

November 6, 2016

Kiki Tidwell
Email address: kikitidwell@cox.net

Subject: Answers to Additional Questions Regarding Alternatives to the Proposed Line

Dear Ms. Tidwell:

Below are answers to the questions that you have raised concerning the Northern Wood River Valley – Local Backup Electrical Supply Report.

1. Real Bid - Per my previous email, the Vionx Energy Island Application listed a cost for the existing diesel generation and is not indicative of current generation costs. As to NRG's indicative pricing, it appears to assume siting the generation at the Ketchum substation. In contrast, Idaho Power's report provides cost estimates for generation located at both Ketchum and Elkhorn substations. These estimates include two fuel storage tanks and the land and interconnection costs. Finally, the NRG email states that the maintenance cost would be low. The following industry practices are recommended for backup generation: weekly inspection, monthly operation under load for 30 minutes, and annual preventative maintenance. The annual diesel fuel cost alone amounts to \$50,000.00.
2. Heating Load – The first method, Temperature Based Energy Usage, calculates the heating portion of residential electrical load. It is not an estimate of how much heating is electrical versus natural gas or other resource. The analysis is not dependent on the percent of units heated by electricity. Also, three separate methods were used to determine how much winter electrical load is heating related. Each of the methods identifies between 60 and 70 percent of winter load is related to heating. The percentage of load related to heating is then used to determine how much load could be reduced by a change in thermostat setting to 55 degrees.

As stated in the Local Backup Electrical Supply Report, the Bald and Dollar mountain loads were reduced. The attached Power Usage Distribution report was updated to reflect the same reductions which changed the maximum potential reduction from 11 to 10 percent. There are factors (e.g. participation level and communications failures) that will further reduce the actual achievable load reduction from automatic reduced thermostat set points.

For reference, the city-data.com website does provide data on home and apartment heating sources for Blaine County, Ketchum and Sun Valley. It presents home electric heating ranging from 26% to 36% and apartment electric heating ranging from 58% to 63%. Natural gas heated homes and businesses have fan loads that will be operating while heating. This, coupled with the use of electric heating in motels, does result in a significant winter electric load related to heating in the northern portion of the Wood River Valley.

3. Intermountain Gas - The statement regarding Intermountain Gas was related to the ability for them to supply gas for either the reciprocating or combustion turbine generators included in the report. A representative from Intermountain Gas indicated that facility upgrades would be required. They would need additional time to study the requirements to determine whether the improvements would be limited to facilities north of Hailey or extend all the way to Jerome. Regardless the improvements will be very costly, potentially doubling the cost of each option, and eliminate the consideration of natural gas supply.
4. Salmon - Since 1980, the Salmon area, with 30 MW of peak load, has been supplied by two transmission lines. The existing diesel generators were used to supply load when the primary source was out of service. Idaho Power recently constructed a new substation and reconfigured the transmission line connects to improve the service reliability. This new substation and line reconfiguration allows for the planned removal of diesel generators.
5. Peak Load – Idaho Power builds transmission and distribution facilities to meet peak loading conditions. Idaho Power cannot predict the day or time when a winter caused outage will occur. Therefore, the study assumes that the backup local generation will require enough capacity to restore peak load service. The study assumes that non-essential loads could be curtailed following initial system restoration to reduce the 24-hour fuel requirement. Two additional considerations are the ability to support cold load pick up conditions and reactive power requirements.
6. Line Outages - There have been nine unplanned outages on the transmission line between Hailey and Ketchum since 1995. Of those nine outages, three occurred during the winter. Ice build-up and trees contacting power lines are the most common cause of unplanned outages during the winter. This line has not experienced an outage due to avalanche; however, it does traverse steep terrain.
7. Backup Emergency Power – Idaho Power has modified the Midpoint to Wood River transmission line to reduce the susceptibility to outage due to ice build-up and the replacement of the King to Wood River transmission line is scheduled for completion next year. Electrical service provided by Idaho Power is subject to interruption or curtailment as described in the Rule J section of the Idaho Public Utilities Commission approved Idaho Power tariff.

Sincerely,



David M Angell

Manager, Customer Operations Planning

enclosures: Property Protection Analysis Report Rev 2, Power_Usage_Distribution_Rev_2