

**FINDING OF NO SIGNIFICANT IMPACT**

**Lonesome Creek Station Units 2 and 3 Project  
McKenzie County, North Dakota**

**RURAL UTILITIES SERVICE**

**U.S. Department of Agriculture**

**Basin Electric Power Cooperative**

**Prepared by:**

**Engineering and Environmental Staff**

**Rural Utilities Service**

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## **A. INTRODUCTION**

The Rural Utilities Service (RUS) expects to receive a request for financial assistance from Basin Electric Power Cooperative (Basin Electric) for their proposal to add 90 MW of capacity to an existing natural gas-fired power plant in McKenzie County, North Dakota. RUS may finance the proposed Project, making it an action subject to review under the National Environmental Policy Act (NEPA) and other applicable federal environmental laws and regulations. RUS determined that the proposed Project would require the development of an environmental assessment (EA) in accordance with RUS "Environmental Policies and Procedures" at 7 CFR part 1794. RUS conducted an independent evaluation of the EA prepared by Basin Electric, concurred with its scope and content, and adopted it as the agency's EA, in accordance with 7 CFR § 1794.41. RUS has evaluated the proposed Project's purpose and need, alternatives considered, and the EA's environmental impact analysis, and RUS finds that the proposed Project will not have a significant impact on the human environment.

In addition, RUS considers the proposed Project an undertaking subject to review under Section 106 of the National Historic Preservation Act (NHPA), 16 USC 470(f), and its implementing regulation, "Protection of Historic Properties" (36 CFR Part 800).

## **B. PURPOSE AND NEED**

Basin Electric is a member-owned, not-for-profit electric generation and transmission cooperative required to provide reliable electric service to its members. Projecting future power requirements is an important planning tool for Basin Electric to determine its operating strategies. Adequate resources and electric generation and transmission facilities must be developed when necessary to meet increasing electric power needs of Basin Electric's members. Two studies are essential to determining present and future needs: 1) end-use surveys that show where cooperative members presently use their electricity, and 2) load forecasts that show how much power members will require in the future. The end-use survey provides an understanding of how the consumers are presently using their electricity and is the baseline for a forecast of consumers' future electrical requirements, or load. Basin Electric's load forecast indicates accelerated load growth in northwestern North Dakota, mainly resulting from rapid development related to oil and gas exploration and extraction in the Bakken oil field. This rapidly increasing growth creates a stress on existing generation and transmission facilities. To respond to rapid load growth and greater electric power needs in the Williston Basin of northwestern North Dakota, Basin Electric proposes to add new generating capacity by constructing two 45 MW gas-fired generation units at the existing Lonesome Creek power generation facility, which currently has one 45 MW gas-fired generation unit. The proposed Project will bring the capacity of the Lonesome Creek facility up to 135 MW of power to meet the demands of the increasing development in the region.

### **C. PROPOSED ACTION**

Basin Electric proposes to construct two new 45 MW power generation units at the Lonesome Creek Station (LCS) power generation facility in McKenzie County, North Dakota. Basin Electric owns 160 acres of land, approximately 15 miles west of Watford City. LCS is a 48.4-acre facility within the Basin Electric's 160-acre property. The existing LCS facility includes a single 45 MW generating unit (Unit 1). The proposed action is to construct two new 45 MW generating units (Units 2 and 3) at the LCS facility. Together the existing unit and two proposed units would cover seven acres. During construction, there would also be a 22-acre area adjacent to and east of the proposed new generation units for construction purposes. The proposed Units 2 and 3 would be General Electric (GE) LM6000 turbines with an output rating of 45 MW. The units would use dry low nitrogen oxide (NOx) burner technology along with an anhydrous ammonia-based selective catalytic reduction (SCR) system to control NOx emissions. Other emissions control equipment would reduce carbon monoxide (CO) output. The units' flue gas would be released to the atmosphere through an 80-foot-tall stack. The new units would use the existing LCS operator and maintenance building and water treatment area. The Northern Border Pipeline runs immediately adjacent to the LCS site, and it supplies natural gas to LCS for generation fuel.

### **D. ALTERNATIVES EVALUATED**

The EA evaluated the no action alternative as well as action alternatives that would meet the forecasted electrical needs for Basin Electric. These alternatives included: demand-side management, adding baseload capacity, adding intermediate capacity, adding peaking capacity, and purchasing power from other power generation cooperatives or providers. Based on alternatives evaluated, Basin Electric determined that a power source with quick start capabilities located in the vicinity of the LCS site would best meet load demand in the Williston Basin at this time. The proposed action will partially address system needs in the area. Additional proposals are underway to meet the rapidly growing energy demand in the Williston Basin. Other proposals to achieve the needed capacity and reliability demand in the area include a proposed high voltage transmission line from Antelope Valley Station to the Williston area. The generation that would be most capable of meeting Basin Electric's need was determined to be a two-unit simple cycle combustion turbine at the existing Lonesome Creek site. The no action alternative served as the benchmark for comparison of environmental impacts.

### **E. PUBLIC AND AGENCY INVOLVEMENT**

Notice of the proposed Project was provided to federal and state agencies and Indian tribal governments by letter on December 6, 2012. Responses from the Bureau of

Indian Affairs, U.S. Forest Service (USFS), North Dakota Department of Transportation, North Dakota Game and Fish Department, North Dakota State Water Commission, and State Historical Society of North Dakota indicated no objections to the proposed Project.

Responses from the U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service (USFWS), Natural Resources Conservation Service (NRCS), North Dakota Department of Health, and North Dakota Forest Service are summarized below.

The USACE indicated that if the proposal would be constructed in waters of the U.S., a Section 404 permit may be needed. Basin Electric conducted a stream and wetland delineation and determined that no waters of the U.S. were in or near any construction areas.

The USFWS requested that potential impacts on bald and golden eagles and migratory birds be evaluated, and that the proposed Project minimize impacts to terrestrial habitats. RUS evaluated impacts on federally listed species, eagles, migratory birds, and other protected species based on information and recommendations from biologists who conducted field investigations at LCS. Because construction is occurring on an existing industrial site and involves only a temporary laydown yard, the proposed Project would have no effect on federally listed species, migratory birds, or terrestrial habitats.

The NRCS indicated that if the proposed Project included the addition of permanent sites to the current footprint, an evaluation under the Farmland Protection Policy Act would not be needed. No permanent additions to the plant site, other than the current footprint, would be required for construction of Units 2 and 3.

The North Dakota Department of Health requested that Basin Electric implement measures to minimize fugitive dust emissions, minimize adverse effects to nearby water bodies, and minimize noise during construction. Storm water discharge permits and air quality control permits would also be needed. Basin Electric is in the process of obtaining all storm water and air quality control permits and would mitigate fugitive dust and use noise control measures during construction. The proposed Project would have no effects on nearby water bodies.

The North Dakota Forest Service requested that the proposed Project avoid disturbing forested areas and replace trees that are affected. No trees or forested areas would be affected.

The availability of the Environmental Assessment for public review was announced in the Williston Daily Herald and the Bismarck Tribune on September 11, 2013. Copies were made available for public review in the McKenzie County Public Library and at Basin's headquarters. The comment period ended on October 11, 2013. A response

was received from McKenzie Electric Cooperative, which expressed support for the proposed Project. No other responses were received.

## **F. SUMMARY OF ENVIRONMENTAL EFFECTS AND COMPLIANCE WITH APPLICABLE ENVIRONMENTAL LAWS, REGULATIONS, AND EXECUTIVE ORDERS**

Under the no action alternative, the proposed Project would not be constructed, thereby resulting in no physical impact to the environment. The analyses in the EA documented that the proposed Project would have no effects on endangered and threatened species, wetlands, floodplains, historic properties, farmland, or human health and safety. There would be no disproportionate effects on minority populations or low-income populations. Construction of the proposed Project would result in minor impacts to air quality, greenhouse gas emissions, water resources, vegetation, wildlife, socioeconomics, transportation, aesthetics, and noise. Mitigation to avoid or minimize impacts is provided below. Basin Electric is responsible for implementing these mitigation measures.

Threatened and Endangered Species. RUS determined that there would be no effect to federally listed species. However, Basin Electric has opted to implement the following measures to avoid potential for unforeseen impacts, because the proposed Project is located in the whooping crane migratory corridor:

- If whooping cranes are observed within one mile of the proposed Project, Basin Electric will stop construction until migrating whooping cranes leave the area.

Bald and Golden Eagle Protection Act. RUS determined that there would be no effect to the bald eagle and golden eagle. However, Basin Electric has opted to implement the following measure to ensure there would be no effects to these species:

- In the first year of construction and operation, a Golden Eagle nest survey will be conducted within a one-mile radius of the proposed Project between March 1 and May 15; if nests are present, further consultation will be conducted with the USFWS.

Air Quality. Basin Electric will comply with all conditions of the air quality control permit issued by the North Dakota Department of Health.

Water Resources. Basin Electric will obtain a NPDES permit for discharge of stormwater runoff and evaporative cooling spray mist blowdown water from the storm water retention pond.

## **G. FINDING OF NO SIGNIFICANT IMPACT**

Based on its EA, RUS concludes that the proposed Project would have no significant impacts to water quality, wetlands, floodplains, land use, aesthetics, transportation, and human health and safety. RUS also concludes that the proposed Project would have no effect to federally listed threatened and endangered species or designated critical habitat. The proposed Project would not disproportionately affect minority or low-income populations. No historic properties would be affected by the proposed Project.

In accordance with the National Environmental Policy Act, as amended (42 U.S.C. § 4321 et seq.), the Council on Environmental Quality Regulations (40 CFR parts 1500-1508), and RUS's Environmental Policies and Procedures, as amended (7 CFR part 1794), RUS has determined that the environmental impacts of the proposed Project have been adequately addressed and that no significant impacts to the quality of the human environment would result from construction and operation of the proposed Project. Therefore, RUS will not prepare and Environmental Impact Statement for its actions related to the proposed Project. Any final action by RUS related to the proposed Project will be subject to, and contingent upon, compliance with all relevant federal and state environmental laws and regulations.

#### **H. RUS LOAN REVIEW AND RIGHT OF ADMINISTRATIVE REVIEW**

This FONSI is not a decision on Basin Electric's expected loan application and therefore not an approval of the expenditure of Federal funds. This FONSI and its notices conclude RUS's environmental review process in accordance with NEPA and RUS's Environmental Policies and Procedures. Final loan approval is dependent on the conclusion of the environmental review process in addition to financial and engineering review of the proposed Project. There are no provisions to appeal this decision. Legal challenges to the FONSI may be filed in Federal district court under the Administrative Procedures Act.

#### **I. APPROVAL**

This Finding of No Significant Impact is effective on signature.



JAMES F. ELLIOTT  
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Date

**Contact Information**

For additional information on this FONSI and the EA, please contact Ms. Deirdre Remley, Environmental Protection Specialist, at USDA, Rural Utilities Service, 1400 Independence Avenue, SW., Stop 1571, Washington DC 20250-1571, (202) 720-9640, or [deirdre.remley@wdc.usda.gov](mailto:deirdre.remley@wdc.usda.gov).

