

Middle Bald Power Line Evaluation 1-7-2011

At the start or origination point RoW easements would have to be obtained to facilitate the installation of the distribution power line. This pertains to whether it's overhead or underground. I believe it wouldn't be a real difficult task to acquire these, but thought I would make you aware of this.

The removal of the trees to facilitate the proposed power line would be the responsibility of Larimer County, and is not included in the price estimates.

I would like to address the installation of the underground facilities. I did put in the cost estimate, the last 1000 feet would be primary, or high voltage underground. This area is where the proposed line would be coming out of the woods, "trees" and going toward the tower site. The excavation, and the installation of the conduit, and the pull rope installed in it, would be Larimer County's responsibility. Poudre Valley REA would supply the necessary materials for this portion. (known as the meadow area.)

In respect to the high voltage underground line being installed, or "primary line" there are a lot of concerns by myself, and management at the REA. I will try and share some of these if I may.

(1) The trench or ditch that would be dug for this installation has to be bare minimum of four feet deep, five feet is preferred. So with that there would be a lot of areas, because of the rock that would have to be "dynamited" to be able to achieve sufficient depth! The costs of the "dynamiting " are significant, plus damage to the environment that could occur.

(2) Keep in mind as well, the installation of the underground power lines, or the process involved will not allow the power line to be installed "in" the road. This installation would need to be adjacent, or parallel to the roads. At the curves or sharp bends, there would need to be equipment installed to allow the termination of the cable. And in addition every 1000 feet this same type of equipment would be installed.

(3) With the above in mind, with the cost, the extreme environmental impact that would occur, even with the greatest of caution with the installation process. The ditch would have to be dug excavated, the entire route , a little over 13 1/2 miles, this would leave a "scar" where the trench line, or ditch would be. The trees along this route would need to be removed as well.

(4) If a comparison were done, between the overhead facilities as opposed to the underground, just with the environmental impact with the difference of installation practices the overhead facilities is far less invasive. Ex: where the poles are installed 18 inch diameter hole is dug , approx every 250 feet, as opposed to a 2 foot wide, possibly wider in places the entire route. I honestly don't know in the area's where the culverts are located how the underground installation could be achieved with disturbing these.

In closing with the above items, areas of concern for the possible environmental impact, safety issues, all associated with the underground facilities installation, the much greater

cost. I believe a person could safely say there is no comparison between the two installations. The overhead power line installation being far less costly, and far less as obtrusive to the environment.

The cost estimate for the overhead installation is \$608,875.00.

The cost estimate for the primary underground installation is \$ 3,215,300.00

If I can be of further assistance, please call, or send drop me an e-mail.

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