FINDING OF NO SIGNIFICANT IMPACT

CENTER TO GRAND FORKS 345 KV TRANSMISSION LINE PROJECT

OLIVER, BURLEIGH, MCLEAN, SHERIDAN, WELLS, FOSTER, EDDY, GRIGGS, NELSON, STEELE AND GRAND FORKS COUNTIES, NORTH DAKOTA

MINNKOTA POWER COOPERATIVE, INC.

ENGINEERING AND ENVIRONMENTAL STAFF RURAL UTILITIES SERVICE

February 2012

A. INTRODUCTION

The Rural Utilities Service (RUS) has received a request from Minnkota Power Cooperative, Inc. (Minnkota) to construct, operate and maintain approximately 250 miles of 345 kV transmission line in North Dakota. The transmission line would extend between the existing Center 345 kV Substation located about one mile east of the Milton R. Young Generation Station near Center, North Dakota, and the existing Prairie Substation located west of Grand Forks, North Dakota. The proposal is called the Center to Grand Forks 345 kV Transmission Line Project (Project) and will be located in Oliver, Burleigh, McLean, Sheridan, Wells, Foster, Eddy, Griggs, Nelson, Steele, and Grand Forks Counties, North Dakota.

RUS is considering providing financial assistance to Minnkota for construction. thereby making the proposed Project an action subject to review under the National Environmental Policy Act of 1969 (NEPA) (U.S.C. 4231 et seq.), the Council on Environmental Quality's (CEQ) regulations for implementing NEPA (40 CFR Parts 1500-1508), and RUS' NEPA implementing regulations. Environmental Policies and Procedures (7 CFR Part 1794), and an undertaking subject to review under Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. § 470f, and its implementing regulations, "Protection of Historic Properties" (36 CFR Part 800). After completing an independent analysis of an EA prepared by Minnkota and its environmental consultant. HDR Engineering, Inc., RUS concurred with its scope and content. In accordance with 7 CFR § 1794.41, RUS adopted the report and issued it as the agency's EA for the proposed Project. RUS finds that the EA is consistent and meets the standards for an adequate assessment. Minnkota published a newspaper notice, announcing the availability of the EA for public review, in accordance with 7 CFR § 1794.42.

B. PURPOSE AND NEED

Minnkota's load growth over the past years has increased at a rate of 2.9 % annually. Future load growth is expected to grow at approximately 1.9 % annually. Base load generation is needed to meet this growth. In order to meet this need, Minnkota entered into an agreement with Minnesota Power and Square Butte Electric Cooperative to exchange its rights to the DC transmission line for additional base load capacity in the Milton R. Young Generation Station Unit 2. These arrangements were approved by RUS on December 23, 2009. Because the DC line will no longer be available to Minnkota to carry generation to its eastern North Dakota and western Minnesota service areas, a new transmission line is required. The proposal will provide a direct link from its base load generation in western North Dakota to its eastern service territory. In addition it will provide a major system improvement to the regional transmission grid and provide support for future wind development in the area. RUS has

reviewed the Alternative Evaluation Study and determined that the proposed project will meet the present and future needs of Minnkota.

C. PROJECT DESCRIPTION

The proposed Project would consist of the following major components:

345 kV High Voltage Transmission Line

The proposed Project consists of approximately 250 miles of new, high-voltage alternating-current (AC) transmission line to run from the existing Center 345 kV Substation located one mile east of the Milton R. Young Generation Station and 4.5 miles southeast of the town of Center in Oliver County, to the existing Prairie Substation located about 0.5 mile west of the city of Grand Forks in Grand Forks County, A crossing of the Missouri River in central North Dakota would be required. The proposed Project would deliver energy from existing base load generation to Minnkota's cooperative members. While final engineering and design have not been completed, the line would mostly be constructed with selfsupporting, single pole self-supporting weathering tubular steel structures. Typical structures would be approximately 140-feet-high and placed approximately 1,000feet apart. The typical right-of-way (ROW) for a single pole 345 kV line would be approximately 150-feet-wide, with a 250-foot-wide ROW required at the Missouri River span. Typical monopole structure would have about 78.5 square feet of permanent impact (10 foot diameter base). Temporary access road within the ROW may be required to access the proposed structure locations. No permanent access road would be located within the ROW.

It is anticipated that each phase wire would consist of bundled conductors composed of two 959.6 kcmil (thousand circular mils) Suwannee trapezoidal wire (TW) type aluminum conductor steel reinforced (ACSR) cables. Each conductor has an outside diameter of 1.1 inches. The trapezoidal configuration of the aluminum strands allows more capacity than in an equal diameter conductor of standard ACSR design. Suwannee TW type ACSR consists of seven steel wires at the center surrounded by 22 trapezoidal shaped aluminum strands. The trapezoidal configuration of the aluminum strands reduces air gaps between strands. Two shield wires, also known as lightning protection wires, are planned. On one side, the shield wire would be fiber optic ground wire (OPGW), and, on the other side, the shield wire would be 0.5-inch Extra High Strength steel cable. OPGW consists of 24 strands of single mode fiber optics conductors in a steel tube wrapped with ten strands of steel wire around the fiber optic tube. Table 1 outlines typical characteristics of a 345 kV transmission line structure.

Table 1. Typical Characteristics of 345 kV Transmission Line Structures

345 kV Transmission Line	Details
Voltage (kV)	345 kV
ROW width (feet)	150
Approximate Span length (feet)	1,000
Range of structure heights (feet)	95 - 180
Number of structures per mile	5 – 7
Minimum ground clearance beneath conductor (feet)	35 – 40
Depth of concrete footings for the poles (feet)	30 – 40
Diameter of concrete footings for the poles (feet)	7 – 10
Average area of permanent disturbance per structure (square feet)	78.5

Center 345 kV Substation Upgrades

The Center 345 kV Substation is located about 4.5 miles southeast of the town of Center, North Dakota and about 1 mile east of the Milton R. Young Generation Station in Oliver County. Most upgrades would occur within the existing substation's fenced boundary (ownership shared with Otter Tail Power Company). This would involve installing new 345 kV circuit breakers, 345 kV dead-end structures, one new and one replacement 345/230 kV transformer and associated bus work, new 345 kV switches and associated foundations, steel structures, and control panels. A line reactor for open line voltage control would also be required. The reactor would require a 22,500-square-foot (0.5 acre) expansion to the north end of the substation, beyond the existing fenced boundary but on Minnkota-owned property.

New 230 kV Tie Line

This approximately 1,500-foot-long 230 kV Tie Line would parallel the existing tie line on Minnkota-owned property. It would be needed to complete a second transmission-to-transmission interconnection between the Square Butte 230 kV Substation and the Center 345 kV Substation. The Square Butte 230 kV Substation is located approximately 0.2 miles south of the Center 345 kV Substation. Figure 1 shows the location of the Center 345 kV Substation as the western end point for the proposed Project. The 230 kV Tie Line and Square Butte 230 kV Substation are near the Center 345 kV Substation.

Existing 230 kV Tie Line Upgrades

The existing Square Butte 230 kV Substation to Center 230 kV Substation Tie Line modifications will include: terminating the existing line to the new T2 terminal at the Center Substation, new 1272/Pheasant aluminum conductor, steel overhead ground wire and associated line hardware, installing 1 new dead-end structure for

T2 terminal location, removal of an existing dead-end structure at the T1 terminal location. All work will occur on Minnkota-owned property.

Square Butte 230 kV Substation Upgrades

The Square Butte 230 kV Substation is located about 4.5 miles southeast of the town of Center, North Dakota, and about 1 mile east of the Milton R. Young Generation Station in Oliver County. Existing 230 kV circuit breakers and line terminal equipment would be re-allocated from the existing high-voltage direct-current (HVDC) tie line to the new 345 kV interconnect as part of the agreement with Minnesota Power. This activity would be completed within the existing substation footprint.

Prairie Substation Upgrades

The Prairie Substation is located within the city limits of Grand Forks, North Dakota in Grand Forks County. All upgrades would occur within the fenced boundary of the existing Minnkota-operated substation. This would involve installing new 345 kV circuit breakers, 345 kV dead-end structures, one new and one relocated 345/230 kV transformer and associated bus work, new 345 kV switches and associated foundations, steel structures, and control panels. New 230 kV circuit breakers would be added to accommodate interconnecting with the existing 230 kV ring bus.

Fiber Optic Regeneration Stations

Four fiber optic regeneration stations would be required along the proposed route to re-amplify the protection and control signals carried in the OPGW. The stations would be placed about 50-55 miles apart. Permanent access roads would be constructed for each fiber optic regeneration station. Each station would require a permanent area of about 50-foot by 50-foot (2,500 sq ft total) that would be leveled, graveled, and have a perimeter fence. The station would have a small 10-foot by 15-foot (150 sq ft total) heated and air-conditioned control building to house the electronic equipment, a battery bank for backup power, and a 20-foot-wide permanent access road. These four stations would be placed at the base of a structure within the ROW.

Table 2. Fiber Optic Regeneration Stations for the Proposed Project

Station #	County	Public Land Survey Location	Township	Access Road Length (feet)
1	Sheridan	T146N, R78W, Section 7, NE Pickard		100
2	Wells	T147N R70W Section 5, NE	South Cottonwood	60
3	Foster	T147N R63W Section 13, SE	63W Section 13, SE Florance	
4	Grand Forks	T150N R56W Section 35, SE	150N R56W Section 35, SE Logan Center 6	

Temporary Laydown Areas

There are eight temporary laydown areas planned for the proposed Project. Minnkota would have three laydown areas located on property currently owned and utilized by Minnkota for its operations. Laydown areas 1A and 1B would be located at the Center 345 kV Substation and laydown area number 7 would be located near the Prairie Substation on property that is currently utilized by Minnkota as a laydown area and equipment yard (indicated in Table 3).

Five temporary lay down areas may be established for the proposed Project and each would temporarily impact approximately 10 acres. Table 3 outlines the location of the lay down areas. These areas were selected for their location, access, security, ability to efficiently and safely warehouse supplies and in an effort to minimize excavation and grading.

The laydown areas would be leveled (if necessary), graveled, and may have a perimeter fence. Erosion and sediment control best management practices would be utilized for sites in close proximity to wetlands. Construction office trailers may be located within the laydown areas. The laydown areas would accept delivery of and store equipment and materials necessary to construct the new transmission line facilities, and would be an area for pre-assembly work and to potentially locate portable concrete batch plant sites. Areas disturbed as a result of establishing the laydown area would be restored to pre-construction condition or per landowner agreement.

Table 3. Laydown Areas for the Proposed Project

Laydown Area ID	Laydown Area Size (Acres)	Public Land Survey Location	Comment
1A (Milton R. Young Station property)	5	T141N, R83W, Section 5	Existing Minnkota laydown area
1B	10	T142N, R83W, Section 33	Existing Minnkota-owned
(Center 345 kV Substation)		, , , , , , , , , , , , , , , , , , , ,	land
2	10	T148N, R73W, Section 36	Temporary on private land
3	10	T147N, R66W, Section 7	Temporary on private land
4A, 4B, 4C,	10, 2, 2	T147N, R65W, Section 4	Temporary on private land
5	10	T147N, R60W, Section 20	Temporary on private land
6	10	T149N, R55W, Section 6	Temporary on private land
7 (Prairie Substation)	20	T151N, R51W, Section 12	Existing Minnkota laydown area

Relocation of Transmission Line Structures at Center 345 kV Substation Relocation of an existing Minnkota-owned transmission line section and addition of new structures would facilitate the addition of a second tie line between the Center 345 kV Substation and the Square Butte 230 kV substation. All relocated

structures would occur on Minnkota-owned property. Currently, Minnkota is in negotiation regarding the work details with the other utilities that use this substation. This work may involve terminating the existing 230 kV Tie Line in a new bay within the substation. The new bay is approximately one span length south of the existing termination point. One structure will be removed and a new structure added and terminated at the new bay. The conductor will be replaced between structures.

D. ALTERNATIVES EVALUATED

No Action

The No Action Alternative, RUS would not provide financing assistance and/or Minnkota would not construct the proposed Project. This alternative would require Minnkota to pursue other methods to meet the purpose and need for this Project –see below.

Alternatives Eliminated From Further Consideration

System Alternatives that were eliminated from further consideration included construction of a new 230 kV Center-Grand Forks Transmission Line, construction of a new 345 kV Center-Fargo 345 kV Transmission Line, develop optional corridor concept for interconnections and undergrounding the transmission line. Based on present and future load serving needs, inadequate line capacity and high costs, these alternatives were eliminated from further consideration.

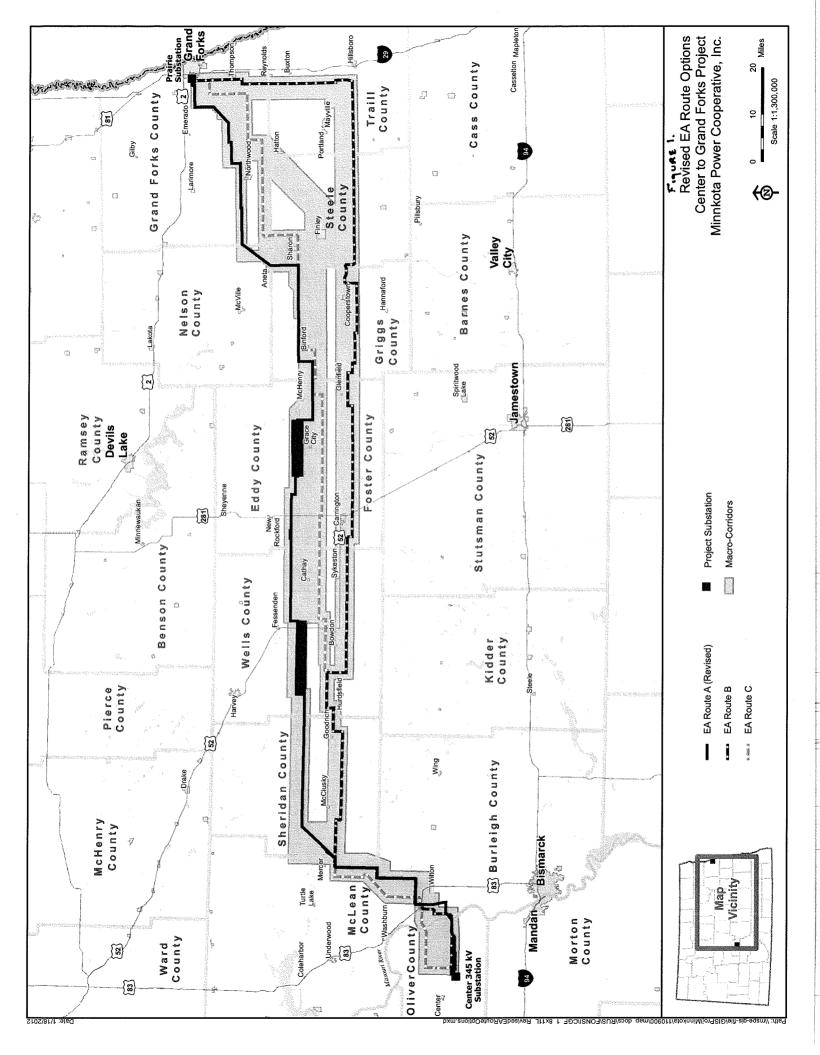
Route Alternatives

Potential route segments were identified and evaluated during the early development process. Thirty nine segments were eliminated from further consideration due to environmental and engineering constraints and public comments received during the scoping process. Three main route alternatives (A, B and C) were considered and evaluated during the review process (Refer to the Figure 1).

Preferred Alternative

Under the preferred alternative, RUS would consider providing financing assistance for the proposal and Minnkota would construct, operate, and maintain the facilities as described in the project description section. Route A was identified as the environmental preferred corridor for the following reasons:

- Reduce impacts on residences
- Shortest length
- Fewest number of poles on farmed lands
- Reduced visual impacts and fewest number of large water body crossings
- Missouri River crossing near existing line crossings; and
- Best address public agency and tribal input.



A detailed description of the preferred alternative route is found in Attachment 1. RUS has reviewed the appropriate engineering and environmental studies and concluded that the proposal is a viable, economically feasible alternative to meet Minnkota's needs to ensure the overall reliability of the system and future load growth.

E. SUMMARY OF NATIONAL ENVIRONMENTAL CONCERNS

Threatened and Endangered Species

The U. S. Fish and Wildlife Service (USFWS) identified six federally listed threatened and endangered species and their habitats and two candidate species that may be present in the project area. The species include the interior least crane (Endangered), pallid sturgeon (Endangered), piping plover (Threatened), whooping crane (Endangered), gray wolf (Endangered), blackfooted ferret (Endangered), Dakota skipper (Candidate) and the Sprague's pipit(Candidate). Based on the Biological Assessment (BA) and potential mitigation measures, RUS has made the following determinations with respect to threatened and endangered species:

- Interior Least Tern: May affect, is not likely to adversely affect;
- Piping Plover: May affect, is not likely to adversely affect;
- Whooping Crane: May affect, is not likely to adversely affect;
- Pallid Sturgeon: No effect:
- Gray Wolf: May affect, is not likely to adversely affect; and
- Black-Footed Ferret: No effect.

According to guidelines and recommendations by the USFWS, Minnkota has developed a line marking plan to minimize impacts to whooping cranes. The plan and associated BA is currently under review by the USFWS. Minnkota will implement the mitigation/conservation line marking measures as outlined in the BA and continue to revise the marking plan as necessary. Identification of distribution lines that will either be marked or undergrounded to meet USFWS recommendations will continue through 2014 if necessary. Therefore, based on the information available RUS has determined that the Project will not significantly impact threatened or endangered species.

Important Farmland

The proposed Project will impact important farmlands. Approximately 1,281 acres of prime farmland, 532 acres of prime farmland if drained and 544 acres of farmland of statewide importance are located within the rights-of-way. Approximately 312 acres will be temporarily disturbed during the construction process. However, only approximately 3 acres will be permanently lost for long term production. RUS has therefore determined that the proposed facilities will have a minor impact on the total number of acres of important farmlands that will be permanently impacted.

Floodplains

Floodplains will be spanned by the transmission line; nineteen intermittent and/or permanent surface waters will be crossed by the proposed Project. The majority of the floodplains located in the project area can be spanned. Based on the width of the Missouri River, three structures could be located in the 100-year floodplain. No transmission line structures will be located in the Missouri River. Structures should not impede the flow of water during a flooding event. Therefore, RUS has determined that the proposed facilities will have a little or no impact on floodplains in the project area.

Wetlands

Approximately 1.856 acres of wetlands are located along the preferred route. Wetland types include freshwater emergent wetlands (1,677 acres), freshwater forested/scrub wetlands (20.5 acres), freshwater ponds (63 acres), lakes (25 acres) and riverine (71 acres). Wetland impacts will be avoided or minimized during the final siting/staking of the final transmission line alignment. Several wetland and two grassland easements will be crossed by the proposed alignment. Most of these crossings will occur at the edge of the easements and therefore will have little permanent disturbance. Minnkota has applied for permits to cross these areas. The USFWS is in the process of reviewing the potential impacts and has issued an EA for the facilities. Once the review is complete, Minnkota should obtain the appropriate permits. The Army Corps of Engineers (USACE) will also have to issue a permit to cross the Missouri River. Minnkota will use Best Management practices during the construction and operation of the transmission line and associated facilities to protect wetland resources and minimize soil erosion. Therefore, RUS has determined that there will be a minimum impact to wetlands in the project area.

Historic Properties/Cultural Resources

A cultural resources literature search and records review was conducted by Minnkota and HDR Engineering, Inc. Fifty four archaeological sites were previously recorded within one mile of the proposed Route A centerline. No sites were identified as eligible for listing on the *National Register of Historic Places* (NHRP). The status of the remainder sites were determined to be unevaluated. A Programmatic Agreement (PA) was developed and executed on August 25, 2011, for the Project to establish the procedures for the phased identification and evaluation of historical properties during project construction.

HDR developed and implemented a predictive model to guide survey efforts for the Project. The route was divided into high, medium and low potential areas for the presence of historic properties. High and some medium areas were then subjected to a Class III survey. The high percentage of sites were found on hilltops with commanding views of the surrounding areas or elevated areas adjacent to water features. Twenty five previously unrecorded sites were identified during the Class III Cultural resource survey. Four sites were isolated finds and not considered eligible for listing on the NHRP. Two Addendums to

the Class II Survey have been completed. RUS has determined that no historic properties or significant sites would be affected. The North Dakota State Historic Preservation Officer (NDSHPO) has concurred with these findings. A total of 75 miles of the current route have been surveyed including all lay down areas. Thirty one new sites were identified. There will be no adverse effects to historic properties. It was determined that one historic architectural history site would have indirect adverse effects. The NDSHPO concurred with this determination. An acceptable mitigation plan has been developed and approved by all parties to mitigate the potential impacts. There are less than two miles of the route that remain for shovel test surveys. These surveys will be completed sometime this spring.

Tribal contacts were initiated with 17 Native American tribes to solicit their comment and concerns. None of the tribes identified properties of religious and cultural significance in the area, however concerns related to project construction on hill tops and at river crossings were identified. In addition, there were requests to re-evaluate sites that had been previously identified. Copies of all surveys completed have been sent to the Native American tribes for review and comment.

RUS has determined that the proposed Project will not impact historic properties listed or eligible for listing in the NRHP or any other cultural resources.

Environmental Justice

There was no evidence of areas with a concentration of low-income or minority populations that were identified through the scoping meetings and census information. The general public has been provided ample opportunity to comment on and effect the location of the Project through numerous public workshops and informational meetings. RUS has determined that the project will not result in a disproportionally high or adverse environmental impact on low income or minority populations in the area.

F. PUBLIC INVOLVEMENT

In order to solicit input from the appropriate agencies and the public, an agency meeting and six public scoping workshops were held prior to the development and preparation of the EA. The Notice of Intent to prepare the EA and Hold Public Workshops were published in the *Federal Register* on October 30, 2009. Public workshops were held in Grand Forks, Cooperstown, Carrington, McClusky, Wilton and Center, North Dakota. In addition to these workshops, several pre- and post scoping informational meetings were held during the environmental review process. Newspaper notices and advertisements appeared in the following papers: *New Rockford Transcript, Foster County Independent, The Bismarck Tribune, Grand Fork Herald, Center Republican, Lakota American, McClusky Gazette, McLean County Independent, Griggs*

County Courier, Steele County Press, The Herald Press, The Fargo Forum, Steele Ozone and Kidder County Press and Trail County Tribune.

The availability of the EA was announced in the abovementioned newspapers. The EA was mailed to Federal, State and local agencies and individuals for review and comment. In addition, the Environmental Assessment was made available for review in local libraries, Minnkota's headquarters and web site and the RUS web page. The comment period ended on January 31, 2008. The Agency comments and responses are summarized in the following table. All comments were addressed via meetings with the individuals, telephone conversations or by letter. No new environmental concerns were identified.

G. RELATED AUTHORIZING ACTIONS

- The USFWS must approve a grasslands and/or wetlands easement.
- The USACE must approve a permit to cross the Missouri River.
- The Public Service Commission must approve a Certificate of Corridor Compatibility and a Route Permit prior to construction of the Project.
- The Bureau of Reclamation (BOR) must approve a Special Use Permit to cross a Reclamation facility twice. Additional site-specific environmental measures may be required by the BOR.

H. FINDING OF NO SIGNIFICANT IMPACT

RUS has determined that the construction, operation and maintenance of the proposed Center-Grand Forks 345 kV Transmission Line and associated facilities will have no significant impacts on the following:

- Properties listed or eligible for listing on the *National Register of Historic Places*:
- Important farmland;
- Floodplains and wetlands;
- Existing land uses;
- Federally listed threatened or endangered species or their designated critical habitat;
- Air Quality;
- · Critical wildlife habitat; and
- Water resources.

No other potential impacts resulting from the project have been identified. Therefore, RUS has determined that this Finding of No Significant Impact (FONSI) fulfills its obligations under the National Environmental Policy Act, as amended (42 §§U.S.C. 4321 *et seq.*), the Council on Environmental Quality Regulations (40 CFR §§1500-1508), and RUS's Environmental Policies and Procedures (7 CFR Part 1794) for its action related to the project.

Regulations (40 CFR §§1500-1508), and RUS's Environmental Policies and Procedures (7 CFR Part 1794) for its action related to the project.

The NDSHPO has reviewed the Supplemental Addendums to the Cultural Resource Survey and has concurred with RUS's determinations of "no historic properties affected" and "no significant sites affected" for the proposed project. There are less than two miles of the preferred route left to be shovel tested which will occur as soon as weather permits. If the PSC modifies the proposed route in its final decision, additional survey work may be necessary. This phased approach will be done in accordance with the terms of the executed PA. Once the survey work is completed, the final archaeological report, along with RUS's determinations will be sent to the appropriate parties for review and concurrence. We anticipate that the Section 106 process will be concluded in late spring.

The decision of RUS is that the NEPA process has been satisfied with respect to a request for financing assistance from Minnkota for the construction of the Center-Grand Forks 345 kV Transmission Line and associated facilities. RUS is satisfied that the environmental impacts of the proposed project have been adequately addressed and, therefore, reaches a FONSI. Since RUS's Federal action will not result in significant impacts to the quality of the human environment, the preparation of an environmental impact statement related to the proposed project will not be prepared.

I. RUS LOAN REVIEW AND RIGHT OF ADMINISTARTIVE REVIEW

This FONSI is not a decision on Minnkota's loan application and therefore not an approval of the expenditure of federal funds. Issuance of the FONSI and its notices concludes RUS' environmental review process in accordance with NEPA and RUS' Environmental Policies and Procedures (7 CFR Part 1794). The ultimate decision as to loan approval depends upon conclusion of this environmental review process in addition to financial and engineering reviews. Issuance of the FONSI and publication of notices will allow for these reviews to proceed. The decision to provide financial assistance is also subject to the availability of loan funds for the designated purpose in RUS' budget. There are no provisions to appeal this decision (i.e., issuance of a FONSI). Legal challenges to the FONSI may be filed in federal district court under the Administrative Procedures Act.

Approved by:

NIVIN A ÆLGÔHARY

Assistant Administrator – Electric Program

Rural Utilities Service

ATTACHMENT 1 REVISED ROUTE A DESCRIPTION

REVISED PREFERRED ROUTE DESCRIPTION - JANUARY 13, 2012 ROUTE

The following is a description of the proposed Route from west to east starting at the Center 345 kV Substation and ending at the Prairie Substation. The proposed Route is approximately 250-miles-long. The proposed Route proceeds diagonally northeast out of the Center 345 kV Substation for about 0.9 miles to the section line, through the North Dakota state permitting process this segment of the proposed Route was expanded about 1,000 feet southeast. Then the proposed Route proceeds due east along the section line for about 3.25 miles, then turns diagonally southeast on a cross-country path for about 0.5 miles, then proceeds east for approximately 0.75 miles, then northeast for about 0.5 miles to the section line. Through the North Dakota state permitting process this segment of the proposed Route was expanded about 0.5 miles to the south to the quarter section line. The proposed Route travels east along the section line for about 3 miles, then diagonals to the northeast for about 1 mile, then turns to travel east for almost 3 miles to the Missouri River. It crosses the Missouri River about 0.16 miles north of the existing HVDC transmission line on the west side of the river and about 0.5 miles north of the existing HVDC transmission line on the east side of the river. From the west side of the Missouri River, the proposed Route proceeds diagonally northeast for almost 2 miles, crossing State Highway 1804, then the proposed Route proceeds east along 279th Ave NE for about 2.25 miles. The proposed Route then proceeds north for about 0.75 miles before turning diagonally northwest for about 2 miles. The proposed Route then proceeds north for 3.75 miles along a section line with a one structure bend in the proposed Route near Yanktonai Lake, and then east for about 5.5 miles along a quarter-section line to within 0.5 miles west of State Highway 41.

The proposed Route proceeds north for about 8.5 miles along the quarter-section line about 0.5 miles west of State Highway 41, turns east for approximately 2 miles along State Highway 41, and follows State Highway 41 to the north for about 9 miles; within this segment, the proposed Route spans the McClusky Canal and Chain of Lakes Recreation Area. The proposed Route turns east for about 2 miles along 3rd St NW to the McLean/Sheridan County line. The proposed Route proceeds diagonally, cross-country for about 2.4 miles to 5th St NW; then turns east along 5th St NW for about 0.75 miles. Due to the North Dakota state permitting process this segment of the proposed Route was expanded approximately 1,000 feet northwest. The proposed Route travels diagonally, cross-country for about 7 miles, then diagonally northeast for 0.75 miles to the west side of 1st Ave NE in Sheridan County. At that point the proposed Route proceeds east (about 0.25 miles north of 10th St NE) for about 20.5 miles; within this segment, the proposed Route crosses the McClusky Canal and State Highway 14. The proposed Route turns south for about 0.25 miles to 10th St NE/the section line; then turns east along the section line for about 4 miles, before turning north for about 0.25 miles to go east for about 1 mile approximately 0.25 miles north of 10th St NE. The proposed Route turns south for about 0.25 miles to the section line, then travels east for about 2.25 miles along the section line to within 0.25 miles west of State Highway 3, and then proceeds north for about 1 mile to 11th St NE. The North Dakota state permitting process expanded this almost 28-mile-long segment of the proposed Route about 0.25 miles south to the section line. The proposed Route turns east along 11th St NE for about 6.75 miles, crossing State Highway 3, then turns north for about 1 mile on a quarter-section line to 12th St NE. The proposed Route turns east along 12th St NE for about 9 miles, crossing U.S. Highway 52; then turns north for about 1.5 miles on a quarter-section line between 44th Ave NE and 45th Ave NE. The North Dakota state permitting process expanded this nearly 16-mile-long segment of the proposed Route about 2 miles south to the section line. The proposed Route turns east along a quarter-section line between 13th St NE and 14th St NE for about 17.5 miles to 62nd Ave NE in Eddy County, crossing State Highway 30. The proposed Route turns north along 62nd Ave NE for about 0.5 miles, then turns east for about 1.5 miles, before turning south for about 0.5 miles to the quarter-section line. The North Dakota state permitting process expanded this 1.5-mile-long segment of the proposed Route about 0.5 miles north. The proposed Route turns east along a quarter-section line for about 8 miles to a quarter-section line between 71st Ave NE

and 72nd Ave NE, crossing U.S. Highway 281, where it turns south for about 1 mile to just north of the quarter-section line, and continues east for about 4 miles just north of the quarter-section line to where it turns south for about 0.5 miles to just north of the section line along 12th St NE (Foster/Eddy County line) where it travels approximately 12 miles to the east. The North Dakota state permitting process expanded this about 12-mile-long segment of the proposed Route about 1.5 miles north from the southern edge of the previous Route A and 1 mile south from the south edge of the previous Route A.

To bypass the towns of McHenry and Binford, the proposed Route goes south for approximately 3.25 miles, then east for about 12.5 miles along 3rd St NE/9th St NE (crossing State Highway 20), and north for about 3 miles to 12th St NE. Along 12th St NE, the proposed Route heads east for about 20.5 miles, across State Highway 1, Sheyenne River, and State Highway 45, to about 0.5 miles east of 120th Ave NE in Steele County where the proposed Route travels north for about 6 miles on the quarter-section to 18th St NE near Aneta. At Aneta, the proposed Route goes northeast, diagonally, cross-country for about 7.5 miles to 6th Ave NE in Grand Forks County. The proposed Route travels east along 6th Ave NE for about 7.75 miles, then north for about 0.2 miles along 41st St NE. The proposed Route then proceeds east for about 9.5 miles, crossing State Highway 18, and turns north for about 2 miles along the quarter-section line (about 0.5 miles west of 31st St NE). Then the proposed Route travels east about 200 feet north of 8th Ave NE for about 4.5 miles to 27th St NE. At 27th St NE, the proposed Route travels north for about 0.5 miles and then travels east for about 4.25 miles to the existing Western (Western Area Power Administration) 230 kV transmission line. Then, the proposed Route proceeds northeast, diagonally, cross-country for about 4 miles adjacent to the Western line ROW, then north for about 2.5 miles along the quarter-section line, approximately 0.5 miles west of 19th St NE, where it turns to go east along the 14th Ave NE section line for about 0.5 miles to 19th St NE. The proposed Route goes north for about 1.5 miles along 19th St NE to the quarter-section line between 15th Ave NE and 16th Ave NE. The North Dakota state permitting process expanded this almost 1.5-mile-long segment of the proposed Route along 19th St NE approximately 1,200 feet to the east to the section line. The proposed Route turns to go east along the quarter-section line for almost 4.5 miles. The North Dakota state permitting process expanded this approximately 4.5-mile-long segment of the proposed Route along the quarter-section line about 100 feet south. At 0.5 miles west of 14th St NE, the proposed Route heads north along the quarter-section line for about 0.75 miles to the south side of the existing 230 kV transmission line and then proceeds east along the south side of the existing transmission line for about 1.5 miles into the Prairie Substation.