RELIABILITY UPGRADE
For Southern Colorado

Questions & Answers: Reliability Upgrade for Southern Colorado

We recently hosted a series of Community Open Houses and a Telephone Town Hall meeting focused on our Reliability Upgrade for Southern Colorado. We appreciate our customer turnout – for those unable to attend, we've included a handful of commonly asked questions and answers from our team.

For additional details on the proposed project, visit www.reliabilityupgradesoutherncolorado.com.

Why do we need a new transmission line when there is a current line that delivers power to these communities?

In recent years, we've seen increased demand and the potential for system overloads during peak use periods in parts of Pueblo and Fremont Counties.

Pueblo West customers, for example, have experienced a 48 percent electrical load growth, meaning customer demand is projected to outpace our ability to delivery reliable electricity.

By reinforcing existing transmission facilities with another line and adding new substations, we'll improve overall system reliability and empower future growth through added capacity. Our ultimate goal is to provide the most dependable energy as efficiently as possible, so customers can count on their schools, hospitals, offices, banks, grocery stores and homes being powered, allowing them to move seamlessly throughout their days.

Will the transmission line run through my backyard?

Our proposed route starts at the West Station in Pueblo and travels mostly through the designated utility corridor until it meets the existing natural gas pipeline easement on Walker Ranch. The transmission line then follows the pipeline easement until it meets and parallels the existing WAPA line in Fremont County, finally reaching its end in Cañon City.

You can find an updated map of the route under the Additional Resources sections of the Reliability Upgrade website.

We've been working with impacted landowners for several months to discuss the project and secure the necessary right-of-way easements along the proposed route.

How did Black Hills determine this was the best route?

Selecting a route is a complex process and we had to balance constraints like cost, impact to neighboring residential areas and environmental considerations. We partnered with an engineering firm, HDR, to analyze a variety of potential routes and substation locations and evaluated customer input, like interest in undergrounding the transmission line.

Some of our findings include:

- Undergrounding the line would be seven times more expensive to all our Southern Colorado customers, not just those directly benefitting from this upgrade, so we decided not to pursue that option.
- Other, above-ground routes we evaluated either impacted more landowners, disturbed more land or were more expensive, so we believe this route, with the adjustments to accommodate customer input, is our best solution.
- Alternative routes, like along Highway 50, were eliminated for a variety of reasons, including a higher number of landowners impacted and conservation easements and wildlife habitats protected under the Safe Harbor Act.

Why not explore renewable energy alternatives, like solar panels and battery storage?

We value renewable energy sources and we know they're important to our customers, which is why we continue to add renewable energy to our grid with offerings like the new 60 megawatt Busch Ranch II wind project and the community solar gardens in Rocky Ford and Ordway. With the addition of such projects, by the end of 2019 we will meet Colorado's Renewable Energy Standard with 30% generating capacity from renewable sources.

We don't believe renewable energy and battery storage are viable alternatives to the Reliability Upgrade transmission line and substations in addressing the reliability needs of Southern Colorado. However, as these technologies advance, particularly battery storage, we will continue to explore opportunities to add additional renewable energy and storage to our grid. Creating a stable, reliable and safe grid will become even more important as we continue to adopt renewable energy under Colorado Renewable Energy Standard requirements.

Have you made any changes to proposed plans based on customer feedback?

Yes. Based on customer feedback, we explored route alternatives and negotiated changes to the route originally proposed to the Pueblo County Commissioners. Feedback from Penrose customers led us to work with Fort Carson to construct the line north of Penrose, removing the easement from 12 customers' backyards. We continue to receive and assess customer input to determine what route changes are feasible.

Will you use eminent domain to take right-of-way easements?

We've received landowner approval for an estimated 85 to 90 percent of the required easements through a completely collaborative approach. Our intent from the very beginning has been to work through a voluntary process and we hope to continue those conversations to secure the remaining easements.

How will Pueblo and Fremont Counties benefit from the upgraded transmission line?

The project will reduce the risk of overloads and safeguard against the total loss of power for these communities. Plus, the upgrade will empower economic development and prosperity in Southern Colorado, helping future growth and bringing visitors and businesses to the region.

The Reliability Upgrade will enhance and maintain reliable energy for these communities by providing additional energy for over 34,000 homes, businesses, hospitals and other facilities in Pueblo and Fremont Counties.

Do transmission lines produce electromagnetic fields that will negatively impact homeowners' health?

While it is true transmission lines produce low frequency electromagnetic fields, they are strongest directly under the line and drop dramatically as you move away. We performed an analysis to determine electromagnetic field (EMF) levels for the proposed transmission line at the edge of the right-of-way and found the projected levels would be 36 mG, well below the Colorado Public Utilities Commission limit of 150 mG.

To help put that in perspective, a vacuum cleaner and hair dryer both produce 300 mG from six inches away and a microwave oven produces 200 mG from six inches away.

What is the impact of the transmission line on home values?

According to a 2017 study conducted by The Appraisers Journal on the effect of high-voltage overhead transmission lines on property values, there is no conclusive data to verify that power lines adversely affect property values.

However, we understand that despite the reliability benefits, new transmission lines can be an inconvenience to landowners, so the Reliability Upgrade team has worked with the majority of impacted landowners to reach a mutually agreeable compensation for easements, competitively based on industry best practices.

How much will this project cost?
As reported in our 2017 annual transmission line report, we estimate this project will cost $24 million (in 2019 dollars).

If you have additional questions, please contact us at BHEReliabilityUpgrade@blackhillscorp.com.