



## United States Department of the Interior

National Park Service  
P.O. Box 168  
Yellowstone National Park  
Wyoming 82190

IN REPLY REFER TO:

L7617(YELL)

CERTIFIED

NOV 07 2013

Ms. Mary Hopkins  
Wyoming State Historic Preservation Officer  
2301 Central Avenue  
Barrett Building, 3<sup>rd</sup> Floor  
Cheyenne, Wyoming 82002

Dr. Mark Baumler  
Montana State Historic Preservation Officer  
Montana Historical Society  
P.O. Box 201201  
Helena, Montana 59620-1201

Subject: Electric Transmission/Distribution System Communication and Automation Plan  
Environmental Assessment

Dear Ms. Hopkins and Dr. Baumler:

The National Park Service (NPS) is proposing to implement a plan to upgrade Northwestern Energy's (NWE) existing electrical service and infrastructure within and adjacent to Yellowstone National Park. The project would improve electrical reliability, reduce impacts to visitors and park operations resulting from outages, and improve safety for NPS and NWE personnel. The project would also meet the Federal Communications Commission (FCC) Narrowing Bandwidth Mandate, which went into effect on January 1, 2013. This project is an undertaking in accordance with 36 CFR 800, the implementing regulations for Section 106 of the National Historic Preservation Act, and we request your review and concurrence with our determination of effect. We previously wrote to you during the scoping period for this project and have attached a copy of that correspondence for your convenience (enclosure 1). The park has developed an environmental assessment (EA) pursuant to the National Environmental Policy Act, which analyzes impacts resulting from the proposal, including impacts to historic properties (enclosure 2).

NorthWestern Energy, an investor-owned utility that provides electricity and natural gas in the northwest quadrant of the United States, has provided electrical power to Yellowstone National Park since the late 1950s using 50 kilovolt (kV) and 69 kV aerial and buried transmission lines. Much of NWE's existing power infrastructure in the park has not been updated since the 1950s and is prone to frequent outages because of the remote nature of the park, inhospitable terrain, climate, and tree cover near transmission lines. Additionally, the park's system lacks modern

communication infrastructure that would normally facilitate diagnosing and correcting the cause of power outages from NWE's central offices in Montana. Further, the lack of reliable communications inside the park can make it difficult for NWE employees to safely implement repairs when outages occur. The purpose of the Environmental Assessment (EA) is to evaluate alternatives that may reduce the duration of power outages, improve system reliability, and improve visitor and employee safety.

Under the preferred alternative, existing electrical substations located at Mammoth, Norris, Canyon, Lake, Grant Village, Madison, Old Faithful, and one repeater site located at Buffalo Mountain (2.65 miles southeast of Jardine, Montana) outside the park are proposed to receive the following improvements:

1. One prefabricated equipment building would be constructed at each of five of the seven substations, and one at the USFS site to house communications equipment. The buildings range in size from 12' x 20' to 16' x 24' in size. At Norris and Mammoth, these new buildings would replace existing older and smaller buildings. The existing buildings at the Grant Village and Old Faithful substations are adequate. These structures would be placed on a concrete foundation and be finished in NPS-brown with a non-reflective metal roof to reduce the degree of visual impact.
2. One tower would be installed at each of the seven existing NWE power substation facilities and at one radio repeater site located at Buffalo Mountain. The towers would consist of a metal lattice structure approximately 24 inches on a face and a maximum of 60 feet tall. At the Mammoth substation, the tower would be 30 feet tall. Towers would be treated to have a dull, dark finish to reduce visual impact. All towers would be equipped with a VHF yagi antenna having 24-inch by 30-inch elements. No tower lighting is proposed. A concrete foundation would be placed at each location to support the tower.
3. Existing security fencing would be expanded at the substations at Canyon and Norris.
4. Backup generator upgrades would be completed, which include an above-ground propane tank.

An analysis of the visibility of proposed substation communication towers is contained in a report in the appendix of the EA (enclosure 2). This report describes where the proposed towers would be visible and compares existing photos to photo simulations of the proposed communication tower to determine the relative visual effect on adjacent historic districts. Based on this analysis, it is anticipated that the proposed tower at three of the seven substations (Mammoth, Norris, and Old Faithful) would be either barely visible or slightly visible in the distant background from the following historic districts: Mammoth Hot Springs Historic District, Fort Yellowstone National Historic Landmark District, and Grand Loop Road Historic District. The other proposed towers would not be seen from other historic districts or properties, since they are located away from public view or are in existing administrative and utility areas. The proposed tower at the Mammoth substation (30-foot tall) would be shorter than existing utility poles within the existing substation. Much of the existing substation equipment at Mammoth is visible, but generally not noticed by most visitors as it is in the background from most views and set against a backdrop of vegetated hills. Historic properties within the Gallatin National Forest all lay on the opposite side of the hill on which the proposed Buffalo Mountain tower is sited, the proposed tower would not be visible from those properties. The proposed 16-foot by 24-foot

equipment building at the existing Norris substation would be treated to a dark dull finish to blend among the shadows beneath the trees that would screen it and the proposed 60-foot tower from the Grand Loop Road Historic District between Norris and Canyon. The proposed tower would be barely visible to passing motorists and only if they happened to look perpendicular from the travel direction at the right moment to catch the view between trees.

A Class III archeological inventory and evaluation conducted for this project (enclosure 3) determined that all work will occur in areas already disturbed by construction of a recent and non-historical nature, and, as such, would not disturb any intact archeological historic properties.

Given the location of the towers and buildings and the results of the visual assessment and archeological inventory, the park has determined that the construction of the substation improvements will not adversely affect any historic properties. The National Park Service seeks your concurrence with this determination.

If you have any questions regarding this project, please contact Tobin Roop, Chief, Branch of Cultural Resources, at (307) 344-2224 or Jennifer Carpenter, Chief, Branch of Environmental Quality and Science Communication, at (307) 344-2528.

Thank you for your time and consideration.

Sincerely,

Daniel N. Wenk  
Superintendent

Enclosures:

1. Scoping Consultation Letter – WYSHPO, MTSHPPO, and ACHP May 13, 2013
2. Electric Transmission/Distribution System Communication and Automation Plan Environmental Assessment which includes Appendix A: Visibility of Proposed NorthWestern Energy Electrical System Improvements from Adjacent Historic Districts (September 2013)
3. Report - Archeological Inventory and Evaluation of Proposed Northwestern Energy - Communication and Automation Locations, Yellowstone National Park and Gallatin National Forest, MT and WY, 2013

Identical Letters Sent with Enclosures to:

Mary Hopkins, Wyoming SHPO  
Mark Baumler, Montana SHPO

cc: (w/o enclosures –digital version only)  
Katy Harris, ACHP

bcc: (w/o enclosures)

Central Files

Supt's Files

Steve Iobst

David Hallac

Tobin Roop

Jennifer Carpenter

Doug Madsen

Staffan Peterson

Nancy Ward

Jim Knoelke

Bret DeYoung

YCR Files

No Reading Files

bcc: (w/ enclosures)

Zehra Osman

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