**Q.** **Why is it necessary to build the new 115 kV Line?**

**A.** South River Electric Membership Corporation takes the reliability of our electric system very seriously. Over the past several years, weather events such as Hurricanes Matthew and Florence have adversely impacted our goal to provide reliable electric service. This is especially true for communities in southern Cumberland and northern Bladen counties. These communities, which are served by our Vander, Cape Fear, Grays Creek, and Butler substations are particularly vulnerable to power outages because they are served from a single 115,000 volt (115 kV) transmission line. The loss of this line could result in an extended outage for this area. In order to reduce outage times, meet the growth in these areas, and provide for substation maintenance needs, we have determined it to be necessary to provide a secondary source of 115 kV power to the Cape Fear Substation. This new line will connect the Cape Fear Substation, located on Butler Nursery Road, to the Vander Substation, located on John B. Carter Road, and will provide electric redundancy by enabling back feed capabilities through the southern part of South River EMC’s system. The new line, which we call the Vander – Cape Fear 115 kV tie line, will also provide additional capacity to support growth of the community.

**Q. What is the purpose of the line siting study?**

**A.** The siting study process that South River EMC is utilizing is widely recognized within the electric utility industry as being the most comprehensive, fair, and balanced one in use. The siting process includes public involvement and is designed to identify all practical routing opportunities. Once alternate routes are developed, they are carefully evaluated on a qualitative and quantitative basis to ensure that the route selected will minimize affects to environmental resources, land use, cultural resources, and aesthetic resources.

**Q. I seem to remember that South River EMC attempted to acquire right-of-way for a transmission line last year. Is this the same project, and if so, why did you “restart” the process and why are you conducting a workshop?**

**A.** Yes. South River EMC did attempt to acquire right-of-way for this project last year. When speaking with members of the community during right-of-way acquisition it became apparent that the process that we used to successfully site lines fell short of achieving both of our core missions; achieving excellence and empowering our members. We value the input from our members, so we decided to place the project on hold, just long enough for us to investigate better ways to involve our members in the decision-making process while ensuring that our electrical and reliability goals are accomplished. The goals of the community workshop being held May 14 at the Church at Cedar Creek Fellowship Hall from 3-7 p.m. is to promote transparency with the community and seek valuable information from our members that can help us make the most informed decisions on where the new line will be located. Please know that any substantive input that you can provide will be considered in our routing study.

**Q. How was the siting study area determined?**

**A.** The 29-square-mile siting study area was determined to encompass the entire geographic area through which it will be practical to route a new 115 kV line to connect the existing Vander and Cape Fear substations. South River EMC is confident that any alternate route that would run outside the siting study area would prove inferior to alternate routes within it because of excessive length and higher cumulative impacts to various resources.

**Q. When will alternate line routes be developed and will I have an opportunity to see them before the final route is selected?**

**A.**  South River EMC will develop alternate line routes and anticipates displaying them at a second community workshop during late summer.

**Q. How many alternate routes will be developed and evaluated?**

**A.** The final number of alternate routes will depend on many factors, but only one will be selected at the conclusion of the siting study. On similar past projects, it has not been uncommon to have three or four primary alternate route corridors that can be connected or “linked” in various ways to form 20 or 30 (or more) alternate routes for evaluation and ranking.

**Q. When will the final route for the Vander - Cape Fear 115 kV Line be selected and announced?**

**A.**  The final route is planned to be announced within approximately 2-3 months following the second community workshop. South River EMC will mail a letter and route map to every landowner of record within the siting study area identifying the selected route.

**Q. How can the public be sure South River EMC will meet all environmental protection requirements?**

**A.** South River EMC is committed to minimizing environmental effects in every aspect of construction and operations. Before building the new 115 kV Line, extensive planning will be completed that will minimize effects to important resources. All local, state, and federal permits that are applicable to line construction will be obtained.

**Q. When will the line be built?**

**A.** South River EMC is targeting 2022 to place the new line in service.

**Q. Will South River EMC consider placing the line underground?**

**A.** Overhead construction is South River EMC’s standard for 115 kV lines, as it is for all electric utility companies in the United States. In the southeast, high-voltage lines are rarely placed underground unless they are located in intensely developed urban areas where it would be impractical or impossible to place them overhead. South River EMC would consider exceptions to the overhead construction standard in situations where a new 115 kV line must be built but circumstances preclude overhead construction. For example, if a new line was required near an airport runway but could not be built overhead for safety reasons, South River EMC would place the line underground if necessary to avoid conflicts with controlled aviation airspace. The time required to repair underground high-voltage lines and their cost compared to comparable overhead lines are key considerations that have led electric utility companies to adopt overhead construction as the standard for 115 kV lines.

Repair Time Consideration

Overhead and state-of-the-art underground 115 kV transmission lines are comparable in terms of reliability; however, they are very unequal with regard to the time required to make repairs. Overhead 115 kV transmission lines can usually be repaired in hours or in worst cases, days. Repairing underground 115 kV transmission lines could possibly take weeks or in worst cases, months.

Underground Line Cost vs. Overhead Line Cost

The risk associated with underground radial 115 kV lines having to be out of service for long periods of time to make repairs is unacceptable to South River EMC, its consumers, and the State of North Carolina. This risk can only be mitigated by installing two underground 115 kV lines rather than one. One line would be energized continuously and the second line would be a spare in case the primary line fails. The cost to build two underground lines --- a primary and a spare ---- could easily be 12 to 20 times the cost to build a single overhead line that would serve the same purpose with equal reliability.

**Q. How wide will the right-of-way for the line be?**

**A.** South River EMC’s standard right-of-way width for 115 kV construction is 100’. If the future line runs adjacent to roads or other utility corridors, the width could be somewhat reduced depending on the circumstances.

**Q. What type structures will the line utilize?**

**A.** South River EMC‘s standard structure design for 115 kV lines is single steel poles. It is anticipated that the new 115 kV line will utilize this standard structure type, but it may become necessary to deviate from the single pole design in specific locations such as sharp angles in the line or to place the line over or under other electric lines.

**Q. How tall will the poles be and how far apart will they be spaced?**

**A.** Single pole structures typically range from 60-80’ in height for 115 kV lines spaced 300-400 feet apart, but there may be exceptions to the typical height and spacing ranges due to various factors, such as topographic conditions.

**Q. Will my power bill be increased as a result of this project?**

**A.** System expansion and improvements are made on a regular basis and these costs are recovered in the Company’s approved rates. However, a noticeable increase specifically due to the cost of this project is not anticipated.

**Q. Should I be concerned about EMF and health effects?**

**A.** Operation of the Vander - Cape Fear 115 kV Line will not cause any significant increases in EMF levels at the edge of the line right-of-way. Electric and magnetic fields (“EMF”) are present wherever electric current exists (power lines, residential wiring, appliances, computers, and even the earth itself). The United States Energy Policy Act of 1992 launched a 7-year, $65,000,000 study that is known as the “EMF Rapid Study” and is the most comprehensive among the many EMF studies that have been conducted since the mid-1970’s. The EMF Rapid Study was sponsored by the National Institute of Environmental Health Sciences (“NIEHS”) and includes the following statement in its conclusion: “The NIEHS believes that the probability that Extra Low Frequency EMF exposure is truly a health hazard is currently small.”

In 1997, the National Academy of Sciences (“NAS”) concluded, after reviewing numerous EMF studies, that “Based on a comprehensive evaluation of published studies relating to the effects of power-frequency electric and magnetic fields on cells, tissues, and organisms (including humans), the conclusion of the committee is that the current body of evidence does not show that exposure to these fields presents a human-health hazard.”

**Q. If the line crosses my property, will its value decrease?**

**A.** South River EMC will take the appropriate steps to fully compensate you for any effect on the overall value of your property. The steps may include real estate sales studies to determine the fair market value of your property at the time right-of-way across it is acquired. Other steps may include an appraisal by an expert appraiser to determine the total value of your property before the line is built and the total value after it is built based on your property’s “highest and best use”. Where appraisals of this type are completed, the difference in the “before value” and “after value” will be discussed with you during right-of-way purchase negotiations and may serve as a basis for a right-of-way purchase offer.