



## The Columbia Electric Transmission Line Project

# Fact Sheet

### The Columbia Electric Transmission Line Project Background

- The Columbia Electric Transmission Line Project is a multi-phased project that ensures Columbians will have reliable electricity. It includes adding a substation and transmission lines. The new substation will allow load on the city's other substations to be transferred to the new substation, thus freeing up space on the entire system. The project will include both underground and overhead electrical design and construction. But it's more than that; it's to make sure that everyone in our community has access to the electricity they need every day.
- At this time, there are plans to bury the electric distribution lines that are under the new transmission lines. Distribution lines are easier to place underground and burying these lines will keep the number of overhead lines to a minimum.
- The contract engineering work for the project was approved by City Council in September 2014. It has been a five-year process that began with a long-term study on electrical reliability for Columbia's overall power grid. From there, a plan was developed to address the upgrades and public input was also received.
  - Background actions leading up to Mill Creek substation purchase:
    - 2008 – Substation and line routes recommendations
    - 2009 – Substation site property identified
    - 2010 – City Council approved Bill B54-10, an ordinance to acquire Peach Court site for substation (known as the Mill Creek substation); route studies to provide 161 kV power also conducted
  - In 2010 and 2011, line route options feeding out of the proposed Mill Creek substation were presented to the public at several open house meetings. Options were presented to the City Council and a line route was approved.
  - Background on actions leading up to the line route options included:
    - 2010 – Public open house meetings occurred to get feedback on line routes on Option A
    - 2011 – Option A results presented to City Council, and Columbia Water & Light was asked to seek alternatives for an Option B; open houses were held with the public for Option B
    - 2012 – Council receives report on Option B preferred routes; open houses held with the public on Option A and Option B





- 2012 – In a Columbia Water & Light Public Survey, the public ranked the following as the top three most important factors:
  - Reliable electric service
  - Option that provides the longest-term solution
  - Least cost to build/minimal rate impact
- Also from the survey, 76 percent of residents chose Option A as the preferred option.
- 2013 – Public hearing held for final route selection, and the Option A route was selected.

### Reliable Electricity and Federal Mandates

- Columbia is a growing city, and reliable electricity is needed to meet demand. Safe and reliable electricity is so important that federal guidelines are in place to make sure that everyone in our community has access to the electricity they need every day.
  - Since 1982, electricity sales (or volume) have almost tripled in Columbia.
- The need for this project was identified during a 2007 electric reliability assessment, required by the North American Electric Reliability Corporation (NERC). The assessment identified scenarios that could cause cascading outages with the electric system of Columbia.
- By 2008, additional transmission lines were added on the east side of town to reduce potential problems. In 2010, a site for an additional substation was purchased. The final step in meeting federal reliability standards is building transmission lines in the southern part of town.
- Adding transmission lines to the McBaine substation was also part of the original plan. This section will be completed after the other parts of the project are finished. This delays the need for funding this part of the project.
- If Columbia Water & Light does not meet federal electric reliability guidelines, fines of up to \$1 million a day can be imposed for each violation. These substation and transmission upgrades should meet Columbia's needs for at least 20 years, if not longer.

### Location of Line Routes and Scale of Project

- Work on the Transmission Line Project is happening in the southern area of Columbia along Scott Boulevard, W. Vawter School Road, Nifong Boulevard and Grindstone Parkway.
- Approximately 8 miles of 161 kV lines are needed, and the anticipated date for completion is 2017.





## Multi-phase Timing for the Project

- The project is broken into three phases and will take about five years to complete:
  - 2014 – Columbia Water & Light requests proposals from engineering firms for Phase 1 of the City of Columbia Mill Creek 161 kV Transmission Lines Project; project is awarded and a line route study begins.
  - 2015 – Phase 1 includes the following work:
    - Line route surveying (ground and aerial)
    - Complete 60% of line design:
      - Overhead transmission line design, which includes design load, line configuration corridor requirements, and identifying easement requirements
      - Design for moving existing overhead distribution lines underground along the transmission corridor
    - Construction on Mill Creek Substation is scheduled to begin.
  - 2016 – Phase 2 work proposed includes:
    - Easement acquisitions, completion of the overhead transmission line and underground distribution design, and construction specifications and material requirements.
  - 2017 – Phase 3 proposed work includes:
    - Construction of overhead transmission line and burying of existing overhead distribution lines.

## Impact to Residents and Business Owners

- Upgrades to the electrical system will result in greater reliability of electricity, helping ensure Columbia's electrical needs are met.
- Survey work is being conducted along the transmission line route on Scott Boulevard W. Vawter School Road and Nifong Boulevard; this will help determine the placement of poles and electric lines. Once the route has been surveyed, easement acquisition will occur.
- Construction occurs in Phase 3 of the project and is expected to take place in 2017. Undergrounding all the distribution lines along the transmission corridor could take additional time.
- The entire city benefits from this project. Columbia imports around 90% of its power from other places in the region and transmission lines connect us to those resources.





## Estimated Costs to Electric Customers

- Columbia Water & Light electric system improvements are paid through customer rates, not taxes. Generally, expensive capital projects are paid through bonds; this method of financing spreads the cost over time and ensures future users of the system help pay for the projects from which they benefit.
- Funding must be secured for the project, per federal mandates and requirements of reliable electricity delivery for Columbia.

## A Glossary of Project Terms

- Reliable electricity means the continuity of electricity occurs with fewer disruptions.
- Electric transmission lines move a large amount of electricity from where it is generated to the area where it will be used. The power is transported at a high voltage.
- Distribution lines bring electricity from the substation to the end user – businesses or residents.
- Substations can either increase the voltage to move electricity through the transmission system or decrease the voltage so electricity can be delivered to the customer through the distribution system.

## More Project Information

- [www.PoweringColumbia.com](http://www.PoweringColumbia.com) - site will be updated throughout the project
- Information Line - 844-244-7870

