.000 – Deviation Procedure.

3. Comments and suggested improvements to this procedure are to be forwarded to the Document Owner.

4. This plan does not imply, nor should readers infer, that its implementation will guarantee that a perfect response will be practical or possible. No plan can shield individuals from all events.

5. Responders will attempt to coordinate the plan and response according to all applicable laws and standards.

6. Response to emergencies, events, or disasters shall only be undertaken to the level of the responders' training, Personal Protective Equipment (PPE), and resources available.

7. There may be little to no warning during specific events to implement operational procedures.

8. The success or failure of all emergency plans depends upon effective training, continual (e.g., annual) review of this response plan, and execution of the response.

9. Sites and team members shall comply with applicable codes, standards, and other requirements as apply in their locality, even if those codes, standards, and requirements contradict this plan.

10. Successful implementation of this plan depends on timely identification of capabilities, available resources at the time of the incident and a thorough information exchange between responding organizations and Emmons Logan Energy Storage team members.

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III. Facility Description

1. Emmons Logan Energy Storage is located in Emmons County at 7196 21st Ave SE, Kintyre, ND 58549. The project includes a 140-MW, four-hour duration Battery Energy Storage System (BESS) facility encompassing approximately 24 acres. The primary entrance to the project will utilize an existing access road located on 21st AVE SE.

2. Appendix 1 provides a map of the Emmons Logan Energy Storage. Notification information for the Emmons Logan Energy Storage. Notification information for Emmons Logan Energy Storage team members and external support organizations (police, fire department, medical facilities, etc.) that may be called to respond to emergency situations at Emmons Logan Energy Storage is included in Appendix 4. The Site Manager or their delegate substitute is available via cellular phone in case of an emergency.

IV. Plan Review and Revision

1. A review of the Emmons Logan Energy Storage emergency response plan shall be conducted and documented at a minimum of an annual basis.

2. The Emmons Logan Energy Storage emergency response plan shall also be reviewed and amended whenever there is a change in the facilities design, construction, operation, or maintenance that affects the emergency response planning.

3. The Emmons Logan Energy Storage emergency response plan shall be reviewed and updated to reflect the changes that may affect this plan when outside resources are changed or modified.

V. Emergency Response Management

Overall Organization

1. Overall responsibility for the Emmons Logan Energy Storage emergency response plan lies with the Emmons Logan Energy Storage Emergency Response Coordinator. The Emergency Response Coordinator or their designee is responsible for the program implementation, including designating evacuation routes and employee assembly points, coordinating severe weather activities, communication emergency response procedures to Emmons Logan Energy Storage team members, contracting with emergency response organizations, and contractor coordination.

Roles & Responsibilities

2. Specific management personnel will assume leadership roles for emergency responses. The Emmons Logan Energy Storage Emergency Response Coordinator, Site Manager, and/or lead team members will assist in the implementation of this plan by knowing and communicating evacuation routes to team

members during emergency evacuation and reporting the status of the evacuation to the Fire Department. The Emergency Response Coordinator is responsible for seeing that this plan is implemented and will appoint an adequate number of personnel to enforce the plan, assure everyone is familiar with this plan and act as a liaison with the local Fire Department(s).

3. All Emmons Logan Energy Storage team members have a responsibility to immediately report emergency situations to the lead team member on duty or local emergency responder personnel when appropriate. There shall be no delay to report emergency events that require the local emergency responders. The lead team member will then notify the Emergency Response Coordinator and other key personnel of the situation using the Emmons Logan Energy Storage Emergency Notification Telephone List (refer to Appendix 3). Where a lead team member is not assigned, facility personnel will refer to the Emergency Notification Telephone list to inform key personnel.

4. The Emergency Response Coordinator (or designee) shall be responsible for initiating a 'phone tree' for informing relevant operations and administrative contacts in [Site Owner / Operator], including the Regional Manager to initiate corporate awareness and public communications activities in accordance with company structure and policies.

5. A subject matter expert (SME) shall be contactable at all times by telephone. This person and a designated secondary SME contact should be readily available to first responders in the case of emergency situations. The SME shall be versed in the battery's failure modes and hazards. A working knowledge of incident command systems will allow the SME to integrate into the emergency response operations when needed. If this is not practical, a toll-free phone number should be available such that first responders may call at any time, and be given operational data on the system, including its current state of health, system alarm notifications, and advice on how to proceed during an emergency event.

Preparation and Planning for Emergencies

6. Pre-planning for emergencies is a crucial element of this plan. The following steps have been taken in planning for emergency situations at Emmons Logan Energy Storage:

- Fire department and other first responders have received a copy of this plan and have participated in an on-site familiarization meeting.
- All emergency responder access points to the facility shall be identified.
- An emergency response information notice board shall be maintained at [location readily visible and accessible to all team members, identified in Appendix 1] and contain key contacts for emergencies, a list of personnel certified in First Aid/CPR, and other notices as outlined in this document or as deemed appropriate by the Emergency Response Coordinator. Provision shall be made for non-English speaking workers on site.
- All road exits are established and posted on the emergency information notice board.

- Evacuation route diagrams have been documented and posted on the emergency information notice board.
- Logs of on-site team members for tracking headcounts during emergencies shall be maintained.
- All buildings and property surrounded by fencing will be marked by signage that identifies specific hazards (such as the NFPA diamond, and all applicable Danger, Caution, Warning signal words).
- Emmons Logan Energy Storage team members receive instruction to keep exits from the site or O&M Building clear and to maintain ready access to fire extinguishers by not blocking them with furniture, or any other means.
- Safe approach distances are established for equipment's different failure modes, team members are trained in these distances, and such information is communicated in writing to first responders during drills and other emergency response informational meetings.
- Safety Data Sheets (SDS) provided by manufacturers shall, where relevant, be provided to first responders. In some cases, manufacturers or suppliers will provide Material Safety Data Sheets (MSDS) instead of SDS where relevant.

Emergency Routes

7. An Emmons Logan Energy Storage evacuation sheet shall be posted and orally communicated to site personnel. These procedures shall be discussed at periodic safety meetings in addition to being covered during new team member orientation. Team members are to know at least two exits whenever possible and be familiar with the evacuation routes posted in the location indicated on the site map (Appendix 1).

8. Depending upon the degree of emergency, weather and/or site conditions, roadways as designated on the site map (Appendix 1) will be used for routes of evacuation. In the event of an evacuation, all team members will meet at the designated muster point for further information. If the primary muster point is inaccessible or hazardous, team members shall gather at the secondary muster point and inform the emergency coordinator (if not present) by radio or telephone. The emergency response coordinator shall inform personnel of a diversion to the secondary muster point by such means as are available, to include radio or loud hailer. If team members are unable to make it to the designated muster points, they should seek shelter wherever possible and contact their supervisor for further instructions.

9. Accountability of team members shall be of the upmost importance and be conducted in a timely manner. Responder access points shall be kept unobstructed at all times so first responders will not be hindered in their operations when responding to emergencies within the site.

Communications

10. Timely and efficient communications are essential to deal with an emergency response situation. The Emergency Response Coordinator is the central point of contact for all involved in an emergency

response, including for first responders and Subject Matter Experts (SMEs). The following processes shall be observed during emergency communications:

- Team members using radios/phones shall yield to individuals who are the most directly involved in an emergency response activity, i.e. emergency response takes priority over all other communication on company network.
- Emergency transmissions should be clearly announced using signal words such as 'urgent' or 'mayday.' These signal words give priority to the radio transmitter to proceed with their message.
- If emergency radio/phone communications are interrupted or unclear, employees shall proceed to the muster point located at [location to be provided post-construction] and identified in Appendix 1.
- All hand-held radios/phones should be recharged daily with back-up batteries ready for use.
- Radios shall be inspected daily for functionality and a radio check shall be transmitted to confirm that both the transmission and receiving functions work. If a radio is not working properly then the team member shall notify the lead team member and make arrangements for some other form of communication while working. Radios that are not working properly shall be placed out of service and labeled appropriately so they will not be used by another team member.
- Provision shall be made for non-English speaking team members on site.

Personal Protective Equipment (PPE)

11. The operation or maintenance of specific equipment may have different safety requirements. There are different levels of PPE that must be checked and maintained. All team members who wear levels of protection above and beyond their normal everyday attire must be trained in that PPE. All training of PPE shall be conducted by a competent person and documented. Some PPE have a SCAM (selection, care and maintenance) document that will instruct the team member on the limitations of the PPE and the proper maintenance of the PPE. Always be aware of individual equipment operational requirements and hazards as well as out service dates.

12. All PPE is required to be worn at all times for the work being conducted. Any PPE that is compromised or no longer considered viable for protection shall be discarded and replaced. Any PPE that comes in contact with hazardous material shall be properly decontaminated and inspected for functionality before being returned to service.

General Training Requirements

13. Initial training for all site team members with respect to the contents of this EAP/ERP shall be undertaken upon the start of employment of substantial changes in duties.

14. Refresher training of the EAP/ERP for all site team members shall be conducted at least annually.

15. Documentation of the EAP/ERP training is to be maintained.

16. Site Team members acting as Site Managers, Leadmen, or Emergency Coordinators are to be trained in their specific duties upon being assigned those duties.

17. All site team members are to be trained on the actions to be taken in case of an emergency.

18. All site team members are to be trained on the specific characteristics of the equipment and systems being used at the Emmons Logan Energy Storage.

19. All site team members tasked with responding to hazardous material incidents are to be provided training that meets federal and state standards.

Training

20. Initial training for all site team members with respect to the contents of this ERP shall be undertaken upon the start of employment or substantial changes in duties. Refresher training of the ERP to site personnel shall be conducted at least annually. Documentation of ERP training is to be maintained in site files.

21. A variety of emergency response drills (such as fire, tornado, bomb threat, etc. as relevant to the site) are to be held by [site owner/operator] at minimum on a quarterly basis and shall be documented. At least on an annual basis, the [locality] Fire Department and other emergency response personnel shall be requested to participate and assist with critique of evacuation drills. Table-top exercises are encouraged to familiarize relevant response personnel with procedures for different types of emergencies that could be encountered at the site.

22. The site Emergency Response Coordinator and Lead team members are trained in their specific duties upon being assigned these roles or beginning their employment. All building occupants have been instructed in actions to take in case of an emergency through their copies of procedures and training, as needed.

23. Operator team members should receive supplier / manufacturer approved training on the specific characteristics of the energy storage system. Applicable common standards (*e.g.* on electrical safety) should be taken into account.

24. All team members who wear levels of protection above and beyond their normal everyday attire must be trained in that PPE. All training of PPE shall be conducted by a competent person and documented.

25. All hazardous materials incident emergency responders and team members at hazardous materials facilities, transport companies, waste treatment facilities, storage facilities and disposal facilities will be

provided training which meets federal and state standards. Such training will be commensurate with their employer's or organization's plan and policies.
26. Initial and refresher training regarding warning systems and alarms shall be conducted at least annually. Documentation of training is to be maintained in site files.

Warning Systems and Alarms
27. Audible and visual (e.g., flashing lights) alarm systems should be established that reflect specific on-site hazard analyses. Team members should be trained on the significance of different alarms and the corresponding actions as outlined elsewhere in this Plan. Descriptions of each alarm and corresponding actions should be clearly posted on an emergency information notice board (location marked on map in Appendix 1).

28. Warning systems and alarms should be tested at least every six months or more frequently per manufacturer specifications or code requirements. Tests shall be documented. All site team members, as well as those offsite who are likely to hear or see an alarm, should be made aware of tests so as not to cause undue concern.

VI. Emergency Response

1. Only team members who are properly trained in accordance with 29 CFR Part 1910.120(q)(6) may respond to hazardous chemical releases.

2. No team member is required or permitted to place himself or herself in harm's way in order to facilitate extinguishment, evacuation, or rescue. All rescue operations will be performed by trained professionals upon their arrival. Rescue operations will only be conducted after a risk-reward analysis is done and proper PPE is used to protect against any adverse hazards that may be encountered.

3. Incidents where local fire department personnel are involved will be managed under a system established by the fire department, called 'Incident Command System.' This establishes a primary incident commander and a liaison to or for the Emergency Response Coordinator.

Analyze
4. Without entering an immediate hazard area, the team member who first discovers an emergency should identify the following:

- Is there a fire, spill, explosion, or other incident happening?
- Does medical assistance appear to be needed?
- Who/what is at risk: people, the environment, or property?
- What are the weather and terrain conditions and risks?

5. The team member will also isolate the area to keep people away from the scene until trained responders arrive, as long as it is safe to do so. A team member who has not received training in

emergency response should take no actions beyond notification, isolation of the area, and personal safety precautions. Any efforts made to rescue persons, protect property, or protect the environment must be weighed against the possibility of becoming part of the problem. Attempts to rescue others shall only be attempted with proper PPE, proper training, and in a manner that does not create significant risk to rescuer or others. Persons at the scene must not contact spilled material or inhale fumes, smoke, or vapors.

Plan

6. After all life hazards are no longer a threat, a plan of operation shall be devised for remediation of the event. The plan shall be communicated to all responders and safety of all responders shall be paramount. A staging area, if needed, shall be identified for extra personnel and equipment that may be needed to accomplish the plan's objectives. All responders that will enter the hot zone (affected area) must be made aware of any decontaminated area upon their exit of the hot zone. Trained responders will be called to the scene by the O&M Manager and/or Lead team members to begin the process of hazard assessment and to establish objectives and priorities. The hot zone shall be identified, and all non-essential personnel shall not be permitted to enter this area without proper training and permission of the Emergency Response Coordinator.

Implement

7. The initial response phase starts with notification, which activates the emergency response system. Anyone who observes or receives information regarding an emergency at Emmons Logan Energy Storage should immediately notify available personnel using the Emmons Logan Energy Storage radio network or their issued cell phones. The Emergency Response Coordinator and/or Lead team member will then ensure 911 is notified. At Emmons Logan Energy Storage, team members are notified of emergencies by cell phone/radio and word of mouth from the Emergency Response Coordinator and/or Lead Team members. Appendix 4 provides a list of emergency notification information for Emmons Logan Energy Storage team members.

8. If an event has the potential to impact the local community, Emmons Logan Energy Storage will contact local fire/police to make community notifications. The contact list in Appendix 2 also provides notification information for the Company Public Affairs team who will provide guidance for instances involving media. The Emergency Response Coordinator and/or Lead Team members will coordinate any media efforts through the Emmons Logan Energy Storage Asset Manager and Company Legal Department.

9. The incident command post will be set up in a location free of contaminants and located upwind uphill and upstream. The Emergency Response Coordinator or designee shall remain at the incident command post to serve as a liaison to the Incident Commander designated by emergency responders. Trained responders may enter a 'hot zone' only when wearing appropriate protective equipment. Team members entering the hot zone shall be briefed on the plan before entering. All communication devices shall be tested prior to entry into the hot zone. A decontamination corridor shall be established prior to

entry into the hot zone. There shall be accountability taken of all personnel entering and leaving the hot zone. A back up team that has the same PPE shall be at the ready in the event of the entry team needs quick assistance. A decontamination team shall be ready to for after exiting the location (warm zone). There shall be a doffing station that is set up immediately at the end of the decontamination section that will allow the responders a safe place to remove their PPE. Only trained responders are authorized to risk exposure to chemicals for purposes of containing or stopping the material release.

10. The Emergency Response Coordinator or a designee will be responsible for notifying the appropriate regulatory agencies and, if necessary, the Emergency Response Contractor or mutual aid groups.

Evaluate

11. During the implementation phase of the emergency, response, action, and progress shall be analyzed by the Emergency Response Coordinator constantly. If the plan seems to be ineffective or unsafe the responders shall be removed from the hot zone and the plan shall be revised. The new plan shall be implemented, and that revised plan shall be analyzed for safety effectiveness again.

VII. Evacuation Procedures

1. When notified to evacuate, site team members shall do so in a calm and orderly fashion, keeping the following instructions in mind:

- Walk, don't run. Help others who need assistance as long as doing so does not put you at greater risk.
- Stay upwind, upstream, and uphill whenever possible.
- Watch for other traffic and equipment on access roads and roadways.
- Be aware of ice/snow and loose gravel conditions.
- Drive safely.

2. Site team members shall go to the primary designated muster area as identified in Appendix 1. If employees are unable to make it to the muster area, they should divert to the secondary muster area and immediately contact their supervisor for further instructions.

3. During evacuation, the Emergency Response Coordinator and/or Lead team members should ensure that every person on his/her crew has been notified and that evacuation routes are clear. Any person with a disability (mobility, hearing, sight, etc.) who requires assistance to evacuate is responsible for pre-arranging with someone in their immediate work area to assist them in the event of an emergency. Anyone knowing of a person with a disability or injury who was not able to evacuate will report this fact immediately to their supervisor. This information shall be communicated to emergency responders immediately upon their arrival if the disabled person has not been evacuated.

4. Once an evacuation is complete, the Emergency Response Coordinator or Lead team member should account for all personnel. This accountability information shall be communicated to the emergency responders immediately upon their arrival. When a person is unaccounted for, the following information shall be communicated to the emergency responders:

- Name of the individual
- Disabled or not disabled
- Work location
- Last known location

VIII. Post Emergency Reporting Procedures

1. Following any emergency described in this plan, and in compliance with facility permits and other County and/or State requirements, an incident report will be prepared by the Emergency Response Coordinator and transmitted to the appropriate individuals and agencies after review by the Company Regional Manager.

2. The Emergency Response Coordinator shall compile all documentation and perform a post-emergency investigation. Immediate performance of this activity will aid in determining the exact circumstances and cause of the incident. Issues to be determined include:

- Causes of the incident.
- Effectiveness of the emergency response plan.
- Need for amendments to the response plan.
- Need for additional training programs.

3. The fire department will make the final determination regarding when the scene is safe to release the site to team members. In some circumstances the scene may need to be safeguarded for investigators to examine the event failures. If the event was caused by a criminal act, the Emmons Logan Energy Storage manager shall be guided by law enforcement for direction.

4. If the facility is not able to reopen due to the event, the Emmons Logan Energy Storage Manager will make a determination regarding continuity of operations for the facility in consultation with the Company Leadership.

IX. Fire Incidents

1. All team members working at Emmons Logan Energy Storage are to be trained and should know how to prevent and respond to a fire emergency. All site team members shall:

- Complete a site training program identifying the fire risk at Emmons Logan Energy Storage.
- Understand the protocol and follow emergency procedures should an event occur.

- Review and report potential fire hazards to the Site Manager.

2. No team member is required or permitted to place themselves in harm's way in order to facilitate extinguishment, evacuation, or rescue. All rescue operations will be performed by trained emergency responders upon their arrival.

X. Conditions Associated with Energy Storage Systems

1. Unlike a typical electrical or gas utility, an energy storage system does not have a single point of disconnect. Whereas there are disconnects that will de-energize select parts of the system, batteries will remain energized.

2. The following hazards may be encountered when fighting fires in energy storage systems:

- Shock or arcing hazards due to the presence of water during suppression activities.
- Related electrical enclosures may not resist water intrusion from the high-pressure stream of a fire hose.
- Batteries damaged in the fire may not resist water intrusion.
- Damaged conductors may not resist water intrusion.
- Shock hazards due to direct contact with energized components.
- No means of complete electrical disconnect.
- Chemical spills.
- Toxic gases.
- Thermal runaways and explosions.

XI. Fire and Water

1. Due to the hazards described above, care and consideration should be applied when considering fire suppression by means of water inundation within energy storage systems. But because water as an extinguishing agent is commonplace, the appropriate use of water should be assessed, *i.e.* whether water reacts with the chemistries present or whether it is not an appropriate extinguisher class. The local fire department should be informed of appropriate fire suppression methods for the energy storage system type as identified by the equipment manufacturer.

2. If unconventional fire extinguishers are required, local first responders should be alerted and trained on their use, including a familiarization drill. The appropriate and most suitable extinguisher should be recommended based on the specific needs of the site in accordance with guidance from the manufacturer. This may include water in some cases, and in all scenarios its use should not be discouraged.

3. All fire extinguishing equipment, whether automatic or manual, shall be regularly inspected for functionality as per manufacturers' guidance.

XII. Response to a Fire Incident

1. In the event of an incipient stage (beginning, small) fire, employees should notify adjacent individuals of this situation and exit the area. Only team members trained in the use of fire extinguishers or other manual fire suppression systems should attempt to use an extinguisher or system. Team members are not expected or authorized to respond to fires beyond the incipient stage (*i.e.*, fires that are beyond the beginning stage and which cannot be extinguished using a hand-held, portable fire extinguisher). The fire department should be immediately notified by dialing 911 when any type of unintended fire has taken place. Site management shall also be immediately notified of any emergency.

Fire External to Battery Container or Enclosure

2. The following actions are to be taken for a fire external to a battery container or enclosure:

- Call 911 and report the following:
  - Site name: Emmons Logan Energy Storage
  - The address of the main entrance: 7196 21st Ave SE, Kintyre, ND 58549 or nearest site access point
  - Injuries, if any, and need for ambulance
- Make sure the immediate area of the fire is clear of personnel.
- Account for all team members and visitors who were working in the immediate area of the fire. If any team members are unaccounted for from the immediate fire area, a communication shall be made throughout the facility in an attempt to locate the person(s) missing. If the person(s) is equipped with a facility radio, then an emergency transmission shall be communicated in attempt to locate the team member(s).
- Contact the Site Manager (if present) and Emergency Response Coordinator (if not the Site Manager) immediately.
- Remove any obstructions (vehicles, material, etc.) that might impede response to the scene.
- Station available team members at road intersections to stop traffic flow into the fire scene.
- Evacuate the energy storage system area immediately if the fire warning alarm sounds or fire warning lights illuminate.
- Proceed to the designated muster point for head count.
  - If onsite, the designated Emergency Response Coordinator will do a head count and relay any information/instructions.
- If you encounter heavy smoke, stay low and breathe through a handkerchief or other fabric; move away from the area.
- Assist anyone having trouble leaving the area so long as doing so does not put the assistor at additional risk.
- Attempt to extinguish the fire ONLY if you have had the appropriate training and proper firefighting agent for the type of fire. Refer to the specific safety data sheet.

- Do not leave the designated muster point until advised to do so. If risk (e.g. smoke) requires evacuation of the muster point, the secondary muster point (designated on the map in Appendix 1) will be used and that fact announced via radio and alarms as available.
- The Emergency Response Coordinator will issue an 'all clear' only when the fire department informs them that it is safe to do so.
- The energy storage system is not to be accessed until the Site Manager or designated Emergency Response Coordinator gives authorization

Fire Internal to Battery Container

3. The following actions are to be taken for a fire internal to Battery Container:

- Call 911 and report the following:
  - Site name: Emmons Logan Energy Storage
  - The address of the main entrance: 7196 21st Ave SE, Kintyre, ND 58549 or nearest site access point
  - Injuries, if any, and need for ambulance
- Make sure the immediate area of the fire is clear of personnel.
- Account for all team members, and visitors who were working in the area of the fire. If any personnel are unaccounted for from the immediate fire area, a communication shall be made through out the facility in attempt to locate the person(s) missing. If the person(s) is equipped with a facility radio then an emergency transmission shall be communicated in attempt to locate the team member(s).
- Contact the Site Manager (if present) and Emergency Response Coordinator (if not the Site Manager) immediately.
- Contact the Operations Center and Manager (if present).
- Evacuate the area immediately if the fire warning alarm sounds or fire warning lights illuminate.
- Remove any obstructions (vehicles, material, etc.) that might impede response to the scene.
- Proceed to the designated muster point for head count.
  - If onsite, the designated Emergency Response Coordinator will do a head count and relay any information/instructions.
- If you encounter heavy smoke, stay low and breathe through a handkerchief or other fabric.
- If there is a second means of egress that is clear of smoke, that egress path will be used, and a radio transmission or other type of communication shall be made stating that the clear egress point for other personnel to use for escape is the second means of egress.
- Assist anyone having trouble leaving the area so long as doing so does not put the assistor at additional risk.
- The fire suppression system is designed to work in a contained environment. **DO NOT** open the doors until it has been determined that the agent has been fully released and a pre-determined amount of time has passed to ensure no hazards are present, and with approval of emergency personnel and Subject Matter Expert.

- **DO NOT** put anyone in harm's way to save the battery equipment in the container.
- Once the Fire Department arrives, provide them with the following
  - All applicable SDS documents
  - Assistance isolating equipment electrically
  - This emergency response plan
  - A liaison to remain with the fire department Incident Commander as needed
- Do not leave the designated muster point until advised to do so. If risk (*e.g.* smoke) requires evacuation of the muster point, the secondary muster point (designated on the map in Appendix 1) will be used and that fact announced via radio and alarms as available.
- The Site manager and/or Emergency Response Coordinator (if not the site manager) will issue an 'all clear' only when the fire department informs them that it is safe to do so and the site (or portions of it) can be reoccupied or normal working conditions can be resumed again.
- The energy storage system is not to be accessed until the Site Manager or designated Emergency Response Coordinator and the emergency responders give authorization.

4. In the event of a fire incident, the designated team members responsible for the safe shutdown of the plant will open switchgear to ensure the grid side of the plant is de-energized and isolate the batteries as best able to (i.e. verify the AC and DC breakers are open in the inverter). The Fire Department needs to understand that some of the equipment (batteries) will remain energized no matter what actions are taken, and the recommended option is containment. Batteries remain energized even if all the contactors, breakers, and switches have been opened.

After a Fire

5. Hazards after a fire should be identified at the time of installation such that recommendations for personal protective equipment (PPE) are available for clean-up crews and hazardous materials (HAZMAT) teams. This may include respirators to protect personnel from toxic gas that continues to be generated from hot cells. Firewater retention and cleanup measures may be required by local regulations. Once first responders have turned the site back to Emmons Logan Energy Storage the Subject Matter Expert, in coordination with the Emergency Response Coordinator, shall direct on-site team members on procedures for securing the site for safety and pending any investigation.

6. In addition to the gas generation risk, cells that remain hot also pose a delayed ignition risk, whereby heat in the cell may transfer to undamaged adjacent cells or remaining active material and reignite the fire. As such, fire-damaged equipment must remain monitored for [a period identified in consultation with equipment manufacturer and SME].

7. Care should be taken to ensure that damaged batteries containing energy have been safely de-energized in accordance with disposal procedures, if possible, before handling and disposal. If unable to completely de-energize batteries involved in a fire, care should be taken with handling or dismantling battery systems involved in fires as they may still contain hazardous energy levels.

XIII. Chemical Release

Hazardous Materials

1. An inventory of hazardous materials shall be maintained for the Emmons Logan Energy Storage and provided in advance to first responders, including fire and ambulance services. Materials typically found at Emmons Logan Energy Storage include:

- (Note: A detailed list of hazardous materials will be finalized and added to the ERP as the Project progresses.)

2. In the event of a breach of energy storage containment, hazardous materials that may be released at Emmons Logan Energy Storage may include:

- (Note: A detailed list of hazardous materials will be finalized and added to the ERP as the Project progresses.)

3. Only team members who are properly trained in accordance with 29 CFR Part 1910.120(q)(6) may respond to hazardous chemical releases.

Spill Response

4. Emergency spill kits are maintained at Emmons Logan Energy Storage, identified on the map in Appendix 1. These kits include, at a minimum:

- Absorbent socks, pads, or pillows
- Disposal bags and ties
- Safety glasses
- Rubber gloves
- Appropriate neutralization medium for liquid present
- Hazardous labels
- Bag of Life-Dri absorbent or equivalent
- Shovel
- Broom

5. A formal notification process shall be initiated when a hazardous material spill or potential spill is first observed. Immediate actions are necessary. The team member who discovers a spill (spill observer) will be responsible for initiating notification and response procedures. Only team members that are properly trained in accordance with 29 CFR Part 1910.120(q)(6) may respond to hazardous chemical releases. Emmons Logan Energy Storage is responsible for providing spill recognition and response training for team members. At least one trained team members shall be on duty at all times.

6. The first team member to witness the spill shall follow these procedures:

- Make an assessment of the incident as observed.
- If the incident can be safely controlled, take steps to do so (e.g., turn off source of spill).
- Notify the Emergency Response Coordinator and provide as much information as possible.

7. The Site Manager or Emergency Response Coordinator shall follow these procedures in the event of a spill:

- Notify Supervisors.
- Make sure all team members are removed from the spill area.
- Take immediate actions to minimize any threat to public safety (verify the spill area has been cordoned off).
- Secure the source of the spill, if safely possible to do so.
- Maintain close observation of the spill.

8. Cleanup may range from very simple removal of minor spills, to installation of skimmers around large spills or between sensitive areas and spills for longer, prolonged cleanups. Cleanups shall be conducted as per OSHA regulations (part 1910). Cleanups can be on pavement or on soil surfaces. On-site personnel shall be trained in the proper use of the cleanup materials. The Emergency Response Contractor or other contracted – and appropriately certified – waste management company may provide cleanup and remediation services. It is strongly recommended that all contractors determine a disposal site in advance of a spill incident.

Reporting Major Spills

9. After initial spill response has begun, notification and reporting to agency personnel shall occur.

In accordance with North Dakota and federal law, the intentional or unintentional release of hazardous materials must be reported to the state within 24 hours of the incident. This can be accomplished by using the Unified Spill/Tier II Reporting System to meet the requirement of notifying all state agencies, both online and by calling 1-833-99SPILL (1-833-997-7455). This number provides a one-call routing menu with options for reporting based on the nature of the spill.

Immediate Spill/Release Reporting Criteria:

- Any spill/release that has an impact, or potential impact, to public health
- Waterways impacted/threatened
- Injuries or Deaths
- Evacuations, or potential need for
- Any spill/release that has immediate impact to wildlife

The following procedures should be followed when reporting major spills:

- Never include information that has not been verified.
- Never speculate as to the cause of the incident or make any acknowledgment of liability.
- Do not delay reporting because of incomplete information.
- Notify the Environmental Services Team Member supporting Emmons Logan Energy Storage.

- The Environmental Services Team Member is responsible for making notification to agencies in conformance with 40 CFR parts 110, 119, and 302 when determined to be appropriate.
- The Environmental Services Team Member is responsible for consulting other agencies including but not limited to the Napoleon and Linton Fire Protection Districts, Emmons County Emergency Management, North Dakota Highway Patrol, North Dakota Department of Emergency Services, State Radio 24-Hour Hotline, OSHA, North Dakota Department of Environmental Quality, and if relevant North Dakota Department of Water Resources.

XIV. Medical Emergency

Medical Emergency Response Procedures

1. If a team member is injured, or an accident has occurred on site that results in an injury requiring emergency care, 911 must be called. The call to 911 can be made by phone by any available site team member. The caller must state to the dispatch that they are at the Emmons Logan Energy Storage. A second notification will be made to the Emmons Logan Energy Storage Office Building, to inform others of the situation.

2. Emmons Logan Energy Storage team members certified in first aid/cardiopulmonary resuscitation (CPR) may administer aid if they have completed training. Regularly present team members with first aid/CPR training are identified on the emergency information notice board and team members shall be aware of who on staff is so certified. At all times when the site is staffed, at least one first aid certified member of staff shall be present. The location of first aid kits and automated external defibrillators (AEDs), if present, shall be identified by appropriate signage and indicated on the map in Appendix 1.

3. All team members shall designate a personal emergency contact, which shall be kept on file.

Serious Injury

4. The following procedures apply for serious medical injuries such as loss of consciousness, heart attack, bone fractures, neck trauma, or severe burns.

- If life threatening, call 911.
- Notify the Site Manager and/or Safety Managers.
- Provide name, exact location, number of injured persons, and brief description of incident.
- On-site personnel shall meet EMS responders at site entrance and direct them to location of incident.
- Do not leave or move the injured unless directed to by Safety Managers or EMS responders.
- Administer first aid if necessary.
- The Site Manager shall inform the employee's personal emergency contact.
- Document incident as part of the investigation.

Attending to an Incident

5. When attending an incident, the following procedures apply:

- Clear a path to the injured person for Site Managers and/or Safety Managers and assign team members to assist with signaling EMS responders to the location of the incident.
- Identify location of Project Site entrance nearest to the incident and notify EMS responders.
- Site Managers and/or Safety Managers shall meet EMS responders at site entrance.
- Direct and accompany EMS responders to location of incident.
- Follow all directions of EMS responders.
- Contact management personnel and/or subcontractors.
- Document incident and keep on file.

Emergency Medical Facilities

6. The nearest emergency medical facility to the Emmons Logan Energy Storage is:
Linton Regional Medical Center - 111 W Elm Ave W, Linton, ND 58552
Distance – 22.0 miles

7. Directions from the Project Entrance to Linton Regional Medical Center are:

- Head south on 21st Ave SE toward 72nd St SE - 6.1 mi
- Continue onto 19th Ave SE - 2.6 mi
- Turn right onto State Rte 13 - 12.2 mi
- Turn right onto US-83 N - 0.7 mi
- Turn right onto W Hickory Ave - 0.1 mi
- Turn left onto Broadway St N - 0.3 mi
- Turn left onto W Elm Ave

XV. Non-Emergency Safety Incident

Notification of Minor Incidents

1. In the event a safety incident occurs where emergency response is not required (near miss, first aid, etc.) work is to be stopped immediately and reported to the Site Manager and/or Safety Manager.

2. If warranted first aid care is to be provided to the team member.

3. If warranted arrangements for offsite medical evaluation and care is to be made with the Site Manager and/or Safety Manager.

Non-Emergency (Occupational) Medical Facilities

4. The nearest non-emergency medical facility to the Emmons Logan Energy Storage is:
Linton Regional Medical Center - 111 W Elm Ave W, Linton, ND 58552
Distance – 22.0 miles

5. Directions from Emmons Logan Energy Storage to Linton Regional Medical Center are:

- Head south on 21st Ave SE toward 72nd St SE - 6.1 mi
- Continue onto 19th Ave SE - 2.6 mi
- Turn right onto State Rte 13 - 12.2 mi
- Turn right onto US-83 N - 0.7 mi
- Turn right onto W Hickory Ave - 0.1 mi
- Turn left onto Broadway St N - 0.3 mi
- Turn left onto W Elm Ave

XVI. Security Incident

Bomb Threat

1. The purpose of this plan is to give direction to all site personnel in the event Emmons Logan Energy Storage is a target of an actual or threatened bomb assault/attack. Anyone receiving a bomb threat shall:

- Treat the caller with courtesy and respect. Complete the Bomb Threat Report (Appendix 5). Use this sheet as a reference while talking with the caller making the threat.
- Attempt to obtain as much information as possible. See the "Bomb Threat Checklist" (Appendix 6).
- Immediately notify the Emmons Logan Energy Storage Site Manager or Emergency Coordinator by phone. Stop all radio transmissions from this point on until cleared by the Emergency Coordinator or other competent authority. Radio transmissions can activate electronic detonating or timing devices.

2. The Site Manager or Emergency Response Coordinator will immediately notify 911. The Emergency Response Coordinator shall:

- Evaluate the threat and determine the appropriate course of action to take.
- Notify law enforcement and/or ambulance.
- Notify Corporate Security.
- Evacuate the facility as necessary.
- Coordinate evacuation of any part of the surrounding community with local authorities as needed.
- Coordinate search of the site with proper authorities.

3. If any suspicious item(s) are found, they are not to be touched. Barrier tape will be used to mark the area where the suspicious item(s) are by extending a continuous line of tape beginning immediately in front of the suspicious item(s) and extending to just outside the room exit. This will help guide local authorities to the suspicious item.

4. The Site Manager or Emergency Response Coordinator will ensure that the "All Clear" message is communicated once the threat has passed or is no longer present.

Chemical/Biological Agent Threat

5. The procedures described previously for a bomb threat should be used for a chemical or biological agent threat. Refer to Appendix 7 for a copy of the phone report when receiving such a threat and Appendix 8 for a checklist.

6. Any team member that is exhibiting signs and symptoms from a chemical or biological agent should be isolated from other workers and be prepared for transport by EMS.

Sabotage or Vandalism

7. Anyone detecting any act or threat of any act of sabotage or vandalism will immediately notify the Site Manager or Emergency Response Coordinator. The Site Manager or Emergency Response Coordinator will evaluate the situation and decide what actions to take. The following options should be considered and/or implemented:

- Notification of 911.
- Corrective action as required, providing that no person will risk injury.
- Evacuation of the facility.

Active Shooter

8. In an active shooter situation, team members should:

- Quickly determine what actions to take to protect life: options include run, hide, and fight (described in the DHS' Ready.gov site).
- Use best judgment based on the specific circumstances of the incident. Getting away from the shooter(s) is the top priority.
- Call 911 when in a safe location and warn/prevent individuals from entering an area where an active shooter may be if possible.
- When encountering responding police, remain calm and follow any and all instructions from the officers. Officers may shout commands and push individuals to the ground for his/her safety as well as their own. When law enforcement personnel arrive at the scene, personnel should be aware of the following:
    - Follow all official instructions from police;
    - Remain calm, think, and resist the urge to panic;
    - Immediately raise hands and spread fingers;
    - Keep hands visible at all times;
    - Put down any items;
    - Avoid making sudden or quick movements toward officers;
    - Do not point, scream, or yell;
    - Do not ask for help from the officers when evacuating;
    - Proceed in the direction as advised by the officers; and

- Provide all relevant information to police.

Act or Threat of Violence to a Team Member

9. All Emmons Logan Energy Storage have an obligation to report an act or threat of violence to a team member. The Emmons Logan Energy Storage Site Manager and/or Emergency Response Coordinator is to be immediately notified of a threat or act of violence.

10. Upon notification the Emmons Logan Energy Storage Site Manager and/or Emergency Response Coordinator is to:

- Contact Local Law Enforcement to respond to the threat.
- Attempt to deescalate the situation without physically engaging to do so.
- Direct other team members to seek safe refuge.
- Notify Corporate Security Support Services.
- Notify the Business Unit Executive.

XVII. Natural Disaster / Severe Weather Event

1. Natural emergencies considered in this procedure are associated with weather disturbances such as tornadoes, flooding, hurricanes, blizzards, high wind conditions, earthquakes, wildfires and severe thunderstorms. Warnings about developing weather emergencies are issued by local radio stations or tracked by onsite weather systems. These warnings should provide adequate information of the approach of weather-related emergency conditions. The Emmons Logan Energy Storage Site Manager and/or Emergency Response Coordinator has several means to monitor these weather-related emergencies. These include:
    - Internet access to weather-related websites;
    - AM/FM radio to monitor local news stations; and
    - TV stations and local news.

Flooding and Flash Flood

2. Flash flooding is a result of heavy localized rainfall such as that from slow moving, intense thunderstorms. Flash floods often result from small creeks and streams overflowing during heavy rainfall. These floods often become raging torrents of water which rip through riverbeds or canyons, sweeping everything with them. Flash flooding can occur within 30 minutes to six hours of a heavy rain event. In hilly terrain, flash floods can strike with little or no advance warning. Distant rain may be channeled into gullies and ravines causing flash flooding in minutes. In the event of a flash flood, the following procedures shall apply:

- During periods of thunderstorms, always remain alert to heavy rains in your immediate area or upstream from your location. It does not have to be raining at your location for flash flooding to occur.
- Do not drive through flooded areas. Even if it looks shallow enough to cross.

- Do not cross flowing streams on foot where water is above your ankles.
- Be especially cautious at night. It is harder to recognize water danger then.
- Do not attempt to outrace a flood on foot. If you see or hear it coming, move to higher ground immediately.
- Be familiar with the land features where you work. It may be in a low area, near a drainage ditch, or small stream.
- Stay tuned to weather forecasts and updates for the latest statements, watches, and warnings concerning heavy rain and flash flooding in the Area.
- Waiting 15 to 30 minutes, or until high water recedes, is a simple safety measure.

Tornado

3. Upon the issuance of a tornado warning, Emmons Logan Energy Storage team members will evacuate the site and report to the pre-designated shelter area. In the event team members are outside and unable to evacuate to the shelter, the following procedures will be followed:

- Lie flat in a nearby ditch or depression, covering the head with the hands. Be aware of the potential for flooding.
- Team members are safest in a low, flat location and will be instructed to not get under an overpass or bridge.
- Team members will be instructed to never try to outrun a tornado in congested areas in a vehicle. It is safest to leave the vehicle for safe shelter.
- Team members are instructed to beware of flying debris.

4. Following tornado or high wind events, the site facility will be evaluated by Emmons Logan Energy Storage team members for damage. All repairs will be performed under standard operational procedures.

Lightning Storm

5. In the event a lightning storm is within 10 – 30 miles and approaching Emmons Logan Energy Storage, the following procedures shall apply.

Notify Site Manager and/or Safety Manager, and all on-site team members.

- Stop work safely and head to staging and laydown yards in vehicles.
- Remain at staging and laydown yards, get update on weather conditions.
- If storm/lighting is still approaching Emmons Logan Energy Storage, get in and stay in company or personal vehicles that have rubber tires only.
- If safe enough to do so, take cover in on-site designated shelters.
- Once storm passes, remain in cars/trucks for at least 30 minutes depending on passing storm severity, and wait for an “OK” from the Site Manager or Emergency Response Coordinator in charge of monitoring the storm.

Winter Storm

6. Before winter approaches, the facility will ensure adequate supplies, including:

- Rock salt or similar products to melt ice on walkways.
- Sand to improve traction.
- Snow shovels and other snow removal equipment.
- As needed, service agreement(s) with snow removal vendors.

7. When winter weather threats exist, Emmons Logan Energy Storage will monitor local news channels for critical information from the National Weather Service (NWS). Be alert to changing weather conditions. Winter storm watches, warnings, and advisories are issued by local National Weather Service Forecast offices.
Depending on the severity of the winter storm, the Site Manager or Emergency Response Coordinator will give direction to personnel regarding site staffing/closure.

Seismic Event

8. Earthquakes may strike with little to no advance warning. As such, when an earthquake does occur, it is important to stay as safe as possible. Be aware that some earthquakes are actually fore-shocks and a larger earthquake may subsequently occur. Also, be aware that many earthquakes are accompanied by aftershocks after the main event has occurred. If an earthquake occurs minimize your movements to a few steps to a nearby safe place and if you are indoors stay there until the shaking has stopped and you are sure exiting is safe. The following actions should be followed for team members indoors:

- Drop to the ground and take cover by getting under a sturdy piece of furniture and hold on until the shaking stops. If there isn't a desk or sturdy piece of furniture near you, cover your face and head with your arms and crouch in an inside corner of the building.
- Stay away from glass, windows, outside doors and walls, and anything that could fall such as lighting fixtures or furniture.
- Use a doorway for shelter only if it is in close proximity to you and if you know it is a strongly supported load-bearing doorway.
- Stay inside until the shaking stops and it is safe to go outside.

9. The following actions should be followed for team members outdoors:

- If you are already outdoors stay there.
- Move away from buildings, structures, light poles, and utility wires.

10. Once in the open stay there until the shaking stops to prevent being hit by falling debris.

11. Following seismic events, the site facility will be evaluated by Emmons Logan Energy Storage team members for damage. All repairs will be performed under standard operational procedures.

XVIII. Cybersecurity

1. Cyber security testing should be an integral part of the Emmons Logan Energy Storage operation; systems should be secure by design. Once in operation, ensure continuous secure operation by monitoring, risk assessment and patching.

2. A process should be created and put in place to ensure continuous hardening of the Emmons Logan Energy Storage and its systems. The principle of hardening is making sure that the attack surface to site and equipment is limited by:

- Only necessary network service ports should be open, others should be closed.
- Only necessary software should be installed on the device, other software should be removed.
- Development environments and source code should not be installed on production devices.
- Remote access protocols that use plain text communication should not be used.
- Software that stores passwords unencrypted should not be used.

3. Emmons Logan Energy Storage team members are to immediately notify the Site Manager of Cyber Security concern and/or incident. The team member is to provide detailed information pertaining to the concern or incident.

4. The Emmons Logan Energy Storage Site Manager is to:

- Notify Corporate Security Support Services
- Notify ROCC (if an active plant/facility)
- Notify the Business Unit Executive
- Follow direction given by the Corporate CSIRSP Team.

XIX. Appendices

- **Appendix 1: Map of Site**
- **Appendix 2: Evacuation Map**
- **Appendix 3: Emergency Contacts**
- **Appendix 4: Hazardous Materials Incident Form**
- **Appendix 5: Bomb Threat Report**
- **Appendix 6: Bomb Threat Checklist**
- **Appendix 7: Chemical/Biological Agent Threat Report**
- **Appendix 8: Chemical/Biological Agent Threat Checklist**

Business Unit:	Engineering & Construction (E&C)	**Document Owner:**	GM – Safety Services
Document Name:	Site Emergency Action / Response Plan	**Document Revision #:**	0
Document #:	ECMS.002.000	**Date of Issuance:**	08/05/2024

XX. Revision History

Rev #:	Date:	Revised By:	Revision Detail

Appendix 1: Map of Site

[Note: A detailed map of the site, including site boundaries, primary and secondary entrances, emergency information notice boards, emergency stop switches, first aid kit locations, AED locations, fire department connections, emergency spill kit locations, and other key emergency resources, will be prepared and included in the ERP as the Project design is finalized.]

Appendix 2: Evacuation Map

[Note: A detailed map of the site, including primary and alternate evacuation routes, exits, the primary muster point, and a secondary muster point, will be prepared and included in the ERP as the Project design is finalized.]

Appendix 3: Emergency Contacts

[Note: A list of emergency contacts will be prepared and included in the ERP as the Project design is finalized.]

Onsite Contacts

1. **Site Manager:**
2. **Emergency Response Coordinator:**

Offsite Emergency Response Contacts

1. **Fire:**
2. **Police:**
3. **Ambulance:**
4. **State Police:**
5. **Sheriff:**
6. **FBI:**

Medical Service Providers

1. **Telephonic Medicine:**
2. **Occupational Clinic:**
3. **Hospital:**

Offsite Corporate Support Contacts:

1. **Environmental Services:**
2. **Safety Support Services:**
3. **Security Support Services: 561-694-5000**
4. **ROCC: 561-694-3636**
5. **Media Relations:**

Appendix 4: Hazardous Materials Incident Report Form

Date & Time of Notification:
Received By:
Reported By:
Location:
Chemical Information
1. **Nature of Emergency (leak, explosion, spill, fire, derailment, other)** 2. **Description:** 3. **Name of material(s) released/placard number(s):** 4. **Release of materials (has ended, is continuing)** 5. **Estimated amount of material which <u>has been</u> released:** 6. **Estimated amount of material which <u>may be</u> released:** 7. **Media into which release occurred (air, ground, water)** 8. **Plume characteristics – direction - color - height - odor** 9. **Characteristics of material – color -smell -liquid -gaseous - solid** 10. **Present status of material (solid, liquid, gas)**
Apparent Responsible Party(s)
Environmental Conditions
1. **Current Weather – Wind Direction - Wind Speed - Temp** **- Humidity - Precipitation - Visibility** 2. **Forecast:** 3. **Terrain Conditions:**
Hazard Information (From SDS) ***Attach SDS* **
1. **Potential hazards:** 2. **Potential health effects:** 3. **Safety recommendations:** 4. **Recommended evacuation distance:**

Business Unit:	Engineering & Construction (E&C)	**Document Owner:**	GM – Safety Services
Document Name:	Site Emergency Action / Response Plan	**Document Revision #:**	0
Document #:	ECMS.002.000	**Date of Issuance:**	08/05/2024

Impact Data

1. **Estimated areas / populations at risk:**
2. **Special facilities at risk:**
3. **Other facilities with HAZMAT in area of incident:**

Protective Action Decisions

1. **Tools used for formulating protective actions (SDS, ERP, Modeling, CHEMTREC)**
2. **Protective action recommendations (evacuation, shelter in place, combination, non)**
3. **Time actions implemented:**
4. **Recommended Evacuation Routes:**

Notifications – ***Corporate Environmental Services to make notification to external parties. ***

1. **Corporate Environmental Services**
   - National Response Center
   - CHEMTREC
   - State Emergency Response Commission

Appendix 5: Bomb Threat Report

***** KEEP CALLER ON THE LINE AS LONG AS POSSIBLE*****

Exact Words of Caller:
Questions to ask the Caller:
1. When is it going to explode? 2. When is the agent going to be released? 3. Where is it right now? 4. Who put it there? 5. What does it look like? 6. What will trigger it? 7. Where did you get the agent? 8. Why are you doing this? 9. What is your name? 10. What is your telephone number and address?
Try to determine the following
1. Identity (male, female, adult juvenile) 2. Voice (loud, high pitched, deep, raspy, pleasant, disguised, broken, other) 3. Accent (local, not local, foreign, regional) 4. Race (caucasian, african american, hispanic, asian, other) 5. Speech (educated, average, illiterate, obscene, other) 6. Manner (calm, angry, rational, irrational, coherent, incoherent, deliberate, self-righteous) 7. Background (office, factory, bedlam, trains, quiet, voices, airplanes, traffic, other)
Is the Voice Familiar to you, who did it sound like?
Additional Information:
Date & Time:
Received By:

Appendix 6: Bomb Threat Checklist

Mail Threat:
1. **Handle documents as little as possible to preserve fingerprints.** 2. **Notify Site Manager immediately.**
Telephone Threat:
1. **Complete the Bomb Threat Report Form** 2. **Deliver completed form to the Site manager immediately.**
Site Manager:
1. **Gather all information regarding threat.** 2. **Contact Corporate Security.** 3. **Notify Local Law Enforcement.**
Searches:
1. **To be conducted by trained local law enforcement only.**
Suspicious Objects:
1. **Do not touch or attempt to move.** 2. **Notify Corporate Security.** 3. **Notify Local Law Enforcement.**
Evacuation:
1. **Make site-wide announcement and give location where to assemble.**
Re-entry:
1. **Determined based on an all-clear being given by Local Law Enforcement & Corporate Security.**

Appendix 7: Chemical/Biological Agent Threat Report

***** KEEP CALLER ON THE LINE AS LONG AS POSSIBLE*****

Exact Words of Caller:
Questions to ask the Caller:
1. **What chemical or biological agent is it?** 2. **When is the agent going to be released?** 3. **Where is it right now?** 4. **Who put it there?** 5. **What does it look like?** 6. **What will cause it to spread?** 7. **What will trigger it?** 8. **Where did you get the agent?** 9. **Why are you doing this?** 10. **What is your name?** 11. **What is your telephone number and address?**
Try to determine the following
1. **Identity (male, female, adult juvenile)** 2. **Voice (loud, high pitched, deep, raspy, pleasant, disguised, broken, other)** 3. **Accent (local, not local, foreign, regional)** 4. **Race (caucasian, african american, hispanic, asian, other)** 5. **Speech (educated, average, illiterate, obscene, other)** 6. **Manner (calm, angry, rational, irrational, coherent, incoherent, deliberate, self-righteous)** 7. **Background (office, factory, bedlam, trains, quiet, voices, airplanes, traffic, other)**
Is the Voice Familiar to you, who did it sound like?
Additional Information:
Date & Time:
Received By:

Appendix 8: Chemical/Biological Agent Threat Checklist

Mail Threat:
1. **Handle documents as little as possible to preserve fingerprints.** 2. **Notify Site Manager immediately.**
Telephone Threat:
1. **Complete the Chemical/Biological Threat Report Form** 2. **Deliver completed form to the Site manager immediately.**
Site Manager:
1. **Gather all information regarding threat.** 2. **Contact Corporate Security.** 3. **Notify Local Law Enforcement.**
Searches:
1. **To be conducted by trained local law enforcement only.**
Suspicious Objects:
1. **Do not touch or attempt to move.** 2. **Notify Corporate Security.** 3. **Notify Local Law Enforcement.**
Evacuation:
1. **Make site-wide announcement and give location where to assemble.**
Re-entry:
1. **Determined based on an all-clear being given by Local Law Enforcement & Corporate Security.**

Appendix F

Stakeholder Correspondence

F1. Notification Letter Template

merjent

p 612.746.3660 ▪ f 612.746.3679 ▪ www.merjent.com

1 Main Street SE ▪ Suite 300 ▪ Minneapolis, Minnesota ▪ 55414

October 25, 2024

«Agency»
«Mailing_Address»
«City», «State» «Zip»

Subject: Notification of the Proposed Emmons-Logan Energy Storage Project in Emmons County, North Dakota

Emmons-Logan Energy Storage, LLC (Emmons-Logan Energy Storage), a wholly owned, indirect subsidiary of NextEra Energy Resources, LLC, is proposing to construct and operate the Emmons-Logan Energy Storage Project (Project) in Emmons County, North Dakota. The Project includes an up to 140-megawatt, four-hour duration battery energy storage system (BESS) facility with associated inverters, transformers, underground cables, and other ancillary facilities such as fencing, roads, and a supervisory control and data acquisition system. The Project is proposed to connect with the Emmons-Logan Wind, LLC 230-kV collector substation at the existing Emmons-Logan Wind Energy Center.

The Project will be capable of storing power from the grid when production exceeds system demand (oversupply). If the grid has excess energy (e.g., during periods of low demand), this energy will be absorbed by the Project for later release. The Project will provide additional reliability for and deliverability to the grid by having the ability to store low-cost excess generation (relative to load) and inject it onto the grid at times of increased demand.

The purpose of this letter is to provide notification of the Project per North Dakota Administrative Code Section 69-06-01-05. Emmons-Logan Energy Storage plans to submit an application for a Certificate of Site Compatibility for the Project to the North Dakota Public Service Commission and aims to start construction in 2025 with commercial operation anticipated in late 2026.

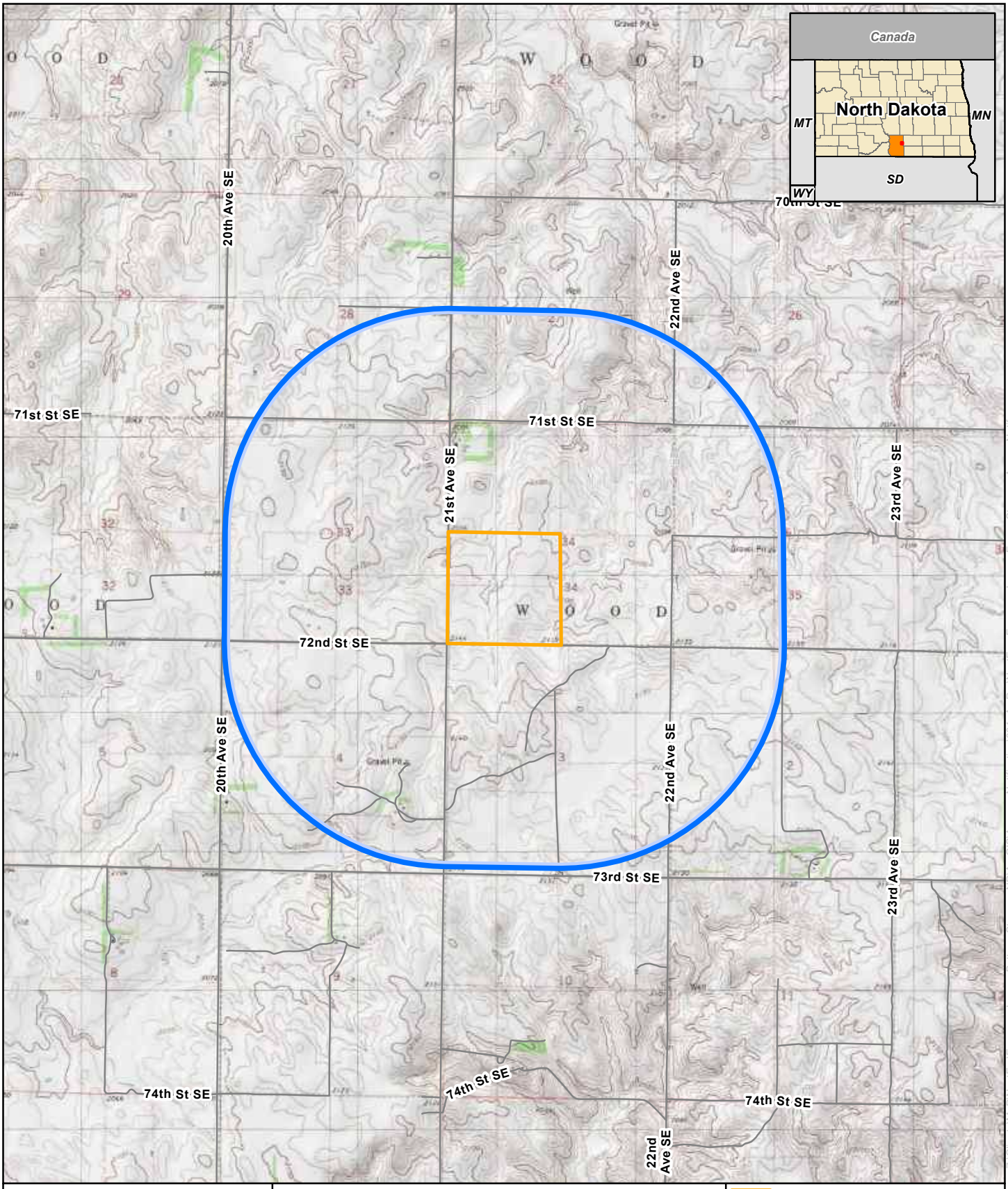
We are seeking input from your agency or entity regarding any sensitive resources, current or planned development, or property interests within the Project site, which covers approximately 160 acres, or within the larger Study Area, defined as a one-mile buffer around the Project site. The Project site plus a 1-mile Study Area is located in portions of Sections 26, 27, 28, 33, 34, and 35 in Township 134N, Range 74W, and Sections 2, 3, and 4 in Township 133N, Range 74W, as shown on the attached map. In addition, we ask that you provide information regarding any applicable permits that may be required from your office. Emmons-Logan Energy Storage respectfully requests your response within 30 days of receipt of this letter. Copies of all correspondence received in response to this letter will be included with the North Dakota Public Service Commission application.

Emmons-Logan Energy Storage has contracted Merjent, Inc. on this Project. If further information is desired or if you have comments regarding the Project, please contact me at the address provided below, by e-mail at lindsey.churchill@merjent.com, or by phone at 701-526-4848.

Regards,
Lindsey Churchill, PhD, PWS
Senior Project Manager

Merjent, Inc.
1 Main Street SE, Suite 300
Minneapolis, Minnesota 55414

Enclosure: Project Study Area Map



0 1,500 3,000 Feet

Scale: 1:36,000

N W E S

merjent

For Environmental Review Purposes Only

Study Area Map

Emmons-Logan Energy Storage

Emmons County, North Dakota

Project Site

Study Area

Source: Z:\Clients\M_P\NextEra\Emmons_Logan_Battery_Storage_NDA\ArcGIS\Agency_Notification\001_ArcPro\NextEra_Emmons_Logan_EnergyStorage_AgencyNotify.aprx

Date: (10/17/2024)

EL 000161

F2. North Dakota Game and Fish Department

NORTH Dakota | Game and Fish
Be Legendary.™

November 29, 2024

Lindsey Churchill, Senior Project Manager
Merjent, Inc.
1 Main Street SE, Suite 300
Minneapolis, Minnesota 55414

Subject: Proposed Emmons-Logan Energy Storage Facility in Emmons County, North Dakota

Ms. Churchill,

Thank you for reaching out to the North Dakota Game and Fish Department (Department) regarding the proposed Emmons-Logan Energy Storage Facility. Ensuring we develop efficient and clean energy responsibly is beneficial to both the residents of the state and the wildlife. The addition of battery storage to increase the deliverability and reliability of an existing wind farm is a promising next step in ensuring projects remain efficient and effective at meeting increased demands. However, as this is a newer technology in general and new to the state, it is imperative that due diligence is taken, especially early in the siting process.

The Project is a unique case, as it is one of the first battery storage project to be introduced in North Dakota. There is much uncertainty of the risk these projects pose to wildlife, and as such, it is quite difficult to minimize risk, when so little about the risk is known. In the absence of state specific guidelines or best management practices, general recommendations can be made to avoid/minimize impacts based on the best science available at the time.

1. Site Selection
   a. Adhere to criteria laid out in 69-06-08-01 of the North Dakota Administrative Code, which specifies areas of exclusion and avoidance for energy conversion facilities (https://www.ndlegis.gov/information/acdata/pdf/69-06-08.pdf).
   b. Select a site with minimal risk to wildlife. Refer to Figure B11, Key Native Wildlife and Habitat Areas, in Wind Energy Development in North Dakota – Best Management Practices, to assess the potential risk of the site selected (https://gf.nd.gov/node/4800).
   c. Avoid areas of unstable land surfaces such as slopes and areas prone to erosion.
   d. Avoid state or federally owned/operated land (including, but not limited to, Wildlife Management Areas, Private Land Open To Sportsmen, National Wildlife Refuges, etc.)
2. Micro-sitting
   a. Habitat loss:

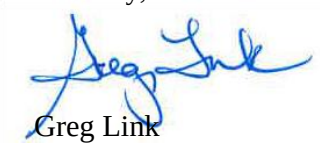
100 North Bismarck Expressway | Bismarck ND, 58504-5095 | (701) 328-6300 | Fax: (701) 328-6352

        i. Focus on avoidance: micro-sitting sites away from native/unbroken habitat (grasslands, woodlands, and wetlands), before moving to mitigation strategies. Impacts to rare, unique, and declining species will be much greater if the habitat they depend on is disturbed or lost.
        ii. Avoid installing new drain tile systems that may drain or hinder replenishment of adjacent wetlands or that flood adjacent wetlands during drastic precipitation events.
    b. Habitat fragmentation:
        i. Consolidate all facilities and roads to the extent possible as to reduce habitat fragmentation.
    c. Threatened and Endangered species
        i. Coordinate with the US Fish and Wildlife Service to assess and minimize risk to species listed under the Endangered Species Act.
3. Construction
    a. Wildlife safe fencing should be used, and efforts should be taken to ensure wildlife is not trapped within the facility, such as constructing structures installed to allow animals to escape or checking for entrapped animals routinely.
    b. Any lighting installed should be designed to minimize light pollution and initiatives that aim to reduce impacts to wildlife should be considered.
    c. A plan for managing noxious weeds should be created and approved by the local weed board/s.
    d. Wildlife friendly plantings should be utilized to the extent possible (I.e. native wildflower and grass seed mixes over non-native mixes and natural hedgerows versus fencing).
4. Voluntary Offsets
    a. It is recommended that when impacts to unbroken grasslands, wetlands, and woodlands cannot be avoided, suitable replacements be applied back onto the landscape. Ensuring these habitats remain on the landscape is the only way to stem the decline of our state's rare and sensitive species and prevent listings through the Endangered Species Act, which could impact both the state and its citizens. The Department recommends that any acre of habitat broken due to development be replaced at a minimum of a 1:1 ratio. For example, if 100 acres of native grasslands are going to be developed for energy conversion, a minimum of 100 acres of grasslands should be planted within the county to offset that impact. These plantings should also be protected for the life of the project.
5. Safety plans
    a. If the batteries used pose a risk to either wildlife or human life (fire/explosion risk, chemical leakage, etc.) safety plans should be developed.
6. Recycling plans
    a. An end-of-life/ recycling plan should be developed so that a safe and effective disposal of the batteries is ensured when the project reaches the end of its life.

As the project moves forward, the Department requests to remain informed. To accurately analyze the project and provide valuable feedback to the Public Service Commission, it is important that the Department receives all documents, including wildlife surveys, spatial data, and any voluntary offsets being proposed 100 days prior to the hearing date.

Thank you for the opportunity to comment on the proposed project.

Sincerely,



Greg Link
Chief, Conservation and Communications Division

Cc: Luke Toso, US Fish and Wildlife Service
ND Public Service Commission

February 21, 2025

Greg Link
Chief, Conservation and Communications Division
North Dakota Game and Fish Department
100 N Bismarck Expressway
Bismarck, North Dakota 58504

Subject: RE: Proposed Emmons-Logan Energy Storage Facility in Emmons County, North Dakota

Dear Mr. Link,

Thank you for your letter and for providing detailed guidance regarding the proposed Emmons-Logan Energy Storage Project (the project). Emmons-Logan Energy Storage appreciates the North Dakota Game and Fish Department's (Department's) commitment to ensuring responsible energy development and its focus on wildlife protection. Below, we address each of the points in response to your November 29, 2024 letter.

1. **Site Selection**
    a. The project will adhere to North Dakota Administrative Code Section 69-06-08-01, which outlines areas of exclusion and avoidance for energy conversion facilities. Given that the project is a utility-scale energy storage plant with a capacity of 5 megawatts or more, it is subject to the North Dakota Energy Conversion and Transmission Facility Siting Act and the regulations of the North Dakota Public Service Commission (Commission).

    In our upcoming application for a Certificate of Site Compatibility, we will address the specified exclusion and avoidance areas, selection criteria, and policy requirements. The design of the project will reflect these considerations to ensure full compliance with the Commission's regulations and the North Dakota Administrative Code.

    b. While helpful, *Wind Energy Development in North Dakota – Best Management Practices* is specific to wind energy development. However, we strive to select sites to minimize risk to wildlife and have taken that approach for this project as well. For the Emmons-Logan Energy Storage Project, Emmons-Logan Energy Storage selected a site in existing cropland, adjacent to existing energy infrastructure to minimize impacts to wildlife.

    c. As required by North Dakota Administrative Code Section 69-06-08-01, the project has been sited to avoid unstable land surfaces, including landslide deposits mapped by the North Dakota Geological Survey.

    d. The project has been sited on private land and avoids state or federally owned/operated land, including Wildlife Management Areas and National Wildlife Refuges, and the project avoids Private Land Open To Sportsmen easements.

2. **Micro-siting**
    a. **Habitat Loss**
        i. The project, with an approximate size of 25 acres, has been sited within existing cropland and therefore avoids native/unbroken habitats (grasslands, woodlands, and wetlands). A wetland delineation survey has been conducted within the proposed site, and the project has been designed to avoid wetlands.
        ii. The project does not include the installation of drain tile systems.
    b. **Habitat Fragmentation**
        i. The project has been designed to consolidate facilities and roads to minimize habitat fragmentation. The storage facility has been located adjacent to the existing Emmons-Logan Wind collection substation.
    c. **Threatened and Endangered Species**
        i. Emmons-Logan Energy Storage has coordinated with the USFWS regarding the project. In accordance with North Dakota Administrative Code 69-06-01-05 Emmons-Logan Energy Storage sent the same notification letter to USFWS that the Department has received. Emmons-Logan Energy Storage has held meetings with the USFWS to discuss proposed NextEra development projects in North Dakota, including the project, most recently, on June 13, 2024. To date, USFWS stated that they had no concerns with energy storage projects when sited in existing cropland. Emmons-Logan Energy Storage will continue to coordinate with the USFWS as necessary.

3. **Construction**
    a. Fencing will be designed to conform with National Fire Protection Association (NFPA) 70, also known as the National Electrical Code (NEC). Enforced in all 50 states, NFPA 70 is the benchmark for safe electrical design, installation, and inspection to protect people and property from electrical hazards. NFPA 70 Section 110.31 "Enclosures for Electrical Installations" states that a 7' fence is needed, and it is anticipated that chain link fencing with a minimum height of 6', topped with 1' of three-strand barbed wire will be installed.
    b. No lighting is proposed for the project. Any lighting required for night-time operations and maintenance issues will be temporary and provided by the operations team.
    c. Emmons-Logan Energy Storage will create a noxious weed management plan. Emmons-Logan Energy Storage will submit the noxious weed management plan for approval to the Emmons County Weed Board.
    d. The project site is located in cropland and any temporarily impacted areas are expected to be planted to a Natural Resources Conservation Service recommended seed mix appropriate for an industrial application.

4. **Voluntary Offsets**
    a. In accordance with Commission regulations and criteria, the project has been sited to minimize impacts. The proposed project will not impact unbroken grasslands, wetlands, or woodlands as it is located on cropland. Therefore, we do not anticipate the need for voluntary offsets. By selecting a site that avoids these sensitive habitats, Emmons-Logan Energy Storage aims to ensure that there are negligible negative effects on the state's rare and sensitive species, thereby aligning with the Department's recommendations and preserving natural landscapes.

5. **Safety Plans**
    a. Safety plans will be developed to address potential risks from the batteries, including fire risk and chemical leakage. Emmons-Logan Energy Storage will develop an Emergency Action Plan for the project. The Emergency Action Plan will be provided to all project personnel

prior to initiating construction and will establish actions to be taken by the personnel responsible in the event of an emergency.

6. **Recycling Plans**
    a. Emmons-Logan Energy Storage will work to recycle the lithium-ion batteries, as many of the component parts can be recycled from spent batteries and used in new products. Emmons-Logan Energy Storage will require its vendors to provide recycling certificates to ensure all applicable regulations are followed in the recycling and disposal of battery storage related equipment.

As the project progresses, Emmons-Logan Energy Storage will ensure that the Department remains informed. If the Department seeks further clarification on any of these responses, please let us know. Emmons-Logan Energy Storage will provide the requested documents, including wildlife surveys, noxious weed plan, safety plans, and spatial data, at least 100 days prior to the anticipated North Dakota Public Service Commission hearing date.

Thank you for your valuable input and support as we move forward with this project.

Best regards,

Dina E. Brown

Dina E. Brown
Environmental Services Project Manager
281-570-7108 | Dina.Brown@nexteraenergy.com

Cc. Luke Toso, US Fish and Wildlife Service

From: Brown, Dina
To: Lindsey Churchill
Cc: Dirk Churchill
Subject: EXTERNAL: FW: Emmons-Logan Energy Storage Project
Date: Monday, February 24, 2025 10:30:54 AM

From: Mueller, Elisha K. <ekmueller@nd.gov>
Sent: Monday, February 24, 2025 7:56 AM
To: Brown, Dina <Dina.Brown@nexteraenergy.com>
Subject: RE: Emmons-Logan Energy Storage Project

Thank you, Dina. We appreciate remaining informed on the project.

And just an FYI if you weren't aware, Greg is now enjoying the retired life!

From: Brown, Dina <Dina.Brown@nexteraenergy.com>
Sent: Friday, February 21, 2025 2:08 PM
To: Mueller, Elisha K. <ekmueller@nd.gov>; Link, Greg W. <glink@nd.gov>
Cc: Toso, Luke B <luke_toso@fws.gov>; Lindsey Churchill <lindsey.churchill@merjent.com>; Wernicke, Dustin <Dustin.Wernicke@nexteraenergy.com>; Scherb, Clint <Clint.Scherb@nexteraenergy.com>; Cameron, Clay <Clay.Cameron@nexteraenergy.com>
Subject: Emmons-Logan Energy Storage Project

Hi Greg and Elisha,

Thank you for providing comments on our proposed Emmons-Logan Energy Storage Project in Emmons County, ND. Please find attached our response to your comments and suggestions. I look forward to further discussing the project with you should you have any additional comments.

Best regards,
Dina

Dina E. Brown | Project Manager
Environmental Services | Central Region | NextEra Energy Resources, LLC
C: 281-570-7108 | Dina.Brown@nexteraenergy.com
We Are Committed to Excellence | We Do the Right Thing | We Treat People With Respect


NEXTera
ENERGY
RESOURCES

F3. North Dakota Department of Transportation

NORTH Dakota | Transportation
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October 25, 2024

Lindsey Churchill, PhD, PWS
Senior Project Manager
Merjent, Inc.
1 Main Street SE, Suite 300
Minneapolis, MN 55414-2093

PROPOSED EMMONS-LOGAN STORAGE PROJECT IN EMMONS COUNTY, EMMONS, ND, NORTH DAKOTA

We have reviewed your October 25, 2024, letter.

This project should have no adverse effect on the North Dakota Department of Transportation highways.

However, if because of this project any work needs to be done on highway right of way, appropriate permits and risk management documents will need to be obtained from the Department of Transportation District Engineer, Larry Gangl at 701-328-6955.

JON KETTERLING, P.E., DIRECTOR – OFFICE OF PROJECT DEVELOPMENT

57/jk/js
c: Larry Gangl, Bismarck District Engineer

F4. State Historical Society of North Dakota

January 9, 2024

Damien Reinhart
Merjent Inc.
1 Main Street SE
Suite 300
Minneapolis, MN 55414

SHSND Ref: 24-9011 NextEra Emmons-Logan Battery Energy Storage System in portions of [T134N R74W Section 34] in Emmons County, North Dakota

Dear Damien,

From your submission on behalf of Emmons-Logan Wind, LLC, it is our understanding that SHSND Ref: 24-9011 NextEra Emmons-Logan Battery Energy Storage System involves construction of a new substation with battery storage, access roads, and tie-in line connection to an existing overhead power line. Therefore, it is our determination that there are no significant sites affected by this project provided it takes place in the location and in the manner described in the documentation.

Thank you for the opportunity to review this project under North Dakota cultural resources consultation. This letter does not serve as federal agency consultation or SHPO consultation for compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, (36 CFR Part 800), or the National Environmental Policy Act, as amended, (42 U.S.C. §§ 4321- 4347).

If you have any questions, please contact Lorna Meidinger, Lead Historic Preservation Specialist at lbmeidinger@nd.gov or (701) 328-2089.

Sincerely,

for William D. Peterson, PhD
Director, State Historical Society of North Dakota

24-9011

January 9, 2024

Damien Reinhart
Merjent Inc.
1 Main Street SE
Suite 300
Minneapolis, MN 55414

SHSND Ref: 24-9011 NextEra Emmons-Logan Battery Energy Storage System in portions of [T134N R74W Section 34] in Emmons County, North Dakota

Dear Damien,

We received SHSND Ref: 24-9011 "A Class I and Class III Cultural Resources Inventory of NextEra's Proposed Emmons-Logan Battery Energy Storage System (BESS), Emmons County, North Dakota" in portions of T134N R74W Section 34 and find this Merjent report by Damien Reinhart acceptable. We will add it to our Manuscript Collection.

Thank you for the opportunity to review this report. Please be advised that acceptance of this report does not constitute concurrence with the determinations therein. If you have any questions, please contact either Margie Patton, Research Archeologist, at (701) 328-3576 or mmpatton@nd.gov or Lorna Meidinger, Lead Historic Preservation Specialist, at (701) 328-2089 or lbmeidinger@nd.gov.

Sincerely,

for William D. Peterson, PhD
Director, State Historical Society of North Dakota

24-9011

November 20, 2024

Lindsey Churchill
Merjent
1 Main Street SE, Suite 300
Minneapolis, MN 55414
lindsey.churchill@merjent.com

SHSND Ref.: 24-9011 NextEra Emmons-Logan Battery Energy Storage System in portions of [T134N R74W Section 34] in Emmons County, North Dakota

Dear Lindsey,

We received your request for review and the verification on November 6, 2024 that is part of SHSND Ref.: 24-9011. While it was in the queue to be looked at by our archeologists due to the larger study area, we received an addendum report for this project titled "Addendum to A Class I and Class III Cultural Resources Inventory of NextEra's Proposed Emmons-Logan Battery Energy Storage System (BESS), Emmons County, North Dakota." We will respond once this new information has been reviewed. Please note our 30-day window starts from when we received the new report on November 18, 2024.

Please include the SHSND Reference number listed above in further correspondence for this specific project. If you have any questions please contact Lorna Meidinger, Lead Historic Preservation Specialist at (701) 328-2089 or lbmeidinger@nd.gov.

Sincerely,

for William D. Peterson, PhD
Director, State Historical Society of North Dakota

24-9011

December 19, 2024

Damien Reinhart
Merjent Inc.
1 Main Street SE
Suite 300
Minneapolis, MN 55414

SHSND Ref: 24-9011 NextEra Emmons-Logan Battery Energy Storage System in portions of [T134N R74W Section 34] in Emmons County, North Dakota

Dear Damien,

We received SHSND Ref: 24-9011 "Addendum to A Class I and Class III Cultural Resources Inventory of NextEra's Proposed Emmons-Logan Battery Energy Storage System (BESS), Emmons County, North Dakota" in portions of T134N R74W Section 34 and find this Merjent report by Damien Reinhart acceptable. We will add it to our Manuscript Collection.

Thank you for the opportunity to review this report. Please be advised that acceptance of this report does not constitute concurrence with the determinations therein. If you have any questions, please contact either Margie Patton, Research Archeologist, at (701) 328-3576 or mmpatton@nd.gov or Lorna Meidinger, Lead Historic Preservation Specialist, at (701) 328-2089 or lbmeidinger@nd.gov.

Sincerely,

for William D. Peterson, PhD
Director, State Historical Society of North Dakota

Cc: Lindsey Churchill

24-9011

December 19, 2024

Lindsey Churchill
Merjent Inc.
1 Main Street SE, Ste 300
Minneapolis, MN 55414

SHSND Ref: 24-9011 NextEra Emmons-Logan Battery Energy Storage System in portions of [T134N R74W Section 34] in Emmons County, North Dakota

Dear Dr. Churchill,

Within the area surveyed by Merjent, Inc. for cultural resources at the Class III level for this proposed project, there are no significant sites affected by the proposed project. However, within the study area for the project, there are 22 previously identified culturally significant sites. The respective tribes identified in the documentation for these culturally significant sites should be consulted regarding the potential effects of noise levels and visual impacts on these sites. The sites are: CHFEM3, CHFEM4, CHFEM30, CHFEM31, CHFEM35, CHFEM36, CHFEM49, CHFEM64, CHFEM76, CHFEM79, CHFEM81, CHFEM83, CHFEM85, CHFEM86, CHFEM87, CHFEM88, CHFEM89, CHFEM91, CHFEM92, CHFEM106, CHFEM107, and CHFEM119.

Thank you for the opportunity to review this project under North Dakota cultural resources consultation. This letter does not serve as federal agency consultation or SHPO consultation for compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, (36 CFR Part 800), or the National Environmental Policy Act, as amended, (42 U.S.C. §§ 4321- 4347).

If you have any questions, please contact Lorna Meidinger, Lead Historic Preservation Specialist at lbmeidinger@nd.gov or (701) 328-2089.

Sincerely,

for William D. Peterson, PhD
Director, State Historical Society of North Dakota

Cc: Damien Reinhart

24-9011

p 612.746.3660 ▪ f 612.746.3679 ▪ www.merjent.com

merjent®

1 Main Street SE ▪ Suite 300 ▪ Minneapolis, Minnesota ▪ 55414

April 7, 2025

Lorna Meidinger
Lead Historic Preservation Specialist
State Historical Society of North Dakota
612 East Boulevard Avenue
Bismarck, ND 58505-0830

Subject RE: SHSND Ref: 24-9011 NextEra Emmons-Logan Battery Energy Storage System in portions of [T134N R74W Section 34] in Emmons County, North Dakota

Dear Ms. Meidinger,

We appreciate the confirmation of no significant sites affected for the proposed Emmons-Logan Energy Storage Project (Project).

To address comments made in your letter dated December 19, 2024, we wanted to provide additional information. The Project will be sited within a 25-acre Project Area and will be located adjacent to the existing Emmons-Logan Wind Energy Center and associated transmission line. Regarding visual impacts, the Project will be much smaller in comparison to the surrounding turbines and transmission line, and therefore, will not exceed the height of existing infrastructure and is not expected to result in significant additional visual effects. As for noise, an analysis of auditory effects indicates no appreciable increase beyond conversational levels to the Tribally identified sites, given the presence of operating wind turbines and a substation in the immediate area. The nearest Tribally identified sites are approximately 0.5 mile from the Project Area.

We have consulted the respective Tribes identified in the documentation regarding potential effects, including noise levels and visual impacts, on the 22 culturally significant sites. To date, no concerns from Tribes have been raised and the Project team will continue to coordinate with Tribes as the Project is developed.

Best regards,

Lindsey Churchill, PhD
Senior Project Manager

Merjent, Inc.
1 Main Street SE, Suite 300
Minneapolis, Minnesota 55414

F5. Job Service North Dakota

Outlook

RE: EXTERNAL: Emmons-Logan Energy Storage project

From Lindsey Churchill <lindsey.churchill@merjent.com>
Date Fri 1/10/2025 9:25 AM
To Skachenko, Micheal R. <mskachenko@nd.gov>

Received. I will reach out with any questions.

Thank you,

Lindsey Churchill, PhD
Bismarck, North Dakota
651.428.7398 mobile
lindsey.churchill@merjent.com

merjent.

1 Main Street SE, Suite 300
Minneapolis, MN 55414
612.746.3660 main
www.merjent.com

From: Skachenko, Micheal R. <mskachenko@nd.gov>
Sent: Friday, January 10, 2025 8:12 AM
To: Lindsey Churchill <lindsey.churchill@merjent.com>
Subject: EXTERNAL: Emmons-Logan Energy Storage project

Micheal Skachenko
Field Representative Supervisor
Respectful | Loyal | Collaborative | Purposeful
#JobUpND

701.328.5017 • 701.328.5050 (f) • mskachenko@nd.gov

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701.328.2825 • jsinfo@nd.gov • jobsnd.com • 1601 E Century Ave. • Bismarck, ND 58503


You
Tube

CONSTRUCTION PROJECT RISK PROTECTION
COMPLIANCE
UNEMPLOYMENT INSURANCE
JSND-4029

Tax & Field Services
PO Box 5507
Bismarck ND 58506-5507
701-328-2814
TTY: Relay ND 800-366-6888 Fax: 701-328-1882

What is the Purpose of the Construction Project Risk Protection Provision?
The construction project risk protection provision of North Dakota Century Code (NDCC 52-04-06.1) requires the general or prime contractor, or the owner, of a major construction project to post a surety bond or irrevocable letter of credit with Job Service North Dakota.

The surety bond or irrevocable letter of credit is intended to guarantee that the general or prime contractor, or the owner, involved in these large construction projects covers the cost of benefits paid to employees who worked on the projects.

Determination of Project Liability
A project is liable to the construction project risk protection provision if the project meets the following criteria:

- Bids are let after August 1, 2001, **and**
- Construction costs are $50 million or more, **and**
- The project is planned to be completed or discontinued within a period of seven years.

Who is Responsible for Posting the Surety Bond or Irrevocable Letter of Credit?
The general or prime contractor, or owner in those situations in which there is no general or prime contractor, must post the surety bond or irrevocable letter of credit with Job Service North Dakota, in the amount as determined by Job Service North Dakota.

How is the Amount of Protection Determined?
The amount of the surety bond or irrevocable letter of credit is calculated and determined by Job Service North Dakota as the difference between the estimated benefits paid to all employees of the project and estimated contributions collected from all sub contractors on the project.

When Must the Bond or Letter of Credit Be Posted?
The surety bond or irrevocable letter of credit in the amount as determined by Job Service North Dakota must be posted with Job Service North Dakota ***before commencement of work on the project***.

Notification of Contract Award
Project owners and contractors on a liable project must notify Job Service North Dakota in writing, within 30 days of awarding a contract to any contractor. The notification must include:

Sub Contractor's name, address, company contact, contact's phone number, NDSUI account number, and Federal Employer Identification Number (FEIN).

Reporting Requirements and Payroll Recording
All sub contractors must maintain separate payroll records for all employment on the project. Job Service North Dakota will establish for each entity a North Dakota State Unemployment Insurance (NDSUI) employer tax account for the project. Each employer must submit quarterly Employer's Contribution and Wage Reports for employment on the project. These reports must be separate from reports listing other employees working for that employer.

Payment Obligation
Thirty months after the completion or discontinuance of the project, Job Service North Dakota will determine the total benefits paid to employees of all employers on the project. If the total amount paid to the employees exceeds the total amount of contributions collected from the (project) employers under the North Dakota Unemployment Compensation Law, the general or prime contractor, or owner, shall pay to Job Service North Dakota the total amount of benefits paid to the employees that exceeds the total amount of contributions collected from the employers on the project.

If the amount of benefits paid exceeds the amount of contributions collected, Job Service North Dakota will notify the party that posted the surety bond or irrevocable letter of credit of the total amount due. Payment of this amount is due within 30 days after the mailing of the notice. If payment of this amount is not paid within the time frame specified, Job Service North Dakota will redeem the surety bond or irrevocable letter of credit for payment. If Job Service North Dakota presents the surety bond or irrevocable letter of credit for payment, and the amount of the bond or letter of credit is not large enough to cover the cost of benefits paid for all employment on the project, Job Service North Dakota will collect the additional amount due from the general or prime contractor, or owner.

If the party that posted the surety bond or irrevocable letter of credit fulfills the stated obligation by paying to Job Service North Dakota the full amount of benefits paid that exceeds the contributions collected, Job Service North Dakota will return the surety bond or irrevocable letter of credit to the party from which it was received.

NORTH Dakota
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CONSTRUCTION PROJECT REGISTRATION

UNEMPLOYMENT INSURANCE/TAX & FIELD SERVICES

SFN 52990 (R.10-23)

Job Service North Dakota
PO Box 5507
Bismarck ND 58506-5507
701-328-2814
Fax 701-328-1882
TTY 1-800-366-6888

Date	Project Name	Project Number
Owner/Contractor		NDSUI Account Number
Project Start Date	Estimated Project Completion Date	
Number of Employees (of all contractors on the project)		

CALCULATION OF TOTAL CONSTRUCTION COSTS:
(excluding design & engineering costs)

Labor	
Material	
Equipment	
Other - Specify	
Other - Specify	
TOTAL CONSTRUCTION COSTS:	

Contact Person	Title	Telephone Number	Date
Signature of Authorized Representative	Title	Telephone Number	Date

F6. Natural Resources Conservation Service

USDA
United States Department of Agriculture

Natural Resources
Conservation Service

Bismarck State Office
PO Box 1458
Bismarck, ND
58502-1458

Voice 701.530.2000
Fax 855-813-7556

November 13, 2024

Lindsey Churchill, PhD, PWS
Senior Project Manager
Merjent, Inc.
1 Main Street SE, Suite 300
Minneapolis, MN 55414

Dear Ms. Churchill:

The Natural Resources Conservation Service (NRCS) has reviewed your letter dated October 25, 2024, concerning the proposed Emmons-Logan Energy Storage Project in Emmons County, North Dakota.

Farmland Protection Policy Act

NRCS has a major responsibility with the Farmland Protection Policy Act (FPPA) in documenting conversion of farmland (i.e., Prime, Statewide Importance and/or Local Importance) to non-agricultural use when federal funds are utilized for a project. It appears by your letter that the proposed project is not supported by federal funding; therefore, FPPA does not apply, and no further action is needed.

If federal funding is secured in the future for the proposed project, then FPPA would apply and require completion of a Farmland Conversion Rating Form AD-1006.

Wetlands

The Wetland Conservation Provisions of the 1985 Food Security Act, as amended, provide that if a USDA participant converts a wetland for the purpose or to have the effect of making agricultural production possible, loss of USDA benefits could occur. NRCS has developed the following guidelines for wetlands on adjacent agricultural lands to which permanent structure installation occurs. If these guidelines are followed the impacts to the wetland will be considered minimal allowing USDA participants to continue to receive USDA benefits. Following are the requirements:

- Disturbance to the wetland must be temporary.
- No drainage of wetland is allowed (temporary or permanent).
- Mechanized landscaping necessary for installation is kept to a minimum and preconstruction contours are maintained.
- Temporary side cast material must be placed in such a manner not to be dispersed in the wetland.
- All trenches must be backfilled to the original wetland bottom elevation.

NRCS recommends that impacts to wetlands be avoided.

If you have additional questions pertaining to FPPA, please contact Wade Bott, State Soil Scientist, NRCS, Bismarck, North Dakota, at (701) 530-2021.

Sincerely,

WADE BOTT Digitally signed by WADE BOTT
Date: 2024.11.15 10:19:55 -06'00'

WADE D. BOTT
State Soil Scientist

F7. North Dakota Department of Water Resources

NORTH Dakota | Water Resources
Be Legendary.

November 22, 2024

Ms. Lindsey Churchill
Merjent Inc
1 Main Street SE, Suite 300
Minneapolis, Minnesota 55414
lindsey.churchill@merjent.com
701-526-4848

Dear Ms. Churchill

This is in response to your request for a review of the environmental impacts associated with the Emmons-Logan Energy Storage Project, located in Emmons County, North Dakota.

The proposed project has been reviewed by Department of Water Resources (DWR), and the following comments are provided:

-There are no FEMA National Flood Insurance Program (NFIP) floodplains identified or mapped where the proposed project is to take place. No permits relative to the NFIP are likely required based on the current Flood Insurance Rate Map and State minimum standards. However, flood risk has been identified through the North Dakota Risk Assessment Mapservice and Base Level Engineering (BLE) (ndram.dwr.nd.gov). In the absence of FEMA NFIP data, BLE is often considered best available data and is recommended to be considered in the design process. The State of North Dakota has no formal NFIP permitting authority as all NFIP permitting decisions are considered by impacted NFIP participating communities, the community with zoning authority for the area in question. Please work directly with the local floodplain administrators of the zoning authorities impacted.

-Initial review indicates the project does not require a conditional or temporary permit for water appropriation. However, if surface water or groundwater will be diverted for construction of any future projects identified in the plan, a water permit will be required per North Dakota Century Code § 61-04-02. Please consult with the DWR Water Appropriation Division if you have any questions at (701) 328-2754 or appropinfo@nd.gov.

-The DWR Regulatory Division's Engineering and Permitting Section reviewed the project location and determined no drainage permits, or construction permits for dikes, diversions, or restorations are likely required so long as no watercourses are modified (i.e., deepened, widened, rerouted, etc.) and no ponds, sloughs, lakes, or any series thereof, with a drainage area of 80 acres or more are drained. North Dakota Stream Crossing Design Standards (N.D.A.C. art. 89-14) apply to stream crossings within a constructed or reconstructed highway, street, or road, as defined in N.D.A.C. § 89-14-01-02.

Thank you for the opportunity to provide review comments. Should you have further questions, please contact me at 701-328-4970 or kyrkoski@nd.gov.

Sincerely,

Kyle Yrkoski

Planner III

KY:mg/1570

F8. United Stated Army Corps of Engineers

From: Nygard, Jeremy S CIV USARMY CENWO (USA) <Jeremy.S.Nygard@usace.army.mil>
Sent: Friday, November 1, 2024 3:58 PM
To: Lindsey Churchill
Subject: EXTERNAL: NWO-2024-01769-BIS, Merjent; Emmons-Logan Energy Storage Project
Attachments: NWO-2024-01769_20241101_SOV Response.pdf; Eng_Form_6082_2024Apr17.pdf

Hi Lindsey,

Our office has reviewed the information you provided regarding the proposed project and determined that a U.S. Army Corps of Engineers Section 404 permit may be required for your project if any waters or wetlands are impacted. Please see attached letter and blank application form. Thank you,

v/r

Jeremy Nygard
Regulatory Program Assistant
U.S. Army Corps of Engineers
North Dakota Regulatory Office
3319 University Drive
Bismarck, ND 58504
Direct: 701-989-6425
Office General Line: 701-255-0015

The North Dakota Regulatory office prefers that all submissions are sent electronically to the ***NEW* Regulatory Request System (RRS) at** https://rrs.usace.army.mil/rrs or the following email address: CENWO-OD-RND@usace.army.mil instead of a hard copy by mail. Please split large attachments (>25 MB) into multiple emails if needed.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, OMAHA DISTRICT
NORTH DAKOTA REGULATORY OFFICE
3319 UNIVERSITY DRIVE
BISMARCK, NORTH DAKOTA 58504-7565

November 1, 2024

NWO-2024-01769-BIS

Merjent, Inc.
Attn: Ms. Lindsey Churchill
1 Main Street SE, Suite 300
Minneapolis, Minnesota 55414

Dear Ms. Churchill:

This is in response to information received on October 29, 2024 regarding the proposed Emmons-Logan Energy Storage Project. The project is located in Section 34, Township 134 North, Range 74 West, Emmons County, North Dakota.

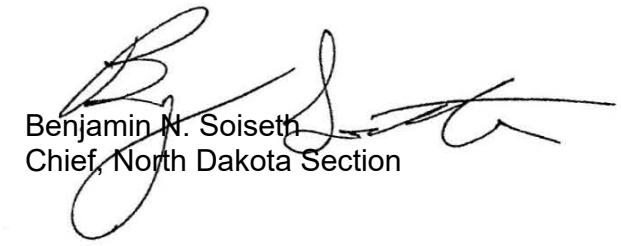
U. S. Army Corps of Engineers Regulatory Offices administer Section 404 of the Clean Water Act (Section 404). A Section 404 permit would be required for the discharge of dredge or fill material (temporarily or permanently) in waters of the United States. Waters of the United States may include, but are not limited to, rivers, streams, ditches, coulees, lakes, ponds, and their adjacent wetlands. Fill material includes, but is not limited to, rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mines or other excavation activities and materials used to create any structure or infrastructure in waters of the United States.

Based on the information contained in your letter, the Corps has determined that your proposed project may need a Clean Water Act Section 404 permit if there is a discharge of dredge or fill material into any types of waters listed in the paragraph above. If you decide to submit a permit application, the permit application and instructions for completing the application are enclosed and may also be found at: http://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/Obtain-a-Permit. Be sure to accurately describe all proposed work and construction methodology. Once the application is complete, mail it to the letterhead address or to the email address (preferred) below.

The North Dakota Regulatory office prefers that all submissions are sent electronically to the following email address: CENWO-OD-RND@usace.army.mil instead of a hard copy by mail. Please split large attachments (>25 MB) into multiple emails if needed.

Please refer to identification number NWO-2024-01769-BIS in any correspondence concerning this project. If you have any questions, please contact Jeremy Nygard at U.S. Army Corps of Engineers, North Dakota Regulatory Office, 3319 University Drive, Bismarck, North Dakota 58504-7565, by email at *Jeremy.S.Nygard@usace.army.mil*, or telephone at 701-989-6425. For more information regarding our program, please visit our website at *http://www.nwo.usace.army.mil/Missions/RegulatoryProgram/NorthDakota.aspx*.

Sincerely,



Benjamin N. Soiseth
Chief, North Dakota Section

Enclosure

F9. North Dakota Transmission Authority

Outlook

RE: EXTERNAL: Emmons-Logan Energy Storage

From Lindsey Churchill <lindsey.churchill@merjent.com>
Date Tue 11/12/2024 11:09 AM
To Vigesaa, Claire <cvigesaa@nd.gov>
Cc Dirk Churchill <dirk.churchill@merjent.com>; Brown, Dina <Dina.Brown@nexteraenergy.com>

Received.

Thank you,

Lindsey Churchill, PhD, PWS
Bismarck, North Dakota
651.428.7398 mobile
lindsey.churchill@merjent.com

merjent

1 Main Street SE, Suite 300
Minneapolis, MN 55414
612.746.3660 main
www.merjent.com

From: Vigesaa, Claire <cvigesaa@nd.gov>
Sent: Monday, November 11, 2024 8:11 AM
To: Lindsey Churchill <lindsey.churchill@merjent.com>
Subject: EXTERNAL: Emmons-Logan Energy Storage

Lindsey,

Thanks for the notification on your Emmons-Logan Energy Storage project. I have no concerns with your proposed project and am looking forward the project's development.

Best Regards,

Claire

Claire Vigesaa, Executive Director
North Dakota Transmission Authority
406-489-3881

F10. North Dakota Department of Environmental Quality

November 14, 2024

Lindsey Churchill, PhD, PWS
Senior Project Manager
Merjent
1 Main St. SW, Suite 300
Minneapolis, MN 55414

Re: Emmons-Logan Energy Storage Project in Emmons County

Dear Ms. Churchill:

The North Dakota Department of Environmental Quality (Department) has reviewed the information concerning the above-referenced project received at the Department on October 28, 2024, with respect to possible environmental impacts.

1. Necessary measures should be taken to minimize fugitive dust emissions created during construction activities. Any complaints that may arise should be dealt with in an efficient and effective manner.

2. Aggregate to be used for road construction should not contain any erionite. Aggregate sources should be tested for erionite following guidelines found at https://deq.nd.gov/erionite. For questions regarding erionite testing, please contact the Asbestos Program at 701-328-5166 or asbestos@nd.gov.

3. Projects disturbing one or more acres are required to have a construction stormwater permit until the site is stabilized by the re-establishment of vegetation or other permanent cover. An industrial stormwater permit, or certification for exclusion from an industrial stormwater permit, may be required based on the type of industrial activity at the facility. Additionally, a wastewater discharge permit is required prior to discharging process wastewater to waters of the state. Further information about the permits may be obtained from the Department's website or by calling the Division of Water Quality at 701-328-5210.

   Cities or counties may impose additional requirements and/or specific best management practices for construction affecting their storm drainage system. Check with the local officials to be sure any local stormwater management considerations are addressed.

4. All solid waste materials must be managed and transported in accordance with the state's solid and hazardous waste rules. Appropriate efforts to reduce, reuse and/or recycle waste materials are strongly encouraged. As appropriate, segregation of inert waste from non-inert waste can generally reduce the cost of waste management. Further information on waste

management and recycling is available from the Department's Division of Waste Management at 701-328-5166.

The Department owns no land in or adjacent to the proposed improvements, nor does it have any projects scheduled in the area. In addition, we believe the proposed activities are consistent with the State Implementation Plan for the Control of Air Pollution for the State of North Dakota.

If you have any questions regarding our comments, please feel free to contact this office.

Sincerely,

L. David Glatt, P.E., Director
North Dakota Department of Environmental Quality

LDG:ll
Attach.

Construction and Environmental Disturbance Requirements

The following are the minimum requirements of the North Dakota Department of Environmental Quality (Department) for projects that involve construction and environmental disturbance in or near waters of the State of North Dakota. They ensure that minimal environmental degradation occurs as a result of construction or related work which has the potential to affect waters of the state. All projects must be constructed to minimize the loss of soil, vegetative cover, and pollutants (chemical or biological) from a site.

Soils

Prevent the erosion and sediment loss using erosion and sediment controls. Fragile and sensitive areas such as wetlands, riparian zones, delicate flora, and land resources must be prohibited against compaction, vegetation loss and unnecessary damage.

Surface Waters

All construction must be managed to minimize impacts to aquatic systems. Follow safe storage and handling procedures to prevent the contamination of water from fuel spills, lubricants, and chemicals. Stream bank and stream bed disturbances must be contained to minimize silt movement, nutrient upsurges, plant dislocations, and any physical chemicals, or biological disruption. The use of pesticides or herbicides in or near surface waters is allowed under the Department's pesticide application permit with notification to the Department.

Fill Material

Any fill material placed below the ordinary high-water mark must be free of topsoil, decomposable materials, and persistent synthetic organic compounds, including, but not limited to, asphalt, tires, treated lumber, and construction debris. The Department may require testing of fill material. All temporary fills must be removed. Debris and solid waste must be properly disposed or recycled. Impacted areas must be restored to near original condition.

F11. Tribal Notification Letter Template

March 19, 2025

[Name]
[Title]
[Tribe]
[Address]

Subject: Notification of the Proposed Emmons-Logan Energy Storage Project in Emmons County, North Dakota

Dear [Name],

Emmons-Logan Energy Storage, LLC (Emmons-Logan Energy Storage), a wholly owned, indirect subsidiary of NextEra Energy Resources, LLC, is proposing to construct and operate the Emmons-Logan Energy Storage Project (Project) in Emmons County, North Dakota. The Project includes an up to 140-megawatt, four-hour duration battery energy storage system facility with associated inverters, transformers, underground cables, and other ancillary facilities such as fencing, roads, and a supervisory control and data acquisition system. The Project is proposed to connect with the Emmons-Logan Wind, LLC 230-kV collection substation at the existing Emmons-Logan Wind Energy Center.

Per a request from the State Historical Society of North Dakota, we are sending this notification about the Project's proximity to sites identified as culturally significant. Emmons-Logan Energy Storage plans to submit an application for a Certificate of Site Compatibility for the Project to the North Dakota Public Service Commission and aims to start construction in 2025 with commercial operation anticipated in late 2026.

The Project Area is located on approximately 25 acres in existing cropland in West Half (W1/2) of the Southwest Quarter (SW1/4) of Section 34, Township 134 North, Range 74 West of the fifth principal meridian, in Emmons County, North Dakota.

The Project will be capable of storing power from the grid when production exceeds system demand (oversupply). If the grid has excess energy (e.g., during periods of low demand), this energy will be absorbed by the Project for later release. The Project will provide additional reliability for and deliverability to the grid by having the ability to store low-cost excess generation (relative to load) and inject it onto the grid at times of increased demand.

Tribal cultural surveys were conducted within and adjacent to the Project Area, with findings documented in previous inventories from 2018 and 2019 (see Table 1). A Class I literature review covering the Project Area, and a 1-mile buffer Study Area is summarized in Table 2 and shown on Figure 1. No cultural resources have been identified within the Project Area; however, cultural resources, including those identified by Tribal Cultural Specialists, are present within the 1-mile buffer.

An analysis of auditory effects indicates no appreciable increase beyond conversational levels, given the presence of operating wind turbines and a substation in the immediate area. The nearest Tribally identified sites are approximately 0.5 miles from the Project Area. The Project will not exceed the height of existing infrastructure and is not expected to result in additional visual effects.

Outreach Summary
As it may be helpful to you in determining your level of participation in this project, below is a list of the Tribes that have also received this letter based on review of available public information and internal NextEra

research efforts. If you think a Tribe not listed below may have an interest in this area, please let us know so that we may reach out to them.

- Cheyenne River Sioux Tribe
- Chippewa Cree Tribe of Rocky Boy
- Crow Nation
- Flandreau Santee Sioux Tribe
- Fort Belknap Indian Community
- Fort Peck Assiniboine and Sioux Tribes
- Lower Brule Sioux Tribe
- Lower Sioux Indian Community
- Mandan, Hidatsa, Arikara Nation
- Northern Cheyenne Tribe
- Oglala Sioux Tribe
- Rosebud Sioux Tribe
- Santee Sioux Nation
- Shakopee Mdewakanton Sioux Community
- Sisseton Wahpeton Oyate
- Standing Rock Sioux Tribe
- Turtle Mountain Band of Chippewa Indians
- Upper Sioux Community
- Yankton Sioux Tribe

****

I hope this information has been helpful to you. Again, as it is NextEra's policy to reach out to Tribes in the vicinity of its projects, I wanted to provide you this information about the project. Please let me know if you have an interest in the project area and would like to be involved in further discussions so that we can answer any questions, provide you additional information, discuss any concerns you may have about the project, and plan any requested tribal participation accordingly. I can be reached at 701-202-3430 or via email at Valerie.Barbie@nexteraenergy.com

Sincerely,

Valerie Barbie
Senior Project Manager, Development
Tribal Relations
701-202-3430

cc: Clint Scherb
Dustin Wernicke
Dina Brown

Enclosures: Table 1: Previous Inventories within 1 Mile of the Project Location **Redacted**

Table 2: Previously Identified Archaeological and Historic Sites within 1 Mile of the Project Area **Redacted**

Figure 1: Project Location and Previous Cultural Resources **Redacted**