

Jean Jewell

From: gfleisch986@hotmail.com
Sent: Friday, March 11, 2011 8:25 AM
To: Jean Jewell; Beverly Barker; Gene Fadness
Subject: PUC Comment Form

A Comment from Gerald Fleischman follows:

Case Number: IPC-E-10-56, IPC-E-10-57, IPC-E-10-58, IPC-E-10-59, IPC-E-10-60
Name: Gerald Fleischman
Address: 11535 W. Hazeldale Ct.
City: Boise
State: Idaho
Zip: 83713
Daytime Telephone: 208-941-3715
Contact E-Mail: gfleisch986@hotmail.com
Name of Utility Company: Idaho Power Company
Acknowledge: acknowledge

Please describe your comment briefly:

Subject: Comments on the Murphy Flat Mesa, Murphy Flat Energy and Murphy Flat wind projects; Case Numbers IPC-E-10-56, IPC-E-10-57 and IPC-E-10-58 and on the Rainbow Ranch and Rainbow West wind projects; Case numbers IPC-E-10-59 and IPC-E-10-60 All five wind subject projects represent excellent opportunities for Idaho to increase the in-state renewable energy portion of the energy it uses beyond the current 6.8%. While it is true that these five projects will not make a big dent, these and more like them will. It is very difficult to see into the future, but the Public Utilities Regulatory Policy Act of 1978 (PURPA) requires states to do so. When a state imports 93.2% of its energy (Idaho's annual energy use 529 trillion Btu; Idaho's generation of renewable energy including all hydropower - 10,566,306 MWh (36 trillion Btu), it could be a safe bet that it is very vulnerable to outside factors the foundation of its productivity the standard of living of its citizens.

Idaho energy resources

It would be fantastic if Idaho had substantial petroleum resources. While it is true that natural gas has been discovered in Payette County, there is a risk that the supply will be short-lived. Here is a quote from David Hawk regarding the gas in Payette County In the past gas has been found in small pockets of limited aerial extent. The gas was not in a cavity but rather between the grains of the rock. The gas quality in the area has been measured and found to be higher quality Btu content than the normal Northwest Pipeline natural gas. In this first well they sat casing to total depth indicating they believed the shows they measured while drilling and immediately thereafter were significant. They then perforated over the pay zones and tested the gas on various choke sizes for a period of time..that data is not available now. They tested gas at a rate of 4,500,000 cubic feet per day at a fairly high pressure. I am sure the quality of the gas is fine. The question is always, what is the size of the reservoir. Is it small or some size that will sustain production for a long time? The sands are quite porous (the ability to hold a fluid) and seem to have good permeability (the ability to transmit a fluid). Sands like this in the Gulf Coast are short lived say 6 years but produce very well during their life.

Does this sound like something on which to stake the future of our state? There are probably good long term reasons to make sure that PURPA works well and that utilities figure out how to manage more in-state renewable energy.

Plasma ignition and the load following capabilities of coal-fired power plants A recent report, "Plasma ignition technology for pulverized coal boilers" in the March 2011 issue of Energy-Tech magazine says that with plasma ignition technology that coal-fired power plants can operate with good stability at turndown ratios as high as 90%. It is used at 500 coal-

fired power plants representing 230,000 MW of capacity in China but at none in the U.S. The article says, Plasma Ignition Technology is not new to North America. In the early 1980s, with the industry recovering from the 1970s oil crisis and the commissioning of new nuclear plants, technology was pursued to cycle large fossil units down to low loads. The technical limitation of large coal units being restricted to 30-40 percent load without additional fuel for flame stability was one of the necessary topics to be addressed. The objective was maintaining combustion stability while minimizing supplemental fuel costs (i.e. fuel oil, natural gas). The coal-fired industry is facing very similar market conditions and might consider this alternative as a technically and economically viable system to be more competitive.

Another part of the article states,

Deregulated utility market competition from lower natural gas prices leads to increased competition as these natural gas-fired plants move down the dispatch curve into the baseload region once dominated by coal. Increasing regional percentages of renewable energy (non-dispatchable, such as wind) and the current reduced industrial and commercial energy consumption resulting from the economic downturn has reduced the off-peak capacity requirements. First, dispatched renewable energy, nuclear and hydro units fill the needs in off-peak periods while forcing fossil units to cycling operation.

This information implies that Bridger and Valmy and other coal-fired plants could be operated in a much more flexible manner allowing much more renewable energy generation in Idaho. Perhaps one option would be to charge wind generators for the extra costs associated with cycling these plants.

The pressure of PURPA is forcing some innovation from the utilities in dealing with non-dispatchable generation. They are capable of far more innovation and flexibility than they have demonstrated to date. By prematurely stopping a reasonable path to PURPA project power generation we undermine the intent of PURPA and ignore the risk suggested by our 93.8% dependence on outside energy supplies.

Coal reserves and the greater value of coal power supplied as load following Another advantage of operating coal-fired power plants in a more flexible and load-following mode is the reduction in greenhouse gas emissions and the extension of the life of the Bridger coal field. A brochure from Idaho Power Company and PacifiCorp Energy dated 1/01/11 entitled "Jim Bridger Plant, Point of Rocks, Wyoming" states that the Bridger coal field has reserves of 140,000,000 tons. This seems like a lot, and it is. But the brochure also states that the Bridger plant consumes 8,000,000 tons a year. This means the Bridger field has an expected life of only 17.5 years. There will probably still be coal available at the end of that time but it will probably cost more than coal from the Bridger field. The Bridger plant is this wonderful dispatchable baseload (and potentially load-following) resource. Should we squander it as quickly as possible by operating it only in baseload mode? Besides extending the life of the Bridger field, load-following power generation is more valuable. Operating the Bridger plant in load-following mode would bring greater value to each ton of coal consumed and each ton of CO2 emitted.

Should the utilities investigate the load following potential of the Bridger and Valmy power plants? PURPA projects provide motivation for investigation. The IRP process does not. Specific benefits of the Murphy Flat projects The Murphy Flat projects are good because they already have conditional use permits and are well on the way toward interconnection agreements. They are in a place that has no other developed wind resources so their effect on the electric grid may be more positive than negative.

Payment to county

These projects will provide \$330,000 a year in payments in lieu of taxes to the county.

Wind data already collected

The projects also have more than a year of wind data collected which makes financing much more likely in the short term.

Energy cost hedging opportunity for high-lift farming operations Another benefit of these projects is that they represent a way for a high-lift pumping farm (over 600' of head) to hedge against pumping energy costs by investing in the source of one of its major cost components, energy supply. Many people have said that the cost of farming on high-lift irrigated land is too great and that we should not do it. I feel good farm land will be

getting scarcer around the world and that the high-lift pumping farms on the south side of the Snake River will provide large inputs to Idaho's economy. These wind projects can help carry high lift pump irrigated farming operations into a future of great profitability. Pioneering effort in relatively low wind resource area Another factor that makes the Murphy Flat projects beneficial is that they are located in a relatively (compared to other wind projects) low wind resource area. The wind map shows the land as being Class 3. If Class 3 wind resources can be developed, Idaho's potential to generate more than its current 6.8% from renewable energy is greatly enhanced. Idaho has very little developable wind resources above Class 3.

Specific benefits of the Rainbow wind projects While the Rainbow wind projects are not on high-lift pumping farm land, they are on ranch land that has relatively low productivity. Rainbow Ranch now raises rodeo cattle. The wind operation will not affect this activity. The biggest opportunity is to harvest more than one resource from the same land and make this ranch more profitable and pay more taxes to the county. The two Rainbow wind projects would pay \$220,000 a year to Cassia County in the form of payments in lieu of property taxes. All five projects would benefit their respective counties and Idaho. They would harvest a resource that blows by every day that currently provides no benefit. Employing Idaho's hydropower was no easier. The number 93.2% keeps coming to mind. It implies that now is not the time to sit back and rely on outside energy resources. It is the time to continue to push for using Idaho's own resources. These projects will help provide the motivation and the experience to for Idaho's utilities figure out how to integrate them.

The form submitted on <http://www.puc.idaho.gov/forms/ipuc1/ipuc.html>
IP address is 164.165.52.100
