WENCK File #2579-0019
July 2015

Minnesota Power 250 kV DC Transmission Line Reroute Post-Construction Inspection Report PU-13-103

Prepared for:

North Dakota Public Service Commission

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Responsive partner.
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APPENDICES

1.0 Executive Summary

The North Dakota Public Service Commission (PSC) retained Wenck Associates, Inc. (Wenck) to complete a construction inspection of the 250 kV DC Transmission Line Reroute (Project) in Stutsman County, North Dakota (ND), owned and operated by Minnesota Power (MP), a subsidiary of Allete, Inc. Construction of the Project was completed in November 2013. Wenck reviewed all Project documents to identify those aspects that required compliance and visually inspected the Project area on 9 July 2015.

During the inspection, Wenck observed that the Project appears to have generally been constructed according to the specifications. New transmission line structures appear to have been installed at the locations described in the Project Application. Much of the site has been restored to its previous use for agricultural production. No significant issues were documented during the inspection.

There were several non-critical issues that may need to be resolved for the Project to be considered complete and in full compliance, including 1) submit as-built design specifications, drawings, and GIS files to the PSC, 2) complete any necessary avian monitoring studies, 3) verify proper construction and building permits were acquired, 4) clean up and properly dispose of construction waste left on site, and 5) verify old transmission line structures were fully removed. Wenck expects follow-up actions taken by Minnesota Power to address these particular issues can be corroborated in writing or photos and will not require a subsequent site visit. Wenck recommends the PSC take the following steps to resolve these issues.

Recommended Action Steps

- **Request now**
  - Submittal of as-built design specifications and associated GIS files
  - Removal and proper disposal of concrete waste left on site

- **Review internally, clarify, then request if needed**
  - Pre and post-construction aviation monitoring studies
  - Verification of construction and building permits
    - Stutsman County building permits for all new, removed, or relocated transmission line structures
    - United States Fish and Wildlife Service (USFWS) permit for work in USFWS wetland easement
    - Permits for transportation of large equipment during construction
  - Verification of removal of old transmission line structures

2.0 Background and Scope

2.1 INTRODUCTION

The 250 kV DC Transmission Line Reroute (Project) is located in Stutsman County, ND. The Project consists of rerouting approximately 0.7 miles of transmission line in order to remove several structures from wetland areas. The Project is owned and operated by Minnesota Power (MP), a subsidiary of Allete, Inc. The Project is under the jurisdiction of the North Dakota Public Service Commission (PSC), which issued its Order in Case No. PU-13-103 on 9 October 2013, granting a Certificate of Corridor Compatibility for a Transmission Facility No. 147 and Route Permit No. 158.

2.2 PURPOSE

The North Dakota Energy Conversion and Transmission Facility Act (North Dakota Century Code Chapter 49-22) authorizes the Public Service Commission to determine that the location, construction, and operation of jurisdictional energy conversion and transmission facilities will produce minimal adverse effects on the environment and the welfare of citizens of North Dakota. Post-construction inspections ensure that such projects are constructed in compliance with the siting laws (North Dakota Century Code Chapter 49-22) and rules (North Dakota Administrative Code Article 69-06) and the applicable Commission Findings of Fact, Conclusions of Law, and Order (Order). The North Dakota PSC retained Wenck Associates, Inc. (Wenck) to complete a construction inspection of the Project.

2.3 METHODS AND SCOPE OF INSPECTION

2.3.1 Project Compliance Items Identified

Wenck identified a list of "Project Specifications" which MP was obligated or responsible to follow and that can be verified either in written documentation or by an on-site inspection. These items were taken from 1) siting laws and rules, 2) Project activities or specifications proposed in the Application for a Certificate of Corridor Compatibility (Application), 3) Orders, and 4) recommendations by other agencies. These Project specifications are listed in Table 2.1 under 7 categories: Siting & Location; Project Design & Engineering; Pre-Construction; Cultural Resources; Natural Resources; Construction, Reclamation & Soils; and Operation.

2.3.2 Document Review

Wenck staff reviewed publicly-available Project documents in the PSC Online Case Search (ND PSC 2015) to find written verification of compliance for the Project specifications listed in Table 2.1. If written verification was filed, the findings are described in Section 3 and the source and name of the documentation is listed in Table 2.1, Column 3 (Written Verification). Green boxes in the table represent Project specifications that are potentially non-compliant because they have no written verification.

2.3.3 On-Site Inspection

Roshaan Grieme, E.I.T., a Wenck Project Engineer, visited the Project site on 9 July 2015. The site was inspected visually by walking the transmission line route and examining several points of interest within the corridor. Points of interest included new transmission line structures, connections to existing structures, and wetlands. Digital photographs

(Fujifilm FinePix JX580, 16 megapixel) were taken showing typical Project infrastructure and documenting problem areas (see Appendix A). Geographic coordinates were recorded at observation points or potential problem areas using a handheld Global Positioning System (GPS) (Garmin GMSMAP 60CSx; <10m accuracy; NAD83 datum).

If Project specifications were verified during the site inspection, the findings are described in Section 3. In Table 2.1, Column 4 (Site Verification), green boxes represent Project specifications that are potentially non-compliant because they could not be verified during the site inspection.

Table 1: Project Specifications with Written or Site Verification Information

Source of Project Specification	Description of Project Specification	Written Verification*	Site Verification*
	SITING & LOCATION		
App. p. 1	The Project is located in Stutsman County, ND, approximately 1.5 miles east of County Highway 68 and 3.5 miles north of County Highway 39. The Project is located approximately 3.25 miles northeast of the town of Medina, ND.	None	Section 3.1.1
App. p. 10	Approximately 0.7 miles of transmission line will be relocated approximately 1,000 feet south of the original alignment.	None	Section 3.1.1
ND Admin. Code Article 69-06-08; App. p. 13-17	Siting Criteria analysis – exclusion, avoidance, selection, and policy. No exclusion or avoidance areas within study area. No impacts to Selection Criteria, with the exception of converted farmland (see below). Meets Policy Criteria.	Docket #6, Appendix A (Agency Coordination)	Section 3.1.2
App. p. 15	Approximately 0.01 acres of land currently used for agricultural production would be permanently converted to use as an energy transmission facility. This is due to the relocation of eight transmission line structures. The rest of the project area would remain available for farming.	None	Section 3.1.3
	PROJECT DESIGN & ENGINEERING		
App. p.18	The Project consists of rerouting approximately 0.7 miles of 250 kV DC overhead transmission line. This will involve replacing eight structures. The new structures will be 4-foot diameter, tubular, weathering steel, self-supporting monopole structures. The height of the structures will range from 65 to 100 feet and have an average span of 660 feet between them.	None	Section 3.2.1
App. p.19	Project shall meet or surpass all relevant state codes, National Electric Safety Code (NESC), Avian Power Line Interaction Committee (APLIC) raptor-safe design standards, and all appropriate safety standards.	None	Section 3.2.2
Order 4	Existing structures to be replaced which are inundated are to be cut off and capped at least two feet above the water level and may remain abandoned in the water until they can be removed.	None	**Section 3.2.3**

Source of Project Specification	Description of Project Specification	Written Verification*	Site Verification*
Certification 30	Provide engineering design drawings prior to construction upon request.	Docket #23, Supplemental Application Information, Appendix F	N/A
Certification 32	Provide as-built design specifications and associated GIS files within 3 months after construction complete.	**None**	N/A
	PRE-CONSTRUCTION		
NDCC 49-22-07.1; ND Admin. Code Article 69-06-03	Letter of Intent.	Docket #1, Letter of Intent	N/A
NDCC 49-22-08; ND Admin. Code Article 69-06-04	Application for a Certificate of Corridor Compatibility	Docket #6, Application	N/A
NDCC 49-22-07; Certification 1, 6, 36	Certificate of Corridor Compatibility; subject to suspension or revocation	Docket #29, Order	N/A
NDCC 49-22-04; ND Admin. Code Article 69-06-02; App. p. 7	Ten-Year Plan	Case #PU-12-440	N/A
Certification 2, 5	Conduct Pre-construction Conference. Provide notice of intent to start construction. Once started Company shall keep the Commission and the Commission's third-party construction inspector updated of construction activities on a weekly basis.	Docket #34, Notes from Preconstruction Conference, Notice of Construction Commencement Date; Docket #36, Progress Report	N/A
Certification 3, 4	Compliance with rules and regulations of other jurisdictional agencies. Obtain permits and approvals from other agencies and provide copies to the Commission prior to applicable permitted activity.	**Docket #6, Application, Appendix A; Docket #23, Supplemental Application Information**	N/A
Certification 31, 34	Inform Commission of plans to modify the transmission facility or site plan, and obtain written approval. Any facilities not included in current Application must be applied for in a separate Route Permit or Site Certificate.	None filed to date	Section 3.3.4
	CULTURAL RESOURCES		
App. p. 24; Certification 11	If any cultural resource, paleontological site, archeological site, historical site, or grave site is discovered during construction, it must be marked, preserved and protected from further	None reported to date	N/A

Source of Project Specification	Description of Project Specification	Written Verification*	Site Verification*
	disturbances until a professional examination can be made, report filed with the Commission and the State Historical Society, and clearance to proceed is given.		
App. p. 41	State Historical Society: Complete a Class III (pedestrian) survey of the project area for review by State Historical Society.	Docket #30, Class III Intensive Cultural Resources Inventory	N/A
	NATURAL RESOURCES		
Certification 9	Report presence of T+E species or critical habitat, bald or golden eagles during construction and operation.	None reported to date	N/A
Certification 19	Tree and shrub removal and replacement will comply with "Tree and Shrub Mitigation Specifications".	None	Section 3.5.6
App. p. 31	Complete a tree and shrub survey and submit to the Commission.	Docket #23, Appendix E	N/A
App. p. 32	Construction to take place in the fall to avoid avian breeding and nesting seasons.	Docket #34, Notes from Preconstruction Conference, Notice of Construction Commencement Date; Docket #36, Progress Report	N/A
App. p. 40-41	Provide construction plans to USFWS and ND Game and Fish Department.	None	N/A
App. p. 41	ND Parks and Recreation Department: Avoid impacts to waterfowl and wildlife species and their habitats. Complete pre and post construction aviation monitoring studies to identify and assess adverse impacts to waterfowl and wildlife.	**None**	N/A
App. p. 41	ND State Water Commission: All waste material associated with the project must be disposed of properly and not placed in identified floodway areas.	None	**Section 3.6.6**
App. p. 42	Stutsman County: Provide documentation addressing how existing structures are to be removed so as to minimize contamination of surrounding waters and eliminate a potential public safety hazard.	Docket #29, Order	N/A
	CONSTRUCTION, RECLAMATION & SOILS		
App. p. 19, 27	Implement appropriate erosion control measures.	None	Section 3.6.1

Source of Project Specification	Description of Project Specification	Written Verification*	Site Verification*
App. p. 19; Certification 13, 25	Temporarily disturbed areas and roads will be restored to original condition. Pre-existing township and county roads used during construction restored to equal or better condition. Restoration of area as soon as practicable upon completion of construction.	None	Section 3.6.2
Certification 14	Construction must be suspended when weather conditions are such that construction activities will cause irreparable damage to roads or land.	None	N/A
App. p. 27; Certification 15	During construction, at least 12 inches of topsoil, where available, must be stripped and separated from subsoil. Topsoil and subsoil must be segregated and replaced separately.	None	None
Certification 16	Reclamation, fertilization, and reseeding is to be done according to the NRCS recommendations, unless otherwise specified by the landowner and approved by the Commission.	None	None
Certification 21, 22	Repair/replace all damaged fences and gates. Repair/replace damaged drainage tile.	None	Section 3.6.5
Certification 23	No staging areas on land not owned by Company, unless otherwise negotiated with landowners.	None	None
App. p. 19; Certification 24	Waste removed and disposed regularly.	None	**Section 3.6.6**
NDCC 49-23; Certification 35	Notify the Commission if any damage occurs to underground facilities during construction, suspend construction until compliance with One-Call Excavation Notice System requirements has been determined and clearance to proceed has been given.	None reported to date	N/A
App. p. 40	ND Department of Health: Minimize fugitive dust emissions created during construction, adverse effects to water bodies, and noise.	None	None
App. p. 41	ND Parks and Recreation Department: Impacted areas to be revegetated with species native to Project area.	None	Section 3.6.4

Source of Project Specification	Description of Project Specification	Written Verification*	Site Verification*
	OPERATION		
Certification 7, 8, 27, 28	Construct and operate in accordance with Application and safety requirements. Maintain records of compliance with Order and Certificate of Site Compatibility. Extraordinary events (e.g. injuries, T+E wildlife fatalities, discovery of large numbers of dead birds or bats) reported within 5 business days.	None reported to date	Section 3.7.1
Certification 17, 18, 24	Reclamation and maintenance throughout life of facility. Waste removed & disposed regularly.	None	Section 3.7.1
Certification 20, 29	Mitigate any increase in television and residential radio interference that results from the construction of the facility. Establish a procedure for handling complaints concerning the proposed facility.	None	N/A
Certification 26	Provide any necessary safety measures for traffic control or to restrict public access to transmission facility.	None	Section 3.7.4

*** Green boxes indicate potential non-compliance items**

3.0 Findings

3.1 SITE INFORMATION

3.1.1 Designated Location

The Project was built generally as proposed in the designated location described in the Application and Order (see Appendix A). Maps of the approved corridor and observations of structures during the site inspection appeared to coincide. The new transmission line structures were observed to be located in upland areas and outside of wetlands.

3.1.2 Siting Criteria

Siting criteria were analyzed in detail in the Application for the Project (Docket #6, Application). Wenck confirmed during the site inspection that there were no exclusion or avoidance areas within the Project area. Wenck also confirmed that impacts to selection and policy criteria were considered and kept at a minimum. Minor impacts to agricultural production are described in Section 3.1.3.

3.1.3 Land Use & Agricultural Impacts

Installation of seven new transmission line structures has resulted in approximately 0.01 acres of active farmland being converted to use as a transmission facility. The Natural Resources Conservation Service (NRCS) stated that farming in the project area will not be significantly impacted due to minimal acreage, and that the Farmland Protection Policy Act (FPPA) does not apply in this situation (letter dated 4-22-2013). Wenck confirmed during the site inspection that the area surrounding the new structures has resumed its previous agricultural production use (see Appendix A, Photo 4).

3.2 PROJECT DESIGN & ENGINEERING

3.2.1 Structure Specifications

Seven new steel structures were observed along the new transmission line route; four structures were single-pole and three were double-pole (see Appendix A, Photos 2, 6, 13, and 17). The structures are supported by a circular concrete base which is embedded into the ground. Span lengths and structure heights appeared to match those specified in the Application.

3.2.2 Codes and Specifications

There was no written verification of compliance with the National Electric Safety Code (NESC) or Avian Power Line Interaction Committee (APLIC) raptor-safe standards. Wenck observed during the site inspection that it appears the Project complies with the raptor-safe design standards.

3.2.3 Abandoned/Removed Structures

The Project application calls for replacing eight existing structures. Wenck confirmed that the existing structures along the original alignment have been removed. The apparent remains of a structure were observed in the wetland north of the transmission line (see Appendix A, Photo 15). This area was raised about 1-2 feet above the water surface, but it was difficult to see this in detail due to limited access through this wetland area. It's unclear if the structure had been entirely removed, or perhaps it was cut and capped, with the base still present. It is recommended that the PSC verifies that this structure was removed completely. No other evidence of structures along the original alignment was observed,

though with limited access to the wetland area it is possible that other structures were not entirely removed.

3.2.4 Engineering Design Drawings
Engineering design drawings were provided prior to construction (Docket #23, Supplemental Information to Application, Appendix F).

3.2.5 As-Built Drawings and GIS Files
Wenck Associates received as-built GIS files from Allete, Inc. on 30 June 2015, but it is unclear if the Commission has received these files. No as-built information has been uploaded to the PSC online database to date. It is recommended that the PSC request these as-built files.

3.3 PRE-CONSTRUCTION

3.3.1 PSC-Required Documents
A Letter of Intent was filed with the PSC on 6 March 2013 (Docket #1, Letter of Intent). The PSC moved that the one-year waiting period between filing the Letter of Intent and the Siting Application be shortened to twenty days (Docket #3, Commission Motion acknowledging Letter of Intent). The Application for Certificate of Corridor Compatibility and Route Permit was submitted on 14 June 2013. (Docket #6, Application). The PSC issued Certificate of Corridor Compatibility No. 147 and Route Permit No. 158 on 9 October 2013 (Docket #29, Order). Minnesota Power filed a Ten-Year Plan with the PSC in 2012 (Case #PU-12-440, Docket #1, 2012 Ten Year Plan).

3.3.2 Pre-Construction Conference/Weekly Updates
A pre-construction meeting was held on 16 October 2013 notice was provided during the meeting of intent to start construction on 21 October 2013 (Docket #34, Notes from Preconstruction Conference, Notice of Construction Commencement Date). Construction reports were filed for two weeks of construction (Docket #36, Progress Report).

3.3.3 Permits and Approvals from Other Agencies
The only permit obtained for the Project that is on file with the PSC is a Stutsman County building permit (Docket #23, Supplemental Application Information, Appendix C). However, it is stated in the Application that a building permit would need to be acquired for each individual structure installed, moved to a new location, or permanently removed. This would indicate that as many as sixteen building permits would have been needed. The PSC may want to verify that either all of the building permits were acquired or that the one building permit on file was satisfactory for Stutsman County.

In the Application, it is stated that permits for transportation of large equipment would be acquired as needed from NDDOT. It is also stated in the Application that a Special Use Permit from USFWS may have been required for work in USFWS wetland easements. However, no such permits are currently on file for the Project. The PSC may want to verify that these permits were obtained, if they were necessary.

3.3.4 PSC Approval of Modifications
There were no notifications to modify the facility filed to date. Observations of on-the-ground infrastructure coincided with maps on the Application.

3.4 CULTURAL RESOURCES

3.4.1 Cultural Site Avoidance

A Class III Cultural Resources Inventory was completed for the Project (Docket #30, Intensive Cultural Resources Inventory) in June 2013, which resulted in a "No Historic Properties Affected" recommendation. The North Dakota State Historical Society reviewed the Class III Cultural Resources Inventory and concurred with the "No Historic Properties Affected" determination (Docket #23, Supplemental Information to Application, Appendix D).

3.4.2 Reporting of New Discoveries

No new discoveries of cultural, archeological, or historical sites have been reported to the PSC to date and no discoveries were recorded on the weekly construction reports for the Project. Presumably no new sites were encountered during construction of the Project.

3.5 NATURAL RESOURCES

3.5.1 Wetlands, Surface Water, and Floodplain

A wetland delineation report was not included in the Application. From a National Wetland Inventory figure included in the Application, it appears there is one wetland in the Project area, which is protected by a USFWS wetland easement (Docket #6, Application). According to a letter from the USACE (dated 23 April 2013) included in the Application, there are not any wetlands under USACE jurisdiction in the project area. The primary purpose of the Project was to remove transmission line structures from wetland areas and relocate them to upland areas. Temporary construction occurred within the wetland while removing the structures. Wenck verified during the site inspection that the structures within the wetland appeared to be removed (as noted in Section 3.2.3), and that there don't appear to be any significant impacts to the wetland.

Wenck verified during the site inspection that there were no bodies of water located within the new transmission line route. However, surface water was observed in the immediate vicinity of the transmission line (see Appendix A, Photo 15). In addition, surface water was present beneath the transmission line west of the point where the rerouted transmission line joined the original alignment (see Appendix A, Photo 20). The structures in this area appeared to be located in upland areas and were not inundated.

The North Dakota State Water Commission stated in a letter (dated 10 June 2013) that there were no floodplains in the Project area, and that the project should have no impacts to floodplains (Docket #6, Application).

3.5.2 Ground-dwelling Wildlife

Temporary impacts to ground-dwelling wildlife were expected due to construction activity. However, due to the relatively small area being affected, long-term impacts to such wildlife are not expected. Wenck did not observe any impacts to wildlife during the site inspection.

3.5.3 Avian Species

Similar to other wildlife, temporary impacts to avian species during construction were expected. No long-term impacts are anticipated. Wenck did not observe any impacts to avian species during the site inspection.

According to the Application, the Project lies within the Central Flyway of North America and is used by birds during spring and fall migrations. To comply with the Migratory Bird Treaty

Act (MBTA), construction occurred during the fall to avoid avian breeding and nesting seasons (Docket #34, Notes From Preconstruction Conference; Docket #36, Progress Report).

The Application states that APLIC raptor-safe design standards would be met. Wenck observed during the site inspection that it appears the Project complies with the raptor-safe design standards.

In a letter dated 10 May 2013, the North Dakota Parks and Recreation Department suggested that pre- and post-construction avian monitoring studies be completed to assess any potential impacts. Evidence of these avian monitoring studies has not been filed with the PSC. The PSC should consider whether these studies are warranted and request them if needed.

The Project area does not appear to offer habitat for golden eagles and bald eagles.

3.5.4 Threatened and Endangered Species

Several threatened, endangered, and candidate species are listed in the vicinity of the Project. Due to the Project being a minor reroute of a small portion of an existing transmission facility, the Project was anticipated to have no effect on those species.

3.5.5 Reporting

There were no reports filed documenting the presence of threatened or endangered species or bald or golden eagles during construction or operation to date and no observations were recorded on the weekly construction reports for the Project. It is assumed none were observed during construction.

3.5.6 Tree & Shrub Mitigation

A tree and shrub survey was completed for the Project (Docket #23, Supplemental Information to Application, Appendix E). The results of the survey indicated that there were areas of trees and shrubs in the vicinity of the Project, but no disturbance of trees and shrubs was expected during construction. Therefore, mitigation would not be necessary. During the inspection, Wenck observed a line of trees and shrubs approximately 30 to 40 feet south of the new transmission line (see Appendix A, Photo 10). There didn't appear to be any trees or shrubs that were disturbed or removed during construction. The rest of the Project area consists of active agricultural land, and no other trees or shrubs were observed in the immediate vicinity.

3.6 CONSTRUCTION, RECLAMATION & SOILS

3.6.1 Erosion and Sedimentation Control

The Project Application states that Best Management Practices (BMPs) would be utilized during construction to minimize the potential for sedimentation and erosion control. No erosion or sedimentation issues were observed during the site inspection.

3.6.2 Reclamation and Roads

Areas disturbed during construction appear to have been mostly restored to their previous condition. Crops and other vegetation are present throughout the transmission line corridor, though there are several small, isolated areas which were likely disturbed and are barren or where crop growth is scarce (see Appendix A, Photos 3 and 11). Around most of the new structures there is an area approximately 5 to 10 feet in diameter where tall grass and

weeds are present, but otherwise crop growth around the structures appears to be good (see Appendix A, Photos 7 and 18).

No written verification of NRCS recommendations for reclamation, fertilization, and reseeding has been provided to the PSC.

One area of interest is located in the SE corner of the Project, between two new structures. In this area there are several small piles of soil in a drainage way, which cause pools of water to form (see Appendix A, Photo 5). In is unclear if this this was caused by construction of the transmission line.

The Project did not require crossing or cutting into an existing roadway. Roads accessing the site appeared to be in a condition typical for the area and do not appear to have been negatively impacted by construction traffic. Evidence of new roads or temporary roads was not observed during the site inspection.

3.6.3 Construction Management

Two construction reports were submitted for the project, covering two weeks total (Docket #36, Progress Report). It is assumed that these reports cover the entirety of the Project. No issues were reported, and construction appears to have been completed in November 2013.

3.6.4 Reseeding

It is stated in the Application that Minnesota Power intended to leave disturbed areas available for farming rather than revegetate with native grassland species. In a letter dated 10 May 2014, the North Dakota Parks and Recreation Department recommended that any impacted areas be revegetated with species native to the project area (Docket #6, Application).

3.6.5 Repairs

No damages to property were observed during the site inspection. It is likely that fence around the wetland area in the middle of the project was removed and/or relocated to facilitate construction in and out of the wetland. The fence appeared to be functional and it looked like portions of the fence were relatively new (see Appendix A, Photo 8).

3.6.6 Waste

Small chunks of concrete waste were observed around several of the new transmission line structures (see Appendix A, Photo 12 and 14). The rest of the Project area was free of debris and equipment.

3.7 OPERATION

3.7.1 Operation and Maintenance

The site appeared to be operating as described in the Application. There is likely little maintenance required due to the nature of the transmission facility and work done by landowners on the adjacent agricultural land.

Wenck observed several small areas of disturbed soil and limited crop growth which may require further reclamation, as noted in Section 3.6.2. There were small amounts of concrete waste around several of the new structures, but no other debris or equipment was observed during the inspection, as noted in Section 3.6.6.

3.7.2 Safety & Record-keeping

No concerns were identified during the site inspection that would indicate that Project construction or operation was out of compliance with the Application or safety regulations. Weekly reports document no safety concerns. No injuries or extraordinary events have been reported to date.

3.7.3 Public Complaints

No records of complaints regarding the facility have been filed to date.

3.7.4 Public Safety

Access to the transmission facility is not limited in any way. However, electrical components of the facility are not easily accessible and the Project spans private property used for agricultural production, so safety concerns regarding the public appear to be minimal.

4.0 Issues to Resolve and Recommendations

4.1 PROJECT SPECIFICATIONS NEEDING WRITTEN VERIFICATION

Several components of the Project were asserted in the Application or proposed construction and could be verified in writing, but have not been filed with the PSC. Table 2-1 summarizes these items, which are indicated as those shaded in the "Written Verification" column, indicating no written verification was provided where applicable and necessary. Wenck does not consider any of these items to be critical for Project compliance. However, Wenck suggests they be on file with the PSC to confirm compliance. Wenck recommends the PSC request from Minnesota Power the following list of "Necessary" items, and if the PSC deems appropriate, the list of "Potential" items could also be requested.

Necessary Items

- As-built design specifications and associated GIS files

Potential Items

- Pre- and post-construction avian monitoring studies suggested by North Dakota Parks and Recreation Department
- Stutsman County building permits for all new, removed, or relocated transmission line structures
- United States Fish and Wildlife Service (USFWS) permit for work in USFWS wetland easement
- Permits for transportation of large equipment during construction

4.2 WASTE

At the time of the site inspection, several small chunks of concrete waste were observed around the new transmission line structures. Wenck recommends that the PSC request documentation from Minnesota Power when this waste has been removed.

4.3 ABANDONED/REMOVED STRUCTURES

Wenck observed one location where an old structure along the original alignment was abandoned or removed. Due to limited access around the wetland area, it was unclear if this structure was fully removed, or if it was just cut off and abandoned with the foundation remaining. Wenck recommends that the PSC request documentation from Minnesota Power showing that this and any other old structure along the original alignment was fully removed.

5.0 Conclusions

Overall, the Project appeared to have been constructed as designed, with minimal impacts to the surrounding natural or human environment. The Project site was well-maintained and in good condition. However, Wenck observed several issues that may need to be resolved before the Project is considered complete and in full compliance. This includes: clarification of the approved Project with as-built drawings, filing of avian monitoring studies, verification of obtained permits from regulating agencies, removal of construction waste, and verification of complete removal of transmission line structures. None of these are critical issues, but the PSC should determine which are necessary for the company to comply with and then notify the company what actions are required on their part.

6.0 References

North Dakota Public Service Commission (ND PSC). 2015. Online Case Search. Available from: http://www.psc.nd.gov/database/company_case_list.php. Accessed July 2015.

7.0 Signatures

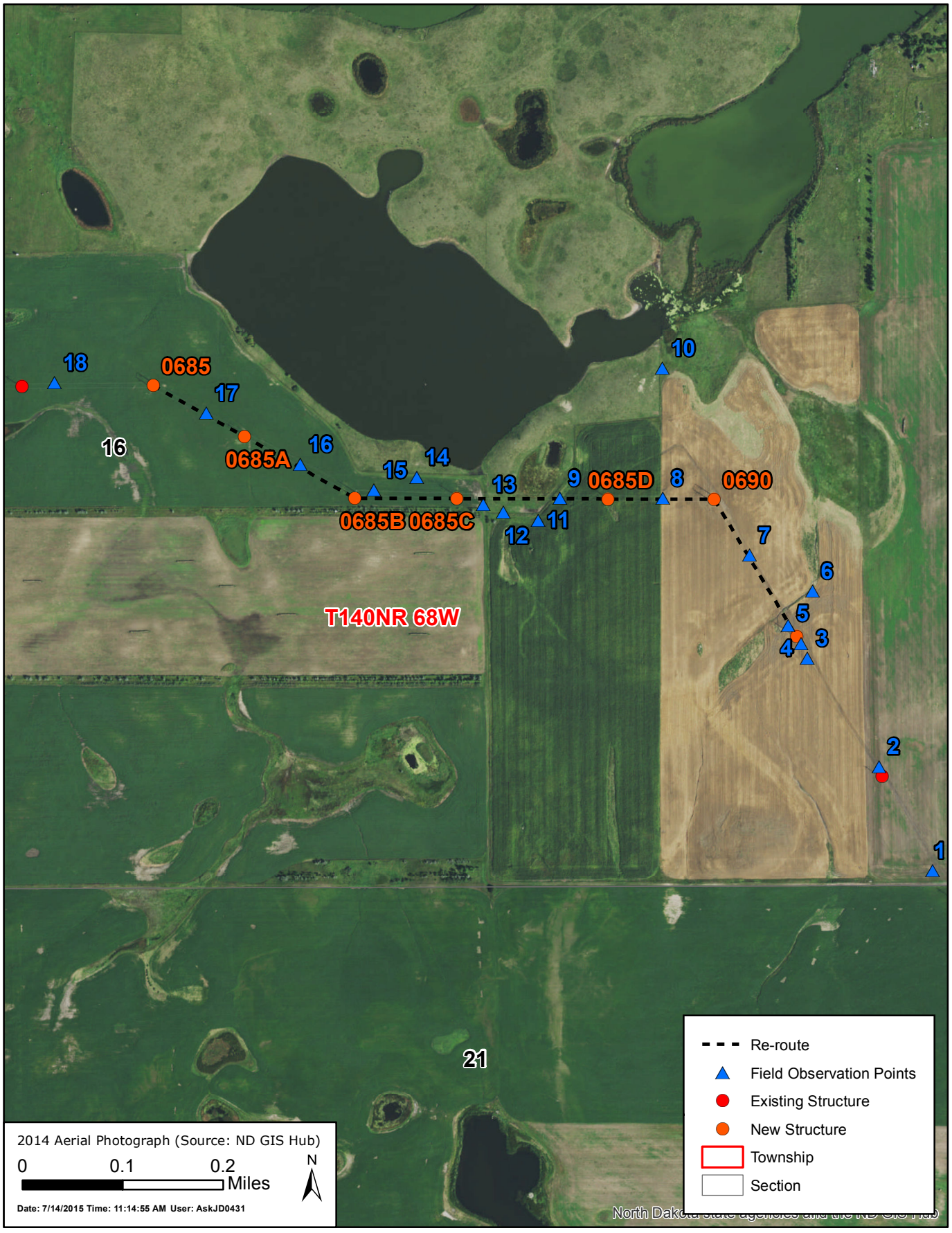
The services performed by Wenck scientists for this project have been conducted in a manner consistent with the degree of care and technical skill appropriately exercised by professionals currently practicing in this area under similar time and budget constraints. Recommendations and findings contained in this report represent our professional judgment and are based upon available information and technically accepted practices at the present time and location. Other than this, no warranty is implied or expressed.

Lead Project Manager, Kevin Magstadt and Secondary Project Manager, Roshaan Grieme, prepared the report.

Kevin Magstadt, P.E., Principal/Regional Manager — Date 7/21/15

Roshaan Grieme, E.I.T, Project Engineer — Date 7/21/15

Figures



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NORTH DAKOTA PUBLIC SERVICE COMMISSION

Field Observations Map

WENCK ASSOCIATES

Responsive partner. Exceptional outcomes.

JUL 2015

FIGURE 1

Photographs

Above: Photo 1 (Observation Point 1) - Connection to existing transmission line structure at south end of Project. Looking northwest.

Below: Photo 2 (Observation Point 3) – First new structure at south end of project. Typical single pole structure. Looking northwest.

Above: Photo 3 (Observation Point 4) – Small barren area near new structure at south end of project. Looking northeast.

Below: Photo 4 (Observation Point 4) – Good vegetation near base of new structure. Looking west.

Above: Photo 5 (Observation Point 6) – Pile of soil with pool of water near south end of project. Looking northwest.

Below: Photo 6 (Observation Point 7) – Typical double pole structure at bend, where new alignment bends to avoid wetlands. Looking northwest.

Above: Photo 7 – Typical vegetation around structure. Grass and weeds within 5 to 10 feet of base, but crop growing in surrounding area. Looking south.

Below: Photo 8 (Observation Point 10) – Apparently new barbed wire fence near wetland. This photo was taken near apparent bend of the old alignment. Looking west.

Above: Photo 9 (Observation Point 11) – Small barren area on south side of transmission line. Looking northwest.

Below: Photo 10 (Observation Point 13) – Line of trees and shrubs on south side of transmission line. Disturbed areas, possibly used for staging or construction traffic. Looking west.

Above: Photo 11 (Observation Point 13) – Limited crop growth in low area near structure. Looking northwest.

Below: Photo 12 (Structure 0685C) – Rocks and concrete waste set on structure base.

Above: Photo 13 (Structure 0685C) – Typical single pole structure.

Below: Photo 14 (Structure 0685C) – Concrete waste near new structure. Looking northeast.

Above: Photo 15 (Observation Point 14) – Apparent abandoned/removed structure in wetland. Looking north.

Below: Photo 16 (Structure 0685B) – Typical vegetation between new structures. Looking northwest.

Above: Photo 17 (Observation Point 15) – Alternate double pole structure at bend. Looking west.

Below: Photo 18 (Structure 0685A) – Typical vegetation near base of new structure. Looking northwest.

Above: Photo 19 (Observation Point 18) – Near connection to existing structure at northwest corner of project. Looking east.

Below: Photo 20 – Existing transmission line at northwest corner of project. Looking west.

Responsive partner.
Exceptional outcomes.

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