# Teckla-Osage-Rapid City 230 kV Transmission Line Project

### **Draft Environmental Impact Statement**







### **Bureau of Land Management**

**High Plains District** 

### **USDA Forest Service**

Black Hills National Forest Thunder Basin National Grassland

#### COMMONLY USED ACRONYMS AND ABBREVIATIONS

BHNF - Black Hills National Forest

BHP - Black Hills Power

BLM - Bureau of Land Management

**BMP - Best Management Practices** 

CEQ - Council on Environmental Quality

CF - Cubic Feet

CFR - Code of Federal Regulations

**DEIS - Draft Environmental Impact Statement** 

EIS - Environmental Impact Statement

**EPA - Environmental Protection Agency** 

FEIS - Final Environmental Impact Statement

FLMPA - Federal Land Management Policy Act

FS - Forest Service

ID - Team Interdisciplinary Team

MA - Management Area

NEPA - National Environmental Policy Act

NFS - National Forest System

OHV - Off-Highway Vehicle

RMP - Resource Management Plan

ROD - Record of Decision

ROW - Right of way

S&G - Standard(s) and Guideline(s)

SHPO - State Historic Preservation Officer

SD - South Dakota

SOLC - Species of Local Concern

T&E - Threatened and Endangered

TBNG - Thunder Basin National Grassland

T-O-RC - Teckla-Osage-Rapid City Transmission Project

USDA - United States Department of Agriculture

USFWS - United States Fish and Wildlife

Service

WY - Wyoming

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**Abstract:** The Black Hills National Forest in cooperation with the Thunder Basin National Grasslands and the Bureau of Land Management (BLM) has prepared this Draft Environmental Impact Statement (DEIS) in compliance with the National Environmental Policy Act (NEPA), and other relevant Federal and State laws and regulations.

Black Hills Power (BHP) proposes to construct and operate a 230 kV transmission line from northeastern Wyoming to the Rapid City area in South Dakota. It would connect the Teckla Substation in Campbell County, Wyoming to the Osage Substation in Weston County, Wyoming and the Lange Substation located in Pennington County near Rapid City, South Dakota. This transmission line is being developed to strengthen the transmission network, improve transmission system reliability, and to help meet future demand for electricity and economic development in the region.

The project proposes to cross private, state and public lands, including the Black Hills National Forest and Thunder Basin National Grasslands, as well as lands managed by the Bureau of Land Management (BLM), and State of Wyoming. As such, this project is subject to the NEPA process which requires federal agencies to evaluate the environmental effects of a proposed project prior to deciding whether to allow the proposed project to be built on federally-managed land.

Three alternatives are considered in detail. Alternative 1 is the No Action Alternative, Alternative 2 is the Proposed Action, and Alternative 3 is the Proposed Action with Route Modifications. This DEIS discloses the direct, indirect, and cumulative environmental effects resulting from the proposed action and alternatives. The Agencies have identified Alternative 3 with the inclusion of route modifications 3a, 3b, 3c, 3d, 3f and 3g as the preferred alternative.

Reviewers should provide their comments by the end of the review period for the DEIS. This will enable the Forest Service and BLM to analyze and respond to the comments and to use the information acquired from the comments in the preparation of the Final Environmental Impact Statement (FEIS) and in the decision making process. Reviewers have an obligation to structure their participation in the NEPA process so that it is meaningful and alerts the agency to the reviewers' position and contentions (*Vermont Yankee Nuclear Power Corp. v. NRDC*, 435 U.S. 519, 553 (1978)).

Environmental objections that could have been raised at the draft stage may be waived if not raised until after completion of the FEIS (*City of Angoon v. Hodel (9thCircuit, 1986) and Wisconsin Heritages, Inc. v. Harris, 490 F. Supp. 1334, 1338 (E.D. Wis. 1980)).* Comments on the DEIS should be specific and should address the adequacy of the statement and the merits of the alternatives discussed (*40 CFR 1503.3*).

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BHP 230kV Transmission Line Project

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"BHP 230kV Transmission Line" as the subject

#### **EXECUTIVE SUMMARY**

The Black Hills National Forest, Thunder Basin National Grasslands, and the Bureau of Land Management are responding to a proposal by the project proponent, Black Hills Power (BHP) to construct and operate a 230 kV transmission line from northeastern Wyoming to the Rapid City area in South Dakota. This proposal is guided by the National Forest and National Grasslands Land and Resource Management Plans (Forest Plans) and the BLM Resource Management Plans (RMPs) that cover the federal lands crossed by the Project and is evaluated in accordance with the National Environmental Policy Act (NEPA) and other agency direction.

The transmission line route proposed by BHP would connect the Teckla Substation in Campbell County, Wyoming to the Osage Substation in Weston County, Wyoming and the Lange Substation located in Pennington County near Rapid City, South Dakota. The route would be approximately 144 miles long and would cross private lands, National Forest System (NFS) lands, Bureau of Land Management (BLM) lands (in Wyoming), and state lands (in Wyoming). The National Forest System lands involved in the Project are managed by the BHNF in South Dakota and TBNG in Wyoming.

The USFS and BLM have identified a need to authorize BHP for construction, installation and operation of a 230kV transmission line to:

- Strengthen the regional transmission network
- Improve the reliability of the transmission system
- Provide additional transmission capacity to help meet the growing demand for electricity and development in the region.

The need for this project has been established and approved through the appropriate planning and oversight criteria--described in Chapter 1 of this document.

The USFS announced the project scoping period through various means, held public scoping meetings, and invited the public to comment and ask questions. The scoping period and public meetings were announced in the *Federal Register* on August 26, 2011. In the fall of 2011, over 3,000 scoping notification letters produced by the USFS were sent to government agencies, tribes, elected officials, property owners near the proposed project, various non-governmental organizations and other interested stakeholders. In addition, news releases about the project and public meetings were published in three local newspapers: News Letter Journal (WY), Hill City Prevailer (SD), and Rapid City Journal (SD).

Comments received during the scoping process were used to help in defining issues, develop alternatives and mitigation measures, and analyze effects. Through review and analysis of the scoping comments and input, the Interdisciplinary Team (ID Team) identified seven (7) prevailing or key issues related to the proposed activities. The seven key issues include effects of the Proposed Project on:

- Wildlife including Sensitive Species such as sage grouse, goshawks, and other raptors
- Wetlands and Vegetation Communities
- Scenic Integrity and Visual Resources
- Private Property including Property Values and Electricity Rates
- Existing and Future ATV/OHV/Snowmobile Trails

- Tree Removal
- Health resulting from Electromagnetic Fields (EMF)

These issues led the ID Team to develop alternatives to the proposed action. The alternatives analyzed in detail in this Draft EIS are briefly described as follows:

#### **Alternative 1 (No Action)**

NEPA requires the study of the No Action Alternative and to use it as a basis for comparing the effects of the Proposed Action and other alternatives. The No Action Alternative assumes that no implementation of any elements of the Proposed Action (no authorization of ROWs and no construction of the transmission line) would occur in the Project area within the next 10 to 15 years. This alternative does not actively respond to the purpose and need for action or address the issues, concerns, or comments identified during scoping for this Project.

#### **Alternative 2 (Proposed Action)**

The Proposed Action was developed as a response to the purpose and need for action. The Proposed Action is a single-circuit 230 kV transmission line that would connect the existing Teckla Substation (located approximately 67 miles north of Douglas, Wyoming in Campbell County, Wyoming); to the existing Osage Substation (located in Weston County, Wyoming about 13 miles northwest of Newcastle); to the existing Lange Substation (located in Rapid City, South Dakota). From the Teckla Substation the line would travel west approximately three miles along an existing transmission line route, then north approximately 19 miles. Here it would turn east and follow county roads and section lines before turning northeast for approximately six miles. The route would then turn east to parallel an existing electrical distribution line before heading straight east along section lines to Wyoming State Highway 116 where it would parallel highway ROW north for approximately seven miles. At this point, the route would generally travel east on section lines to the existing Osage Substation. From the substation, the Proposed Action would travel east and north into Pennington County, South Dakota using approximately 47 miles of currently unused transmission line ROW to the existing Pactola Substation west of Rapid City. In this portion of the line (from Osage to Pactola) the currently unused ROW has a cleared width of approximately 40 to 50 feet which would be widened to 100 feet to accommodate the needed ROW for the new transmission line. From the Pactola Substation, the route would continue east paralleling an existing transmission line for approximately five and one-half miles, and then north and east approximately ten miles to terminate at the Lange substation in Rapid City, South Dakota.

#### **Alternative 3 (Proposed Action with Route Modifications)**

Alternative 3 is defined as the Proposed Action with modifications to the proposed route in specific locations to respond to issues identified during scoping. The seven key issues are presented above. The route modifications are identified as 3a through 3g and each are located within one mile of the proposed route.

The transmission line specifications, construction methods, and operations and maintenance procedures would be the same as those described above for the Proposed Action. The route modifications and key issues they responded to are described below.

- <u>Modification 3a</u> The Fiddler Modification is approximately 7.5 miles south of Upton and nine
  miles west of Osage, Wyoming. It would be approximately one mile north of the proposed route
  for a distance of about five miles and was developed to avoid the Upton Fairview and Jessee
  Greater Sage-Grouse Leks.
- Modification 3b The Mountain View Modification is south of Deerfield Road between Williams
   Draw Road and Gillette Prairie Road in South Dakota. It would be approximately 500 feet north of
   the proposed route for a distance of about one mile and was developed to avoid existing
   residences. This responds to issues 4 and 7.
- Modification 3c The Clinton Modification is north of McVey and Deerfield Roads and east of Slate Prairie Road in South Dakota. It would be approximately 1,000 feet north of the proposed route for about one mile and was developed to avoid existing residences.
- Modification 3d The Edelweiss Modification is located north of Edelweiss Mountain Road and west of U.S. Route 385 in South Dakota. It would be about 1,000 feet north of the proposed route for less than one mile and was developed to avoid a sensitive wildlife area.
- Modification 3e The Pactola Modification is east of U.S. Route 385 near the Pactola Reservoir in South Dakota. It would be about 1,500 feet south of the proposed route and would require clearing for the new ROW for approximately one-half mile. This Modification was developed to move the transmission line farther from the Pactola Reservoir, a visually sensitive area identified in the Forest Plan.
- <u>Modification 3f</u> The Pactola South Modification is also east of U.S. Route 385 near the Pactola Reservoir in South Dakota. It was also developed to avoid the Pactola Reservoir area. It would be located about one mile south of the proposed route and would follow approximately two miles of previously cleared ROW.
- Modification 3g The Hidden Valley Modification is approximately four miles west of Rapid City, South Dakota. It would be approximately 2,500 feet south of the proposed route for about one and one-half mile and was developed to avoid planned future quarry operations.

Relative comparison between the alternative effects on the key issues are summarized in Chapter 2 and discussed in detail in Chapter 3. The Purpose and Need of the Project discussed in Chapter 1 provides the focus and scope of the proposal as related to National Forest and BLM level policy.

Given the purpose and need, the Responsible Officials (BHNF Forest Supervisor, TBNG Forest Supervisor, and BLM High Plains District Manager) will review the Proposed Action, the issues identified during scoping, the alternatives, the environmental consequences of implementing the proposal and alternatives, and public comments on the Draft Environmental Impact Statement. This forms the basis for the Responsible Officials to make the following determinations for their respective jurisdictions:

- Whether the proposed activities and alternatives address the issues, are responsive to laws, regulations, and management direction, and meet the purpose of and need for action in the T-O-RC Project area
- Whether the information in this analysis is sufficient to make a reasoned decision
- Which action, if any, to approve (decide which alternative or combination of alternatives to implement).
- Which if any mitigation measures and monitoring requirements will be applied.

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