



## Dear Columbia Water & Light Customer:

Columbia Water & Light needs to build new transmission lines in the southern part of our community to reliably deliver electricity and meet federal reliability standards. These projects are required for continued compliance with the North American Electric Reliability Corporation, which has been granted authority from the Federal government to assess electric utilities substantial fines for non-compliance. The transmission lines will connect the new Millcreek substation on Peach Court with existing substations. Transmission lines move energy from where it is produced to substations, which lower the voltage for distribution lines to carry the power to homes and businesses.

After gathering input from those living in the area, three possible routes to run the lines have been developed: options A, B, and B2. Advantages/disadvantages for each route from an engineering perspective, as well as costs, are described below. Maps of the routes are on the reverse of this page. **We need to forward the community's thoughts to the Columbia City Council before they make the final decisions for this project.**

- **OPTION A:** Uses 161 kilovolt lines. This option provides the longest term solution for electric load growth. Uses developed right-of-way corridors and is easiest option to maintain. Provides greater reliability with fewer possibilities for power outages than the other options. No disadvantages from an engineering/utility standpoint.
- **OPTION B:** Uses 161 and 69 kilovolt lines. This route is the shortest in length, utilizes some existing transmission line paths and solves the current federal reliability requirements. Since this route uses some lower-voltage lines, it will support electric load growth for a shorter period of time, and can be overloaded more easily. This route contains more cross-country paths which are more difficult to access and maintain.
- **OPTION B-2:** Uses 161 and 69 kilovolt lines. From an engineering standpoint, the advantages and disadvantages of this option are the same as option B. However, it is longer in length and has more angles than B so will be more difficult and expensive to build and maintain. Easement costs are expected to be lower for this option since the route includes more city-owned property. The route runs parallel to a section of the MKT trail and crosses it three times.

Undergrounding electric lines makes them less noticeable, less susceptible to physical damage like bad weather, and doesn't require the regular tree trimming overhead lines do. However, burying transmission lines is more complicated and expensive than distribution lines due to the high voltage of the lines. The construction process causes property disturbance, the permanent removal of all nearby trees and shrubs, and restricts future land development over and near routes.

## Estimated Costs & Potential Rate Impacts of Constructing Electric Transmission Lines

|   | Option A     | Option B     | Option B-2   |
|---|--------------|--------------|--------------|
| Estimated years before more improvements are needed | 20 +         | 10 to 20     | 10 to 20     |
| Miles of 161 kilovolt lines                         | 12.07        | 6.99         | 9.84         |
| Miles of 69 kilovolt lines                          | 0            | 2.97         | 2.97         |
| Total construction cost: overhead                   | \$13,135,117 | \$10,151,122 | \$12,229,788 |
| Total construction cost: underground                | \$91,898,566 | \$75,833,448 | \$97,532,778 |
| Cost/Customer each month for 20 years: overhead     | \$1.18       | \$0.91       | \$1.10       |
| Cost/Customer each month for 20 years: underground  | \$8.26       | \$6.82       | \$8.77       |

### Note:

Electric system projects are paid through utility rates, not through tax revenues. Easement costs could add 6-10% to the costs listed in the table. The cost estimates are based on using voter approved bond funds which are the lowest cost financing option, paid back over a period of 20 years.

## TAKE the SURVEY

**We need your feedback!** Please take our quick and easy survey to help select the route and whether the lines should be constructed overhead or underground. Surveys are due by **February 1, 2013.**

Take the survey online:  
**[tinyurl.com/columbiaelectric](http://tinyurl.com/columbiaelectric)**

To request a printed version, call  
**573-874-7325**

Project contact: Adam Schuttler, Transmission & Planning Engineer  
Columbia Water & Light • (573) 874-7329 • [amschutt@GoColumbiaMo.com](mailto:amschutt@GoColumbiaMo.com)

