



# CENTRAL ELECTRIC POWER COOPERATIVE



## MCCLELLANVILLE 115-KV TRANSMISSION LINE PROJECT

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### NEWSLETTER

September 2010

#### PROJECT PURPOSE AND NEED AND PUBLIC INVOLVEMENT

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##### RUS-Providing Reliable Electricity to Rural Communities

The Electric Program of USDA's Rural Utilities Service (RUS) provides leadership and capital to upgrade, expand, maintain, and replace America's vast rural electric infrastructure. Under authority of the Rural Electrification Act of 1936, the Program makes loans and loan guarantees for construction of electric distribution, transmission, and generation facilities, including system improvements and replacements to furnish and improve electric service in rural areas.

The project under consideration by RUS here is to loan funds to Central Electric Power Cooperative Inc. (CEPCI) to construct a 115-kV transmission line from one of several possible power source points in the McClellanville area to Berkeley Electric Cooperative's proposed new McClellanville substation to provide long-term reliable electric service to the community and surrounding areas.

The McClellanville community is located in an area that has no existing transmission infrastructure and is currently served from an extremely long distribution line. Over the years, this has resulted in a larger number of outages, with longer durations, than considered acceptable. Voltage drops and sags have also been common, making this an area with very poor power quality.

##### Scoping & Public Involvement

Government agencies, private organizations, and the public are invited to participate in the planning and analysis of the proposed project—that is, to define the **scope** of the project EIS analysis.

Scoping was previously conducted on this proposed action from December 2005 to January 2006. A public scoping open house meeting was held on December 14, 2005, and the public was notified of this event by letter and by radio and newspaper announcements. Nearly 200 people, mostly local residents, attended the open house.

RUS has decided to re-scope the project because at the time of the original scoping, it planned to conduct an environmental assessment (EA) rather than an EIS. In addition, there have been changes in potential transmission line routes/corridors as well as changes in the two accompanying planning documents – the Alternative Evaluation Study (AES) and the Macro-Corridor Study (MCS), incorporating new and updated data and conditions.

The Draft EIS will be available for review and comment for 45 days. A Final EIS that considers all comments received will then be prepared. The Final EIS will be available for review for 30 days. Following the 30-day review period, RUS will prepare a Record of Decision (ROD).

##### ENVIRONMENTAL REVIEW—THE EIS

What is an Environmental Impact Statement (EIS)? Under Federal Law—specifically the National Environmental Policy Act (NEPA)—all Federal agencies must conduct an analysis of possible impacts whenever they propose, or would fund, a project that could have impacts on the environment. Agencies must prepare an EIS for projects that would have significant impacts, explaining what the impacts are likely to be and how they would be reduced, if possible, through design features or other measures. Even if significant impacts are likely to occur, this does not necessarily mean a project could not go forward; rather, it requires the agency to try to find ways to make the impacts less harmful.



## MACRO-CORRIDOR GIS MODELING ANALYSIS: IDENTIFYING LOWEST-RISK ROUTES

The alternative transmission line corridors described here were developed through an RUS-required Macro-Corridor Study. When a proponent requests RUS funding for a project that involves a linear feature (transmission line or pipeline), a Macro-Corridor Study is performed to identify alternative routes based on their environmental, engineering, economic, land use, and permitting constraints. The set of alternative routes may be evaluated further in an EIS where the EIS will find one or more corridors most suitable for the placement of a transmission line.

To develop the alternative corridors, a wide variety of mapped information on the environmental and cultural resources, land use, and other physical features of the McClellanville study area were gathered and analyzed using a computer system known as a Geographic Information System (GIS). The GIS was used to place numeric ratings on each type of resource to characterize the level of higher risk—areas that the transmission line should try to avoid—and areas of lower risk, like existing power line rights-of-way that would be more suitable for a transmission line. Overlaying all these ratings, the GIS created a composite “risk surface” map with areas of low-risk and high-risk. From existing power sources, the GIS then mathematically found a path to McClellanville that went through low risk areas and avoided high risk areas. Also using the risk surface map, corridors varying in width from a few hundred feet up to a mile were created along the lowest risk paths. The corridors will be the focus of the analysis of transmission line impacts, and when the NEPA review is completed, if it is decided to construct a line in a particular corridor, it will ultimately allow CEPCI flexibility in placing the on-ground alignment to avoid sensitive resources.

## ALTERNATIVE TRANSMISSION LINE ROUTE CORRIDORS

RUS may finance the construction of a new transmission line to McClellanville from one of two existing power sources—Charity or Jamestown— or from one of three other potential source points that are not yet built—a Belle Isle switching or a step-down switching station built on the 230-kV line at Honey Hill or at Britton Neck. The map shows the alternative corridors.

### Belle Isle and Britton Neck Corridors

The **Belle Isle 1** corridor runs from the Belle Isle power source along Highway 17 for approximately 4 miles to the North Santee River. Using an overhead transmission line, it crosses the Santee Rivers 1 to 2 miles northwest of the U.S. Hwy 17 bridge and continues to the proposed McClellanville substation along a path roughly parallel to Hwy 17. **Belle Isle 2** begins at the Belle Isle source, but rather than using an overhead line, it crosses the 2-mile wide Santee River Delta using directional boring to place the line under the surface substrate of the Delta. The corridor would then travel roughly parallel to and northwest of Highway 17 to the proposed McClellanville substation. To evaluate the idea of using the Hwy 17 right-of-way as a corridor, **Belle Isle 3** was created by modeling the lowest risk path within a strip one mile wide on either side of Hwy 17. The resulting path does not stray outside of the one mile buffer of Highway 17. The resulting corridor essentially follows Hwy 17 from the Belle Isle delivery point to the proposed McClellanville substation.

The **Britton Neck** corridor originates at optional power step-down station sites, located two miles apart, along the 230-kV transmission line that runs south from the Winyah Generation Plant through the Francis Marion National Forest (FMNF). If selected, a final location for the step-down station would be chosen based on environmental field surveys and engineering analyses. Because the alignments of the Britton Neck 1 and 2 merge into a single path just west of State 224 and north of the North Santee River, the paths were combined into a single route. The corridor then runs south across the Santee Rivers, east of Hampton Plantation and across predominately private forest land to the proposed McClellanville substation.

### Charity Corridors

Of the four Charity corridors, two cross the National Forest; two were directed south to avoid the NF. The **Charity 1** corridor starts at the Charity power source, parallels the Charity to Winyah 230-kV transmission line for 4 miles and then shifts southeast through an area of the FMNF with numerous red-cockaded woodpecker colonies until it reaches Hwy 17. It then travels east, roughly paralleling Hwy 17 to the proposed McClellanville substation. **Charity 2** is the same as described for Charity 1 west of Hwy 17; east of 17, it travels a similar path, except it is directed to run closer to the highway than Charity 1. The **Charity 3** corridor runs south from the Charity power source then east, generally around the National Forest. This directed route was created as an alternative alignment that avoids an area on the National Forest with a high density of red-cockaded woodpecker colonies. The **Charity 4** corridor is a combination of the directed alignment west of Hwy 17 and the directed alignment east of the Highway 17 of Charity 2.

### Jamestown and Honey Hill Corridors

The **Jamestown** corridor begins at the Jamestown power source and travels southeast through primarily National Forest land, roughly paralleling State Highway 45. It crosses the 230-kV transmission line near Honey Hill. The corridor then follows State Hwy 45 to cross a wilderness linkage management area (MA29), passes south of Wambaw Creek Wilderness before continuing to the proposed McClellanville substation.

The **Honey Hill** corridor begins at a step-down point along the existing Charity to Winyah 230-kV right-of-way about 1 mile southwest of its crossing of State Hwy 45. The corridor runs southeast, aligns with State Hwy 45 to cross MA29, passes south of the Wambaw Creek Wilderness before continuing on to the proposed McClellanville substation.

# Alternative Macro-Corridor Project Areas



**Legend**

- Study Area
- Source Locations
- McClellanville Substation
- Belle Isle Corridor
- Belle Isle Corridor and Brittton Neck Combined
- Charity Corridors 1&2 Combined
- Charity Corridors 3&4 Combined
- Charity Corridors 1-4 Combined
- Brittton Neck
- Honey Hill and Jamestown Combined
- Jamestown
- Francis Marion NF (Proclamation Boundary)
- Francis Marion NF (USFS Ownership)
- Francis Marion NF (Wilderness Area)
- Cape Romain NWR
- State Park/WMA
- Municipality
- County
- Utility



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## Notice of Public Scoping and Request for Comment McClellanville 115-kV Transmission Line Project

**Proposed Project:** The Rural Utilities Service (RUS) intends to hold public scoping meetings and prepare an Environmental Impact Statement (EIS) to meet its responsibilities under the National Environmental Policy Act (NEPA) in connection with potential impacts related to a project proposed by Central Electric Power Cooperative, Inc., (CEPCI), of Columbia, South Carolina. The proposal is to construct a 115-kV transmission line to Berkeley Electric Cooperative's McClellanville Substation to provide long-term reliable electric service to the community and surrounding areas. The project would greatly reduce the number and length of extended outages in the area, as well as the number of momentary interruptions (or blinks). CEPCI is requesting that RUS provide financial assistance for the proposed project.

**Scoping Meeting:** RUS will conduct a Public Scoping Meeting in an open house format with a brief presentations at two times. The meeting will be held on Wednesday, September 29, from 5 to 9 p.m. at St. James-Santee Elementary School, 8900 U.S. 17, North Charleston, SC, 29405. A presentation about the proposed project and the EIS process will be made twice, at 6 p.m. and 8 p.m. Comments from the public will be taken at the meeting.

**Commenting on the Project:** Comments regarding the proposed project may be submitted (orally or in writing) at the public scoping meeting or in writing and received by RUS within 30 days after the scoping meeting. Send written comments to: Ms. Lauren McGee, Environmental Scientist, USDA Rural Utilities Service, Engineering and Environmental Staff, 1400 Independence Avenue, S.W., Stop 1571, Washington, DC. 20250. Comments may be submitted by e-mail to Ms. McGee at [Lauren.McGee@wdc.usda.gov](mailto:Lauren.McGee@wdc.usda.gov).

**Background Information:** This newsletter provides you with information on the proposal and EIS process. For further information, please contact Bill Rogers, CEPCI, at (803) 779-4975. Copies of studies will be available for download on the RUS website at: <http://www.usda.gov/rus/water/ees/eis.htm>.

Postcard update to newsletter

Dear property owner or interested party:

Recently you should have received a newsletter from the USDA Rural Utilities Service, notifying you of an upcoming public meeting on **September 29, 2010**. The purpose of this scoping meeting is to update the public of a new 115-kV transmission line being proposed by Central Electric Power Cooperative, Inc. and to gather input on what should be addressed in a forthcoming Environmental Impact Statement (EIS) that will analyze the potential effects of the proposed line to the human environment. The proposed line would provide more reliable service to customers of Berkeley Electric Cooperative in the McClellanville area. Background information is available for public review at: <http://www.usda.gov/rus/water/ees/eis.htm>

The public scoping meeting will be held from 5 to 9 p.m., with presentations at 6 p.m. and 8 p.m. at the St. James-Santee Elementary School on U.S. 17 in the McClellanville area.

Unfortunately, the newsletter contained the wrong address for the school. The correct address is: **8900 Hwy 17 North, McClellanville, SC, 29458.**

Thank you.