

SOUTH DAKOTA PUBLIC UTILITIES COMMISSION

APPLICATION

FOR

WAPA NORTH BEND TO PRATT 230 kV TRANSMISSION LINE



Prepared by:

East River Electric Power Cooperative, Inc.
211 S Harth Ave.
Madison, South Dakota

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LIST OF EXHIBITS

- 1 Project Proposed Line Route Map
- 2 Project Plan and Profile Drawing
- 3 Service Territory Map
- 4 Project Planning Study
- 5 Borrower's Environmental Review – RUS BER Report
- 6 BER Environmental and Topographical Map
- 7 WAPA Easement Outgrant
- 8 Hyde County (CR-649) Crossing Permit Approval
- 9 Structure Drawing

ACRONYMS AND ABBREVIATIONS

69 kV	69,000 Volt
115 kV	115,000 Volt
230 kV	230,000 Volt
345 kV	345,000 Volt
ACSR	Aluminum conductor steel reinforced
Dakota Energy	Dakota Energy Cooperative, Inc.
East River	East River Electric Power Cooperative, Inc.
HP	Horse Power
MCM	Million Circular Mills
MW	Mega Watt
MWH	Mega Watt Hour
NESC	National Electric Safety Code
Oahe	Oahe Electric Cooperative, Inc.
PUC	Public Utilities Commission
ROW	Right-of-way
RUS	Rural Utilities Service
SDAR	South Dakota Administrative Rule
SDCL	South Dakota Codified Law
SPP	Southwest Power Pool
SPP	Western Area Power Administration
USFWS	U.S. Fish and Wildlife Service

1.0 APPLICATION PREFACE

East River Electric Power Cooperative, Inc. (East River) is proposing to construct a 230,000 volt (230 kV) overhead electric transmission line to serve its membership in Hughes and Hyde Counties. This transmission line is located in Section 15/16, T110N, R37W, Hyde County, SD.

This entire project is referred to in this application as the “WAPA North Bend to Pratt” or as the “Project”.

The WAPA North Bend to Pratt will include:

- Constructing approximately 500 feet of 230 kV overhead transmission line.

This application meets the requirements set forth in South Dakota Codified Law (SDCL) 49-41B and South Dakota Administrative Rule (SDAR) 20:10:22. The balance of this document includes the application, supporting exhibits, and supporting documents. In accordance with SDCL 49-41B-22, East River establishes that:

1. The proposed facilities comply with all applicable laws and rules;
2. The facilities will not pose a threat of serious injury to the environment nor to the social and economic condition of inhabitants or expected inhabitants in the siting area;
3. The facilities will not substantially impair the health, safety or welfare of the inhabitants; and
4. The facilities will not unduly interfere with the orderly development of the region with due consideration having been given the views of governing bodies of affected local units of government.

East River requests the Public Utilities Commission (PUC) of South Dakota make complete findings and render a decision to grant a permit to construct the transmission facilities upon such terms, conditions or modification of the construction, and operation or maintenance as the Commission may deem appropriate.

East River Electric Power Cooperative, Inc.

By: Mark Hoffman
Mark Hoffman

Title: Chief Operations Officer

Date: March 22, 2024

2.0 APPLICATION

This application was developed and organized to meet the requirements of South Dakota PUC rules set forth in SDAR 20:10:22. This application is submitted to the South Dakota PUC and conforms to South Dakota statutes and rules governing energy conversion and transmission facilities.

2.1 NAME OF PARTICIPANTS (SDAR 20:10:22:06)

The applicant's name, address, and telephone number is:

East River Electric Power Cooperative, Inc.
211 S Harth Ave
P.O. Box 227
Madison, SD 57042
(605) 256-4536

The individuals authorized to receive communications relating to the application on the behalf of East River are:

Danny Brown
General Counsel
East River Electric Power Cooperative, Inc.
211 S Harth Ave
P.O. Box 227
Madison, SD 57042
(605) 256-4536
dbrown@eastriver.coop

Mark Hoffman
Chief Operations Officer
East River Electric Power Cooperative, Inc.
211 S Harth Ave
P.O. Box 227
Madison, SD 57042
(605) 256-4536
mhoffman@eastriver.coop

Jonathan Aus
Manager, Engineering & Planning Services
East River Electric Power Cooperative, Inc.
211 S Harth Ave
P.O. Box 227
Madison, SD 57042
(605) 256-4536
jaus@eastriver.coop

Travis Olson
Transmission Manager
East River Electric Power Cooperative, Inc.
211 S Harth Ave
P.O. Box 227
Madison, SD 57042
(605) 256-4536
tolson@eastriver.coop

2.2 NAME OF OWNER AND MANAGER (SDAR 20:10:22:07)

The proposed transmission facilities will be owned by East River. The Project Manager for the Project is:

Mark Hoffman
Chief Operations Officer
East River Electric Power Cooperative, Inc.
211 S Harth Ave
P.O. Box 227
Madison, SD 57042
(605) 256-4536
mhoffman@eastriver.coop

2.3 DESCRIPTION OF THE NATURE AND LOCATION OF THE FACILITY (SDCL 49-41B-11 (2))

East River is proposing to construct a 230 kV transmission line (Exhibits 1 & 2) to interconnect with WAPA facilities at the North Bend substation. The new 230 kV line will connect WAPA's North Bend Substation with East River's new 230/69 kV Pratt Substation. The Pratt substation will have transformation from 230 kV to 69 kV which will then be transmitted from the Pratt Substation across the East River transmission system to serve Oahe Electric Cooperative, Inc. (Oahe) and in the future Dakota Energy Cooperative, Inc. (Dakota Energy). This will allow Oahe, headquartered in Blunt, South Dakota, and Dakota Energy, headquartered in Huron, South Dakota, to serve developing load growth as well as other future loads that develop in their area (Exhibit 3). The new transmission line Project is referred to in this application as the "WAPA North Bend to Pratt" or as the "Project".

The Project will provide for electrical transmission service necessary to meet the electrical demand in the area and other future loads that may develop.

The transmission line is located on WAPA or East River-owned property, except for the crossing of the public road Right Of Way (ROW) for County Road 649 (CR-649). The 500-foot transmission line involved in the Project is proposed to be constructed in public and private ROW. Where the transmission line will be constructed, private ROW easements have been acquired.

2.4 PURPOSE OF FACILITY (SDAR 20:10:22:08)

East River is a consumer-owned, regional wholesale power supply cooperative headquartered in Madison, South Dakota. East River's members include 24 rural electric distribution cooperatives and one municipally-owned electric system in eastern South Dakota and western Minnesota. East River delivers wholesale power to its members who in turn, power the homes, farms, schools and businesses of the 250,000 member-owners in their service territories.

The facilities involved with the project are located in the certified service area of Dakota Energy. Dakota Energy is a member/owner of East River and has an "All Requirements" contract with East River for East River to provide all of the power and energy requirements of Dakota Energy. East River also provides all of the transmission facilities required to deliver this power and energy to Dakota Energy's distribution system.

The facilities involved with the project will also provide service to Oahe, a neighboring cooperative. Oahe is a member/owner of East River and has an "All Requirements" contract with East River for East River to provide all of the power and energy requirements of Oahe. East River also provides all of the transmission facilities required to deliver this power and energy to Oahe's distribution system.

2.5 ESTIMATED COST OF FACILITY (SDAR 20:10:22:09)

The estimated total cost of the WAPA North Bend to Pratt Project is \$766,000.

East River will either utilize its internal workforce or contract with private transmission line contractors to construct the Project. Cost estimates for the Project are based on recent construction cost histories accumulated during recent construction projects.

2.6 DEMAND FOR FACILITY (SDAR 20:10:22:10)

Oahe has requested new facilities to support projected load growth in their southern Hughes County service territory. Oahe's estimated peak demand is 3.5 MW and an annual energy usage of approximately 23,000 MWH's when the facility is in service. A potential additional peak demand of 11.5 MW could be served from the facility on the Oahe system to serve this load growth.

If this facility is not constructed or is delayed, Oahe Electric will not be able to support projected load growth until this project or a similar project is completed.

2.7 GENERAL SITE DESCRIPTION (SDAR 20:10:22:11)

The proposed 500-foot 230 kV transmission line will originate at Western Area Power Administration's (WAPA) North Bend Substation (Exhibit 1) located in the SE ¼ Section 16, T110N, R73W in Hyde County. The line will be routed directly east from the terminal in WAPA's North Bend facility, approximately perpendicular across CR-649, and onto East River property. The line will then terminate at the new East River Pratt substation constructed adjacent to the WAPA site.

2.8 ALTERNATIVE SITES (SDAR 20:10:22:12)

Due to the location of the projected load growth, the existing East River transmission system and the underlying Oahe distribution system could not support the load growth. East River evaluated options for serving the load off the existing system and also varying degrees of development based on the 230 kV interconnect at WAPA North Bend.

Two 69 kV high voltage transmission lines exist in the vicinity of Oahe's projected load growth. One is the existing East River Pocket Tap, located approximately 14.5 miles south of Blunt, SD. The other is East River's existing Ft. Thompson to Highmore tie, located approximately 14 miles south of Highmore, SD. Bringing service to the projected load growth using the Ft. Thompson to Highmore tie was deemed inappropriate due to the load exposure currently residing on the Ft. Thompson source breaker (Exhibit 4).

2.8.1 69 kV Transmission Service

To serve the projected load growth, a radial transmission line of approximately 8.75 miles in length would need to be built from the existing Pocket substation to a new East River Lake Sharpe substation. This would add to the already 19.3 mile radial line feeding the Pocket substation. Ultimately placing the load growth on a 28 mile long radial transmission line (Exhibit 4).

2.8.2 230 kV Transmission Service

WAPA North Bend was constructed due to a new wind interconnection. East River was made aware of this interconnection through the Southwest Power Pool (SPP) and subsequently made a request to also take 230 kV service from the substation. To serve the unplanned load growth at 230 kV from the Pratt substation, a new transmission line of approximately 500 feet in length would need to be built between the WAPA North Bend substation and the East River Electric Pratt substation. 230 to 69 kV transformation would be required at the Pratt substation to then interface with the area 69 kV system.

In addition to 69 kV transmission line additions described previously, in order to provide primary and backup transmission service to the load at 69 kV, a 15.75 mile line would need to be built from the Pratt substation to the new East River Lake

Sharpe substation. (Exhibit 4)

2.8.3 Alternatives Evaluation

The transmission service at 230 kV rather than solely utilizing existing 69 kV facilities was chosen for the proposed Project due to the limited available capacity, and unmet planning requirements of said solution. Developing a new 230 kV source also provides required backup of forecasted load growth.

Further, transmission service at 230 kV from WAPA North Bend to Pratt was selected because the area needs a newly developed transmission source for imminent forecasted load growth as well as future area development within East River and its membership's service territory. Because the North Bend Wind Project already requested an interconnection at this location WAPA requested that East River take service from the same location rather than an additional 230 kV interconnect in the same proximity.

2.8.4 Line Route Selection

In determining the best route for the 230 kV transmission line, a simple approach to line routing was utilized. The shortest route possible was developed to minimize public impact and provide for the most economical solution to meet the requirements of the Project development.

The WAPA North Bend location was already established due to the North Bend Wind Project so the beginning point of the Project was set. The Pratt substation property was acquired directly across the road from the WAPA North Bend substation.

The preferred route for the proposed 230 kV transmission line begins at the deadend steel of the WAPA North Bend substation, traverses west over CR-649 and immediately into the East River Electric Pratt substation deadend steel.

East River has rights to build the project. East River has a letter showing that an easement outgrant will be granted from WAPA (Exhibit 7). East River has obtained a crossing permit from Hyde County for the crossing of CR-649 (Exhibit 8). The remaining part of the project resides on land owned by East River.

2.9 ENVIRONMENTAL INFORMATION (SDAR 20:10:22:13)

The proposed Project will have minimal environmental impact both during and after construction. The Project crosses an existing road right of way between two transmission facilities.

Because the Project crosses existing road ROW and transmission facilities, the Project should not alter the existing environment of the land around the transmission line. It also will not cause any increased hazards to the health and welfare of human, plant, and animal communities around the lines. The project will follow the requirements of the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act with the United States Department of Agriculture's Rural Utilities Service (RUS) reviewing and approving the project (Exhibit 5).

The transmission facilities involved in the Project will be designed to meet or exceed the RUS Standards or Approvals and the National Electric Safety Code (NESC).

2.10 EFFECT ON PHYSICAL ENVIRONMENT (SDAR 20:10:22:14)

This section provides information on the effect of the proposed transmission line on the physical environment.

2.10.1 Regional Land Forms

Hyde County is largely characterized by rolling plains and expansive prairies and occasional low-lying hills. The Missouri River flows along the southwest edge of the county. Additionally, scattered throughout the county are smaller water bodies such as lakes and ponds.

The Project will not involve any new roads, grading, filling, or other changes to the topography or regional landforms. As a result, no direct, indirect, or cumulative impacts to regional landforms are anticipated by the project.

2.10.2 Topography

Regional topography is generally characterized by rolling hills and plains. Topographic maps of the Project are provided in Exhibit 6.

2.10.3 Geologic Features

The proposed Project is located in two ecoregions, the Western Corn Belt Plains comprised of gently rolling terrain and fertile soils and the Northern Glaciated Plains comprised of gently rolling landscape composed of glacial drift.

2.10.4 Economic Deposits

There are no commercially important sources of coal, oil and gas, or metals in the region.

2.10.5 Soil Type

The soil types in the area of the Project are of fat clay topsoil, fine alluvium and glacial till subsoil.

2.10.6 Potential for Erosion and Sedimentation

It is not anticipated that the construction of this transmission line will cause erosion or sedimentation problems during the construction or in the future.

2.10.7 Seismic Risks, Subsidence Potential, and Slope Instability

The electric transmission line involved in the Project will be designed and constructed to meet utility standards. As a result, no issues relating to seismic risks, subsidence, and slope instability have been identified. Any potential difficulties due to seismic activities, subsidence and slope instability will be avoided through proper design and construction.

2.10.8 Geological Constraints

No geological constraints have been identified along the transmission line routes and it is not anticipated that any geological constraints will impact the Project.

2.11 HYDROLOGY (SDAR 20:10:22:15)

This section provides information on the hydrology of the Project area and the effect of the proposed Project on surface and groundwater.

2.11.1 Hydrologic Map

The topographic map (Exhibit 6) shows the terrain and drainage patterns in the areas around the Project. As this Project does not involve any new roads, grading, filling, deforestation, or significant vegetation removal, there will be no changes to the current drainage patterns.

Construction would be conducted in accordance with a plan for control of sediment and erosion. After construction, no direct, indirect, or cumulative impacts to surface water quality resulting from the proposed project are anticipated.

2.11.2 Effect on Current Planned Water Uses

The proposed transmission line will not use either municipal or private water and therefore, will have no impacts on any planned water uses by communities, agriculture, recreation, fish, or wildlife.

2.11.3 Surface and Groundwater Use by Proposed Facility

The proposed transmission line will not require consumptive use of or discharge to any surface water body or groundwater.

2.11.4 Aquifer Use by Proposed Facility

The proposed transmission line will not require the use of groundwater as a source of potable water supply or process water.

2.11.5 Water Storage, Reprocessing, and Cooling by Proposed Facility

No water storage, reprocessing, or cooling will be required for the construction or operation of the proposed transmission line.

2.11.6 Deep Well Injection Use by Proposed Facility

No deep well injection would be required for the construction or operation of the proposed transmission line.

2.12 EFFECT ON TERRESTRIAL ECOSYSTEMS (SDAR 20:10:22:16)

The proposed Project follows existing roads and should have no adverse long term impact on the vegetation and wildlife composition within the Project area. No permanent service road will be required that would result in vegetation removal and unauthorized access. Vegetation removal or habitat loss resulting from pole and anchor placement is insignificant. The transmission project will not displace or adversely affect wildlife or aquatic species. The Project will not impact ecologically unique or sensitive habitats including wetlands and aquatic habitats.

2.12.1 Effect on Wildlife

The proposed Project should have minimal impact and disruption of any wildlife within the Project area. It should also only cause an insignificant, if any, change or loss of any wildlife habitat or vegetation in the area.

The area around the Project is dominated by agricultural lands. The transmission line involved in the Project is located across road/public ROW.

The Project does not involve any new roads, grading, or deforestation. Vegetation clearing will be restricted to areas immediately around the poles. As a result, the Project should not impact wildlife composition, abundance, or habitat. An updated IPAC report/list was generated on 8/11/2023. A “May Affect, Not Likely to Adversely Affect” determination was made on the listed species and an informal consultation (Section 7) was done with the USFWS. On 3/6/2023, the USFWS concurred with the conclusion that the described project will not adversely affect the rufa red knot, pallid sturgeon, and piping plover.

The USFWS conditionally concurred with the conclusion that the described project will not adversely affect the whooping crane. The Cooperative will take note of and adhere to the conditional concurrence.

2.12.2 Effect on Vegetation

The impact to vegetation in the Project area should be minimal. As stated in 2.12.1, the transmission line is located across a road/public ROW and utility property. The Project does not include any new roads, buildings, grading, water uses, or other changes to the land that may have a long term negative impact to vegetation. Also, the Project should not cause any future erosion problems which could impact vegetation.

Construction of the Project will have a short term impact on vegetation as a result of vehicle and equipment accessing the structures, material delivery, structure assembly and erection, and stringing of conductors and static wire. Also, there is no anticipated need for vegetation removal to maintain adequate safety clearances with the overhead lines.

2.13 EFFECT ON AQUATIC ECOSYSTEMS (SDAR 20:10:22:17)

The proposed Project should not adversely impact any aquatic ecosystems. The Project does not directly change or impact any natural wetlands, streams, or rivers. Also, the Project does not require any new roads, grading filling, or other changes to the existing terrain that could cause erosion or sedimentation problems or would change any existing drainage patterns.

2.14 LAND USE (SDAR 20:10:22:18)

This section provides information concerning the present and anticipated use or condition of the land in the area of the Project.

2.14.1 Land Use Map

Hyde County currently does not have a publicly available land use map. The proposed Project crosses a landscape with a predominantly agriculture land use.

2.14.2 Homes and Persons Displaced

There will be no homes or persons displaced as a result of the construction, operation, or maintenance of the transmission facilities that are part of this Project.

2.14.3 Land Use Compatibility

The proposed transmission line is compatible with the present land uses of the surrounding area. The proposed transmission line traverses road ROW and private land that is zoned agricultural. The addition of the power line to the area would have minimal direct or indirect impacts on the already linear features of the landscape, as existing roads, fencing and power lines transect the area. Construction would temporarily alter the area.

2.14.4 Effect on Land Use

The land in the public and private ROW can be used for the same purpose as prior to this Project. The land will be subject to restrictions as stated in the easements. These restrictions include that trees and structures that might interfere with the safety, operation or maintenance of the line may not be permitted in the ROW.

2.15 LOCAL LAND USE CONTROLS (SDAR 20:10:22:19)

The proposed Project will comply with all applicable zoning requirements. No existing land use controls by any of the governing bodies restrict the use of the land within the proposed Project area for the purpose of constructing and maintaining the transmission line.

2.16 WATER QUALITY (SDAR 20:10:22:20)

This Project should not impact any wetlands, streams or rivers. The Project will comply with all applicable federal, state and local rules and regulations required for alteration of wetlands, streams, or rivers resulting from the Project. The following are specific measures that would be taken to protect water quality in the proposed Project corridor:

- Best management practices would be implemented to minimize erosion and sedimentation, runoff, and surface instability during construction.
- Construction would be conducted to minimize disturbances around surface water bodies to the extent possible.
- Current drainage patterns in areas affected by construction will be maintained.
- Staging areas for project-related construction equipment would be located in areas that are not environmentally sensitive to control erosion.
- The construction area does include an existing excavated drainage ditch in the road right of way. We will maintain a minimum 45 foot buffer from said excavated drainage ditch located in public right of way.
- Construction equipment would not be serviced within 25 feet of waterways or wetlands. Equipment would not be fueled within 100 feet of the waterways or wetlands.
- Any spills of fuels or other hazardous materials during construction or system maintenance would be promptly contained and cleaned up.

- Any herbicides used in ROW maintenance would be approved by U.S. Environmental Protection Agency and applied by licensed professions. Application of herbicides would be limited to the extent necessary for regular maintenance of the transmission line.

2.17 AIR QUALITY (SDAR 20:10:22:21)

No significant or long-term impacts to air quality will occur because of this Project. Construction traffic may generate some local dust for a short duration. However, the use of construction vehicles involved in this Project will be short term at each stage of the Project. The Project will comply with all federal, state and local air quality standards and regulations.

2.18 TIME SCHEDULE (SDAR 20:10:22:22)

The current estimated time schedule for the Project is to start construction in February of 2025 and complete construction by April 2025.

2.19 COMMUNITY IMPACT (SDAR 20:10:22:23)

This section reviews the effects the construction, operation, and maintenance of the Project will have on socioeconomic, taxation, agricultural production, population and community, transportation, and cultural resources.

2.19.1 Forecast of Socioeconomic Impact

This project will provide additional electrical infrastructure in the area to serve the projected load growth and would be available to serve future electrical needs. No other significant socioeconomic impacts to the local communities and governmental facilities or services are anticipated as a result of this Project.

2.19.2 Property and Other Tax Impacts

The taxing jurisdictions will receive, as a result of the Project, additional Property and kWh Tax which will be paid by East River and/or Oahe for the electric service provided to the load growth.

2.19.3 Forecast of Agricultural Impacts

The transmission line in the Project is sited along ROW and property lines. As a result, the Project is not expected to interfere with agricultural operations or result in the loss of croplands. Should damage occur to crops during construction of this Project, landowners are reimbursed for damages as a normal part of easement costs.

2.19.4 Forecast of Population and Community Impacts

The proposed transmission Project is not expected to impact the population, income, and occupational distribution of the region.

2.19.5 Forecast of Transportation Impacts

No significant direct, indirect, or cumulative impacts are expected to the transportation systems of cities, counties, and the state as a result of the Project. Short-term impacts may include minor traffic delays caused when wires are strung across roadways. Any such short-term roadway closings would be scheduled with appropriate authorities and marked clearly, and detour routes would be provided as necessary. Construction of the proposed Project would be expected to cause only insignificant and temporary adverse transportation effects to public access as a result of roadway congestion from work vehicles.

2.19.6 Forecast of Cultural Resource Impacts

The transmission line in the Project is sited across ROW and property lines. There are no anticipated impacts to cultural resources as a result of the Project. No historic properties are affected. No historic properties were identified within the project area. On 1/4/2023, SHPO agreed with the findings of "No Historic Properties Affected." Finding letters were sent to the following tribes on 1/4/2023: Apache Tribe of Oklahoma; Cheyenne and Arapaho Tribes, Oklahoma; Cheyenne River Sioux Tribe of the Cheyenne River Reservation, South Dakota; Crow Creek Sioux Tribe of the Crow Creek Reservation, South Dakota; Fort Belknap Indian Community of the Fort Belknap Reservation of Montana; Lower Brule Sioux Tribe of the Lower Brule Reservation, South Dakota; Oglala Sioux Tribe; Rosebud Sioux Tribe of the Rosebud Indian Reservation, South Dakota; Santee Sioux Nation, Nebraska; Standing Rock Sioux Tribe of North & South Dakota; and Yankton Sioux Tribe of South Dakota. As of December 21, 2023, the Crow Creek Sioux Tribe responded with no objections to the project.

2.20 EMPLOYMENT ESTIMATES (SDAR 20:10:22:24)

This Project may utilize contractors hired by East River during the construction phase. No permanent additional employment is expected as a result of the Project.

2.21 FUTURE ADDITIONS AND MODIFICATIONS (SDAR 20:10:22:25)

At this time, East River does not anticipate any future additions or modifications to this Project that would need to be approved under this permit application.

2.22 RIGHT-OF-WAY ACCESS, CLEARING, WEED CONTROL, AND RESTORATION (SDAR 20:10:22:34)

This section includes information on East River's policies concerning route clearing, restoration, revegetation and weed control.

2.22.1 Vegetation Clearing

The proposed Project is located in public and private ROW. No vegetation needs to be cleared to provide adequate clearance to the transmission line. East River annually trims vegetation away from its transmission lines for this purpose. It is not expected that any additional vegetation will be removed for the Project.

2.22.2 Soils

Any soils removed during borings for the transmission line structures would be used for backfill. Any remaining material would be spread and mounded near the base of the transmission line structures. After construction is complete, any compacted soil would be tilled and the area would be reseeded with native grasses.

This section provides information concerning the present and anticipated use or condition of the land in the area of the Project.

2.22.3 Herbicides and Sterilants (Weed Control)

It is East River's policy to use mechanical and manual methods to clear the ROW. However, where the use of mechanical or hand methods are impractical, the selective use of herbicides may be necessary. In these instances, the appropriate Federal and state agencies will be notified, only approved herbicides will be used, and all recommended precautions will be taken.

2.22.4 Construction Site Access

All line segments are either built in ROW with easements that allow access for construction and maintenance purposes, or are built in public ROW along public roads that provide access for construction and maintenance purposes.

2.22.5 Waste Disposal

Vegetation that may be removed from the ROW and debris resulting from the work will be disposed of in a manner approved by local authorities.

2.22.6 Restoration and Revegetation

Those areas requiring revegetation will be reseeded with vegetation recommended by the Soil Conservation Service.

2.23 TRANSMISSION FACILITY DESIGN AND CONSTRUCTION (SDAR 20:10:22:35)

This section includes information on: (1) configuration of poles; (2) line switches, (3) conductor configuration; (4) proposed transmission site and major alternatives; (5) reliability and safety; (6) ROW or condemnation requirements; (7) necessary clearing activities; and (8) underground utility details.

2.23.1 Configuration of Poles

One basic structure type would be used for the transmission line. The height of the poles, will be approximately 75 feet.

1. A three-pole wood structure with suspension/strain insulators to support the phase conductors on an angle. The shield wire will be supported on one of the wood poles with deadend clamps. This structure will be utilized to turn the angle between the two substation deadends. This structure will be placed on East River property. (Exhibit 9)

2.23.2 Line Switches

No line switches will be installed in this Project.

2.23.3 Conductor Configuration

This section includes information on the conductor configuration and size, length of span between structures and number of circuits per pole for the Project.

As proposed, the Project will utilize a 795 MCM Aluminum Conductor Steel Reinforced (ACSR) conductor with a 3/8 extra high strength steel shield wire using approximately 250-foot spans.

2.23.4 Proposed Transmission Site and Major Alternatives

The transmission line that is proposed in this Project is described in Section 2.7.

Alternatives are identified in Section 2.8.

2.23.5 Reliability and Safety

The proposed transmission line will be designed and constructed in full compliance with all applicable NESC electrical performance and safety codes and, as a result, would not present significant impacts posed by safety or electrical hazard to the general public.

2.23.6 Right-of-way or Condemnation Requirements

All land rights for the Project have been obtained and no condemnation will be required.

2.23.7 Necessary Clearing Activities

No tree clearing activities will need to be completed to maintain the proper safety clearances.

2.23.8 Configuration of Underground Facilities

No underground 230 kV facilities will be required as a part of the proposed Project.

2.24 ADDITIONAL INFORMATION IN APPLICATION (SDAR 20:10:22:36)

This application contains all information necessary for the local review committees to assess the effects of the proposed facilities pursuant to SDCL 49- 41B-7 and 49-41B-11. This application also contains all information necessary to meet the burden of proof specified in SDCL 49-41B-22.

2.25 TESTIMONY AND EXHIBITS (SDAR 20:10:22:39)

List of Preparers

East River Electric Power Cooperative

Mark Hoffman, Chief Operations Officer

Jonathan Aus, Engineering & Planning Services Manager

Jerae Wire, Construction & Permitting Coordinator

This document is intended to represent the entire application, including all narratives, analysis, and exhibits.