INFORMATION SHEET
COLORADO

Q&A about Proposed Ptarmigan Substation

QUESTIONS? if you have any questions please contact: **Larry Claxton 303-571-7089** or **Todd Anderson 303-245-2285**

Q. What has Xcel Energy done since the August 2009 open house?

A. Following the August 2009 open house, Xcel Energy combined comments from that meeting with those provided at the previous public open houses and those received by mail and e-mail.

Based on those concerns, significant engineering challenges, land use issues, and the general complexity of the sites reviewed to date, we felt expanding the siting study area by one-half mile to the north was warranted. By analyzing this expanded area over the last several months, we identified a new potential site for a substation that appears more desirable compared with the other sites considered to date.

This new site is generally level, with good access and allows for the use of more standard substation construction techniques, including Air Insulated Switchgear technology. Xcel Energy believes this site provides for excellent visual screening opportunities, addressing many of the public's concerns.

As we continued our siting analysis, a community representative approached Xcel Energy about our evaluation of potential sites he had identified. We evaluated these additional suggested sites, made field visits with community representatives to discuss the challenges of those sites, and found these sites unviable for various reasons.

Since August 2009, we also have attended three small group meetings to discuss the substation project. At these meetings, Xcel Energy listened to community concerns and discussed the need for the project, explained expanding the siting study area and the criteria used in identifying potential sites, and answered questions from those present.

Q: Why do we need the substation now?

A: Due to increased load growth, the lines providing power to Silverthorne from the Dillon Substation, which serves the Frisco, Silverthorne, Dillon and Keystone areas, have exceeded their capacity. If load continues to grow as it currently has, we could lose the feeder to Silverthorne and approximately half the town would be out of power until repairs could be made. This doesn't necessarily mean we are going to be experiencing numerous major outages now but in the event we lost a feeder, it is likely.

Building a mew substation is critical to ensuring that Silverthorne and its surrounding areas are provided with reliable electricity, especially as demand continues to increase.

Q: You said we needed the substation in 1999? How have you continued to provide service?

A: A temporary substation was constructed and operated until an express distribution feeder was constructed from the Dillon Substation to the Silverthorne area in 2003. This took care of the feeder overload temporarily, but did not provide a remedy for the ongoing reliability concerns.

Q. Why can't the Dillon and Summit substations be expanded and additional distribution feeders constructed to the Silverthorne area?

A. There are several issues that make expansion of the existing facilities undesirable.

The current Summit Substation in Frisco would have to be rebuilt and adjoining land uses make expanding the site problematic. There also are complications with supporting the electric needs of Frisco-area customers during a rebuild. Lastly, the 115-kV transmission line that supplies electricity from the substation is near capacity.

The Dillon Substation already has been expanded to its existing physical limits. Expanding it even further would require site expansion onto property of the Summit County landfill and/or U.S. Forest Service.

By constructing a substation in or near Silverthorne, Xcel Energy can build shorter distribution feeders to serve the area, which will improve the electric system's integrity and improve reliability. Installing additional, long feeders from the Summit or Dillon substations does not improve these important issues. Additionally, with load growth currently extending toward the north of the Silverthorne area, a new substation in the Silverthorne area will help serve growth in that area.

Q. Can the substation be located near the dam or the Dillon water tank?

A. Xcel Energy is proposing a facility to best address the present and future needs of the Silverthorne area and those areas experiencing the most growth – which are north of the city. Sites south of the siting study area require unacceptably long distribution feeders to serve areas in the north part of the Silverthorne community and beyond, where growth patterns are extending.

Q. Why can't the substation be located further north of the town limits?

A. Distribution feeder lengths to serve residences and businesses near the intersection of Colorado State Highway 9 and I-70 increase as you look to the north. Longer feeders increase the risk of outages and reduce electric reliability.

Q. Why can't the site be located on federal lands?

A. According to Section 12.32a (Appropriate Use of National Forest System Lands) of the U.S. Forest Service Handbook for Special Uses—Chapter 10—Application and Authorization Processing, project proposals on National Forest System lands will be denied when they are "based solely on affording the proponent with a lower cost or less restrictive location than can be obtained on non-federal lands". Xcel Energy must comply with the statute and is not proposing substation sites on federal lands, since there are site options on non-federal lands. The referenced Section 12.32a can be found at: http://www.fs.fed.us/im/directives/fsh/2709.11/2709.11_10.doc

Q. Why isn't the parcel of land Xcel Energy owns in the town of Silverthorne considered a more suitable site?

A. The placement of a substation on the vacant Xcel Energy property located in Silverthorne would require the construction of an overhead transmission line across the Blue River Valley, Colorado State Highway 9, and through parts of Silverthorne. Visual impacts associated with this transmission line make this site less suitable.

Q. Why can't the transmission line be buried?

A. An underground transmission line would need to be constructed in a buried duct bank along a gently sloped route comparable to a major county road. The duct bank most likely would consist of six-inch diameter conduit laid within a three-foot-by-three-foot duct bank configuration. Large vaults would be required every half-mile to pull cable sections and splice them together. Also, at each vault an approximately 12,000 square foot leveled surface is required for the pulling and splicing equipment. Additionally, a 10,000 square foot switching station facility would be required at the tap point of the existing overhead transmission line.

The overall cost of burying an electric transmission line can be almost 10 times more expensive than overhead construction costs and this area's mountainous terrain can be prohibitive to build transmission lines underground.

Reliability challenges associated with underground lines include the repair/replacement time needed in the event of a transmission line cable fault. If one of the cables requires repair/replacement, the substation would potentially be on a radial feed for months during work activities, increasing the risks of extended outages.

Q. How has the Lower Blue Master Plan been considered?

A. The siting study takes into consideration applicable local and regional plans, depending on the jurisdiction at each site. Xcel Energy recognizes that protection of the Lower Blue River Basin's rural character is a theme of the Lower Blue Master Plan and each potential site under the county jurisdiction is being evaluated for its potential impacts. Important aspects of the plans that were analyzed include, among others: land use designations; open meadows; irrigated hay pastures; prominent hillsides and ridgelines; ranch lands; and environmentally sensitive areas.

Q: Will the distribution feeders be buried and where will they go?

A: Yes, new distribution feeder lines will be buried and tie into existing facilities.

Q. What kind of landscaping will you do around the substation site?

A. Landscaping techniques will be implemented to help reduce visual impact and meet the requirements of applicable local codes.

Q. Will the site have lighting?

A. Yes. The lighting will be minimal and directed into the substation yard.

Q. What kind of access to the site do you propose?

A. A permanent access road will be required to accommodate the transportation of heavy equipment, such as the transformer that can weigh up to 100 tons. The road needs to be up to approximately 24 feet wide with maximum slopes of 6% - 8%.

Q. What is the distance from the Blue River to the substation?

A. The distance is approximately 375' from the centerline of the river.

Q. What is the difference in cost between Gas Insulated Switchgear (GIS) and Air Insulated Switchgear (AIS)?

A. The cost difference is in the range of $7-8 million.

Q. Won't you be impacting the "Wilderness Lands"?

A. No, the Project area is outside of current and proposed Wilderness Areas.

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