

Approved Minutes
Energy, Environment and Technology Interim Committee
September 28 and 29, 2011

The meeting was called to order at 10:06 a.m. by Cochairman Representative George Eskridge. Other committee members present included Cochairman Senator Curt McKenzie, Senator Patti Anne Lodge, Senator Russ Fulcher, Senator Steve Bair, Senator John Tippetts, Senator Elliot Werk, Representative Maxine Bell, Representative Bert Stevenson, Representative Eric Anderson, Representative Jeff Thompson, Representative Reed DeMordaunt, Representative Wendy Jaquet and ad hoc members Senator Dan Schmidt and Representative Brian Cronin. Legislative Services Office staff members present included Mike Nugent, Ray Houston and Toni Hobbs.

Others attending the meeting were Robert Neilson, Idaho Strategic Energy Alliance; Ken Miller, Liz Woodruff, Louis Landry and Lisa Young, Snake River Alliance; John Chatburn, Lisa LaBolle and Shannon Kelly, Office of Energy Resources; Stephen Goodson, Governor's Office; Kip Sikes, Karl Bokenkamp and Rich Hahn, Idaho Power; Don Howell and Gene Fadness, Public Utilities Commission; Russ Westerberg, Rocky Mountain Power; Courtney Washburn and Bowman Leigh, Idaho Conservation League; Tauna Christensen, Stan Hawkins and Teresa Molitor, Energy Integrity Project; Scott Nichols, U.S. Geothermal; Larry LaBolle and Neil Colwell, Avista Utilities; Brenda Tominaga, Idaho Irrigation Pumpers Association; Peter Richardson, Richardson & O'Leary, PLLC; Will Hart, Idaho Consumer Owned Utilities; Beth Markley and Pat Barclay, Idaho Council on Industry and the Environment; Ron Williams, Williams Bradbury; Jane Wittmeyer; Brent Olmstead, MPIIdaho; David Hawk, I2A; Larry Benton, Benton, Ellis; Leon Duce, Idaho Association of Cities; Michael Christian and Richard Brown, Snake River Oil and Gas; Dawn Marie Cardwill, TBP, LLS; Nick V Troche, Marlene Troche, Jenne Hansen and Richard Hansen, TumbleWeed LLC; Brian Jackson, American Wind Group; and Gerry Fleischman.

After opening remarks **Dr. Steve Aumeier, Idaho Strategic Energy Alliance (IESA)** was introduced to summarize the progress the IESA has made in updating the 2007 Idaho Energy Plan.

He explained that his stated objective from the July 12 meeting was for the IESA to provide the committee with a draft document, vetted by the IESA board, that can be used to guide debate in public meetings through November, while providing time in December to finalize the Energy Plan.

Based on the committee's advice from that July meeting, **Dr. Aumeier** stated that IESA developed a schedule and approach. That schedule and approach included actions such as research and modification of the Idaho energy related data which provides a common factual basis for discussion and debate regarding energy issues; development of a revised structure that enhances the discussion related to economic development as well as energy education and outreach; an enhanced discussion of the impact of technological advance near and long term; an enhanced transportation fuels discussion, and an added section regarding "lessons learned" by

our energy providers over the past five years that can help guide future debate. The ISEA also agreed to review the recommendations, actions and policies in the 2007 plan, suggest modifications and additions including possible pros and cons associated with the existing, modified or new recommendations and actions, and provide these to the committee as a basis for broader public debate.

Dr. Aumeier noted that board members and task force members, particularly Lisa LaBolle and Bob Neilson have spent considerable amounts of time on the document along with Office of Energy Resources Director John Chatburn. **Dr. Aumeier** said he is very pleased with how the plan is coming together. He said they focused on developing the data and structure around the 3 platforms of energy in Idaho that were discussed at the last meeting; Secure, sustainable and affordable supply; energy and economic development and energy education and outreach (energy IQ).

Dr. Aumeier reported that they have made good progress and are ahead of their originally planned schedule. By his assessment, the document is about 90% complete with the basic structure in place. This includes some excellent perspective on technology and regional interactions and other information as well as some new recommendations. He said they still need to do some factual checks and vetting of those new recommendations. From these factual checks and vetting, in addition to the body of the plan, **Dr. Aumeier** expects to provide:

- a list of present and suggested recommendations on which the Board concurs;
- a list of recommendations and actions in the present plan on which the Board does not have concurrence – with a short summary of what we see as the pros and cons or other issues with those actions or recommendations.

Dr. Aumeier emphasized that their focus is not necessarily on specific tactical actions or suggestions, but rather on the data and structure by which the committee can establish policy and engage public debate on an ongoing basis.

He went on to discuss the plan in more detail and noted that committee's focus in 2007 was primarily on conservation and energy efficiency and the development of in-state renewable energy. He said the data in the updated plan shows the policy desires of the 2007 committee made significant progress including geothermal energy producing electricity and the fact that there will be more in the very near future. The most significant capacity addition has been associated with wind energy with really staggering growth in that area; from 75MW in 2008 to an expected 500 MW by the end of this year. In **Dr. Aumeier's** opinion these areas also exemplify lessons learned. He reiterated that, as was discussed at the last meeting, there is no free lunch when it comes to energy, today or in the future. He said that integration of renewable, and particularly intermittent, electricity has benefits and challenges, and our utilities have provided factual lessons learned in this regard, as have other stakeholders including homeowners, land owners and other impacted parties. Whether and how to accomplish more renewable integration will clearly be influenced by public choices regarding costs, benefits and tradeoffs and will, according to **Dr. Aumeier**, be influenced significantly by options afforded technological advancement related to both renewable and conventional energy as well. He said that our Idaho utilities do a very good job at outlining these choices and realities in their

integrated resource plans; those processes and plans are discussed in the report and there has been more public engagement in these considerations through facility siting debates. The draft plan discusses some of these realities and lessons learned.

Dr. Aumeier announced that Idaho ranks 26th in energy conservation and efficiency as measured by the American Council on Energy Efficient Technologies. He said the fact that the state does so well in this area carries significant economic benefits as the more that can be produced with less energy, the more competitive the state becomes. He noted that Idaho universities through the Center for Advanced Energy Studies (CAES) (led by BSU) and other stakeholders have been awarded a grant to develop an Energy Efficiency and Research Institute that will develop advanced technologies, understanding and approaches related to energy efficiency. In his opinion this is another validation of the State's investment in CAES, which is providing significant returns. And the creation of ISEA has itself spawned industrial energy efficiency benefits through our members development of an energy efficiency industry working group.

Dr. Aumeier said there are also some sobering reminders in the data the report contains. One of those is energy intensity (the amount of gross state product produced per unit of energy input) and also household energy burden (the portion of a family's income spent directly on energy). He stated that Idaho households have a relatively high energy burden and our economy is relatively energy intensive. That means that Idahoans depend a great deal on access to affordable energy. **Dr. Aumeier** said that while Idahoans enjoy the nations second lowest average electricity price, the fourteenth lowest average price on natural gas prices and near average prices for gasoline and diesel, the total amount consumers spend on energy as a portion of their total income (the energy burden) is only slightly below the national average. This relates to both the price of energy and average income. He stated that the average Idaho household spends about \$4500 on energy products.

Dr. Aumeier said in looking to the core of our economy, Idaho industry is quite energy intensive. He said Idaho is nineteenth in terms energy used per dollar of gross state product. In his opinion this means that energy issues may be disproportionately more important to Idahoan's than to residents of other states. Due to this fact and the ever increasing volatility in energy markets, he suggested that the committee consider energy policies even more carefully moving forward. He noted that having an energy intensive economy is not necessarily a bad thing.

Dr. Aumeier commented that 80% of total energy consumed in Idaho comes from outside of Idaho valued at \$4.9 billion in 2009 and most of that energy is derived from fossil based resources. He said this leaves Idaho more vulnerable to policy choices and impacts made outside of the state and therefore should be a significant policy consideration. This is discussed in the draft plan.

Dr. Aumeier stated that the data in the report really drives home the importance of committing to the processes and approaches necessary to keep an active energy dialogue based on facts, as well as perspective, going strong. He said there is no free lunch when it comes to energy generation and use and people need to be able to make the best possible decisions and that this Committee can make a big impact by encouraging broader outreach and fact based dialogue regarding energy issues.

Representative Jaquet asked when the committee would be able to see the updated plan. **Dr. Aumeier** stated that the ISEA will be able to provide a final draft and a vetted list of policy items and status of those policies and actions (add, remove, modify) by the second week in October. He added that this will also be available to the public for comment.

Senator McKenzie asked for more detail with regard to the recommendations dealing with low energy prices and the high amount of income that goes to energy. **Dr. Aumeier** said that this is a very important area of plan because there are not single answers with regard to energy. People need to be able to make their own choices so they need to be educated on what is available and how it affects them. He added that this shows the importance of outreach; getting broad energy related data out to the general public. He said this allows people be able to ask the right questions and helps policymakers be able to answer those questions. **Dr. Aumeier** went on to say that energy education should include a direct economic development component.

Representative Demordaunt asked in what ways Idaho would have a strategic advantage in the area of energy efficiency within the service sector. **Dr. Aumeier** knows Idaho has a strategic advantage in terms of being home to a national laboratory that is focused on energy R&D. He added that Idaho has a strategic advantage with policies and structures that are favorable to setting up businesses, with education opportunities for research and development between universities and the state also has large high tech businesses. Another advantage is the entrepreneurial nature of Idaho and having one of lowest costs of energy in nation. He said the question is what partnerships should be incentivized and encouraged. Putting forward structures, guidance and policies is the challenge.

Representative Bell commented about the energy corridor and all of new reserves that are being found and asked whether economic and environmental conditions could keep Idaho from seeing the full benefit of these new reserves. **Dr. Aumeier** said no. He added that the U.S. is a tremendously rich energy country and said that we do not have an energy shortage, we have a technology shortage. He agreed that environmental concerns will have and should have an impact on this but those concerns are driven by the technology. He said that everything will have an impact, we just need to realize this and minimize the negatives.

Representative Jaquet commented on a Department of Labor report showing the number of jobs created by energy and said it was very impressive. **Dr. Aumeier** said he had not seen report but there is one for INL showing economics of jobs impact. He said this would be valuable for everyone to see and then focus on three or four areas to help guide decision making.

Senator Werk commented that more dialogue about strategic advantages and how the legislature could advance and promote those advantages would be very valuable at another meeting.

In response to another question from **Senator Werk**, **Dr. Aumeier** said their report did not focus on distributive generation (solar panels on houses, etc.) but could do so if the committee wishes. **Representative Eskridge** said that was a good suggestion and the committee agreed for it to be included.

Representative Eskridge said he understood ISEA will attempt for this to be a consensus document but asked whether the committee would be made aware of where the board did not reach consensus. **Dr. Aumeier** said they will make every effort to include a summary of where there was agreement and disagreement.

Representative Cronin asked whether the people involved in completing this plan would be available when the committee reviews it. **Dr. Aumeier** commented that board members will be available to answer questions at any time but he was not sure if all would be available at the actual meeting.

Representative Eskridge clarified that the commitment is to have the final product in a couple of weeks and that will be made available to public. He explained it was the intent of the committee to open the process up to public comment until the next meeting on Oct 20.

Mr. Ken Miller, Clean Energy Program Director, Snake River Alliance gave the committee recommendations with regard to updating the 2007 Energy Plan. **Mr. Miller's** complete Powerpoint presentation is available at:

<http://www.legislature.idaho.gov/sessioninfo/2011/interim/energy.htm>

Mr. Miller suggested in moving ahead to 2012, efficiency must remain the priority resource, followed by renewable and then the cleanest convention energy available. He said it is very important to get a draft before the public as soon as possible in order to get public and stakeholder involvement and buy-in.

He commented that it was his understanding that a draft had been submitted to the committee by the ISEA and then withdrawn. **Mr. Miller** said he thinks this draft contains many good proposals, particularly on climate and economic change that were not contained in the 2007 plan. The withdrawal of this plan creates a tighter time crunch with few committee meetings remaining and reduced opportunity for public review.

Going forward, **Mr. Miller** commented that the 2007 plan avoided climate recommendations. He said that regardless of climate views, the 2012 plan must consider the implications of climate issues because the federal government and surrounding states are defining the carbon issue for Idaho. He added that the Bonneville Power Administration and Idaho electric utilities are already planning for carbon constraints.

Mr. Miller also suggested that the issue of siting should be looked at. The 2007 plan suggest siting decisions be made at the local level. He noted that there is existing statute that says counties can call the state for help with these issues. He stated that that no county has ever asked for this help and suggested maybe that is due to lack of awareness.

Another issue that **Mr. Miller** thinks needs to be dealt with is the Office of Energy Resources (OER). When they were formed, they were flush with stimulus money but those funds are winding down. The OER has been staffed down and the executive order establishing it is set to expire in October. **Mr. Miller** emphasized that Idaho needs an energy office to implement policies and administer programs.

In summary with regard to updating the 2007, **Mr. Miller** suggested that the committee retain the recommendations and action items in the 2007 plan as roadmaps to achieving the plan's larger goals. He commented that the committee should resist general or "easy lifting" recommendations such as "get all cost-effective efficiency" and he urged them not to scrub any part of the plan that includes tax incentives simply due to budget constraints. **Mr. Miller** encouraged the committee to be proactive and said that a five year review is probably the longest period of time to wait because the energy world changes quickly.

Senator Werk commented with regard to the climate change comment, regardless of whether anyone believes that climate change is an economic reality or not, the state still needs to have a road map included in the plan. **Mr. Miller** agreed and said the state boundaries do not matter in this area. **Senator Werk** clarified that the idea would be to have a road map of the potential impacts climate change will have and how to take advantage. **Mr. Miller** said yes. He added that utilities have to plan for this because it affects their business.

Representative Anderson stated his belief that the legislature has neglected OER by not making them more permanent but the challenge is how to fund OER. He said without them, the energy plan will not exist. **Mr. Miller** said he has had that discussion with the people involved and they are aware of the problem.

Representative Anderson agreed that the siting issue needs to be addressed. **Mr. Miller** said the issue should be a subject for a future meeting.

Representative Jaquet asked whether there had been legislation passed using geothermal funding to help fund the OER. **Mr. Miller** asked whether she meant royalties. **Mr. John Chatburn, OER** answered that the state received an initial payment that gave some funding to OER and some to public schools and since then that has become less and less. **Representative Jaquet** said that maybe the committee could reexamine that issue.

After lunch **Suzanne Budge and Mike Christian, Idaho Petroleum Council** were introduced to give an update on their progress.

Ms. Budge commented that they have been involved in rulemaking process with all parties and that Bridge Energy is working with officials in Payette County to get approval. **Ms. Budge** noted that the Idaho Petroleum website was up and running at: www.idahopetroleumcouncil.com.

Mr. Mike Christian stated that proposed rules were published on October 5, 2011 and that public comment is open until October 26, 2011. After that the rules are sent to the Oil and Gas Conservation Committee for approval and then on to the legislature. He said these rules addressed bonding amounts and that the standards for well drilling, testing and plugging the well were increased in detail. The rules include provisions for the testing and monitoring of drinking water wells. These rules will be much more specific and detailed than previous rules. **Mr. Christian** noted that the PUC has offered their expertise in the area of safety and inspection and said that the Governor may issue an executive order to facilitate this involvement.

Senator Werk asked for more detail with regard to the rules especially the issues with communities and bonding with fracking and its impact. He asked about the types of notification that will be required for different steps and about disclosure of the contents of fracking fluid

used. He also asked about the possibility of increasing taxation or royalties to help the state financially.

Mr. Christian explained that for bonding the old rule was \$10,000 and now there is a base amount plus \$1 per foot goes up to \$125,000. He said there are many different groups involved. A survey was done of western states and their bonding requirements and Idaho was well within range.

With regard to notification, **Mr. Christian** said there is an added provision for advance notification to surface owners. He said this is a standard provision of other states rules and that Idaho surface owners always have right to seek compensation if exploitation of minerals affects them.

Mr. Christian explained that there is a detailed requirement for disclosure of the contents of the fracking fluids in the rules and that material safety data sheets for individual components are required. There are also restrictions on vtext compounds.

Mr. Christian noted that the Idaho Department of Lands intends to propose legislation to increase the royalties from .5% to 1.5%. States that have existing industry have are higher percentages but the thought by some is that the rate should be low until the industry is developed.

In response to another question from **Senator Werk**, **Mr. Christian** said that the applications for permits to drill and other applications will be published on the Idaho Department of Lands website.

Representative Jaquet asked whether lagoons were added to the rule. **Mr. Christian** said yes, this area was upgraded substantially. **Mr. Christian** noted that the application fee amounts are in statute and that the Department of Lands will propose legislation to raise those from \$100 to \$3,000. Representative Jaquet said she would like to have someone from the Department of Lands at the next meeting.

Mr. Peter Richardson, Richardson and O'Leary, PLLC, was introduced to discuss PURPA. He explained that PURPA is the Public Utility Regulatory Policies Act that was passed by Congress in 1978. PURPA requires utilities to purchase electricity from qualified facilities (QF) at the avoided cost rate. It resulted because utilities were reluctant to purchase electricity from other producers and it is illegal for a person to make electricity and sell to his neighbor. Avoided cost is the cost the utility would have to pay to bring next new energy source on line or if available, the price they could purchase their demand requirements from another source. **Mr. Richardson** noted that it is very easy to become a QF. **Mr. Richardson** explained that it was left up to the states what avoided cost rates would be and how they would be calculated.

He went on to say that one reason Idaho has been so successful in implementation of PURPA and why it has lasted so long is because the state aggressively implemented PURPA in the 1980s. In 1980, Governor Andrus appointed a commission, the Public Utilities Commission (PUC), who implemented a program where utilities buy power for terms of 20 years at avoided cost rates. Many different people got into the business and this created a constituency that is not normally aligned against the interest of the utilities. At this time most of the PURPA projects were hydro in canal drops, cogeneration at potato plants and at lumber mills. This aggressive

implementation was enough to sustain PURPA despite utilities attempts to kill it. This was in the 1980s and 1990s.

Mr. Richardson went on to say that by the 1990s prices were down so the PUC reduced the published rate availability from 10 mw to 1 mw and the contract length was reduced from 20 years to 5 years essentially killing the industry until the energy crisis of 2000-2001. At this time Idaho utilities were on the market buying wholesale power to meet load at \$5,000 mwh. As a result, retail rates went up dramatically and Idaho irrigators were paid to shut off pumps and companies went out of business. Meanwhile existing PURPA projects continued to produce at about 5 cents mwh. These were the same contracts that were established in the 1980s, no new projects.

In 2001, the JR Simplot Company filed a complaint with the PUC suggesting the need to revamp PURPA. He said that all of the utilities opposed the idea saying Idaho did not need PURPA power. The PUC commissioners did not believe that to be true due to the fact the utilities were scrambling to build new plants. At this time the PUC changed the PURPA contract length back to 20 years and 10 mw and decided that natural gas plants would be the surrogate avoided resource. **Mr. Richardson** explained that the PURPA rate is the marginal cost of power not wholesale rates. As a result, the investor owned utilities asked to put a moratorium on new wind and solar projects and this was done. This moratorium resulted in litigation involving the PUC.

Mr. Richardson distributed a handout of all PURPA projects in Idaho as of December 2010. These projects produce about 870,000 kwhs of generation at per kwh rates no higher than nine cents. New projects since Dec 2010 will add another 186,000 kwh of generation.

He added that there has been an application before the PUC to prohibit utilities from claiming ownership of PURPA projects and a petition to not allow QFs to develop projects whose power would be for sale out of state.

In response to a question from **Senator Bair**, **Mr. Richardson** clarified that “avoided cost” is the cost the utility would have to pay to bring next new energy source on line using a formula to come up with a cents per kilowatt hour rate. Currently that energy source is combined cycle natural gas power.

Senator Schmidt commented that the cents per KWH tends to range a lot on the PURPA project handout. **Mr. Richardson** stated that it is actual 2010 data with rates based on commission orders but that the rates vary by season and time of day. He said that these projects actually bring a great benefit to rate payers by keeping costs low. According to **Mr. Richardson**, if PURPA is successfully implemented, an investor owned utility would never have to build another project.

Representative Anderson asked how California was different than Idaho. **Mr. Richardson** explained that California deregulated in 1990 and utilities turned over control of electric backbone grid to an independent contractor. This is now essentially an electricity highway and anyone can use it with proper permits. FERC and Congress recognized this and repealed PURPA’s must buy provisions in states that have done this.

Senator Werk commented that there comes a point where the avoided cost rate is out of alignment and the utility could be paying an avoid cost rate that is not current. He asked about

ways to adjust the avoided cost rate more quickly to respond to market changes. **Mr. Richardson** said that the avoided costs rates are set by the PUC and Idaho declared that it will reset rates whenever the natural gas rate forecast is published by Northwest Power and Conservation Council. Unfortunately they do not meet regularly. **Mr. Richardson** said the commission can be asked to convene and revisit rates if they are believed to be too high. He explained that when avoided cost rates change, existing contracts are not affected, they are paid at whatever rate is on the contract. FERC says avoided costs are avoided costs at the time of contract. Development of these projects takes a long time and there is a need to balance when the contract is signed and rates. This rate assurance and lack of volatility is worth a lot to everyone.

Representative Anderson said he believes that PURPA is a consumer protection program and he thinks it is interesting that the investor owned utilities are using natural gas as a benchmark. He asked why they do not use something else. **Mr. Richardson** explained that in 1980 the avoided cost was based on 500 mw of coal from a plant in Montana. He noted that there has been discussion to set avoided cost rates based on geothermal or wind projects. In his opinion, as long as utilities are building natural gas plants to handle load, the avoided cost rate should be based on natural gas. **Representative Anderson** said it is just a matter of time because of the volatility of natural gas that if we keep building these plants, there will be burden on people who use gas to heat homes. **Mr. Richardson** said there is a cycle and agreed that once the next crisis hits the rates will change.

In response to a question from **Representative Cronin**, **Mr. Richardson** explained that the cost of integrating a resource such as wind has been figured and that is charged to the wind producer in order for the utility to integrate it into their system. He added that with any intermittent resource there is an integration cost.

Senator Schmidt asked what percentage of Idaho's power consumption comes from PURPA projects. **Mr. Richardson** said it was about 10% but he would more accurate information for the committee. He stated that if PURPA was promoted in Idaho, there would be no need to do further large generation. In his opinion if the avoided cost rates were set at 13 cents, the state would see a great increase in PURPA projects.

Representative Demordaunt asked how PURPA affects the volatility of natural gas. **Mr. Richardson** clarified that PURPA reduces volatility because it is so reliable.

Representative Eskridge commented that it was his understanding that in some cases the avoided cost rate is higher than the cost to develop a project. **Mr. Richardson** explained that the avoided cost rates reflect the cost the utility is avoiding by purchasing power from a QF. The developer needs to build a project at price lower than the avoided cost to see a profit. PURPA prohibits investigation by the PUC into the finances of project developer.

Mr. Richardson went on to say that the cost of PURPA projects is a flow-through expense; utilities do not earn a return on the projects and they look like debt on utility balance sheets.

Representative Eskridge asked, no matter what the cost is for developer to develop a project, could there be some developers getting a huge return on investment because of the avoided cost rate. **Mr. Richardson** stated that PURPA developers are not regulated but assured the

committee that no one is getting 30% returns. He said that the margins are very small and the scales favor the utilities.

In response to another question from **Representative Eskridge, Mr. Richardson** answered that utilities should never have to buy power from a PURPA project that they do not need at the time because if a utility does not need resources for many years, the avoided cost rate would be very low. He added that if a utility never needed resources, the avoided cost rate would be zero. Utilities do buy resources when they are not needed because they can sell the power on the open market.

Representative Werk said that everything is a trade off and that there are both good and bad issues with regulated monopolies.

Representative Anderson asked, with regard to the avoided cost rate, whether Idaho might be making it easier for wind projects to make money. He asked whether the standard for avoided costs was appropriate. **Mr. Richardson** said there is a docket open to look at all aspects of the PURPA rate base at the PUC.

Representative Jaquet commented that the city of Hailey has a PURPA project and wanted to generate its own power and sell it to the people of Hailey but that was illegal. She asked whether the city could have more than one PURPA project and qualify. **Mr. Richardson** said they could have several PURPA projects but they could not serve the city of Hailey with any of that power without having something in the state code to allow that.

Mr. Rich Hahn and Mr. Donovan Walker, Idaho Power were introduced to comment on the previous presentation.

Mr. Walker stated that if Idaho Power had the total amount of their load limit at the minimum solely with PURPA projects, they could not keep the lights on because those are all intermittent power sources.

With regard to the question about avoided costs and whether utilities have to purchase the power, **Mr. Walker** said that PURPA and renewables come with an obligation to purchase. He said there is also a lack of consideration for the needs of the utility. If a QF wants a contract, the utility has to contract with them whether they need the power or not at the avoided cost rate. The definition of avoided costs does not include savings. He went on to explain that avoided cost is the cost the utility would pay for that resource whether they purchased it or produced it. Having the rate set based upon the combined cycle combustion gas turbine currently is one method; another method is through an integrated resource plan. This is just a change in methodology as to who can receive the rate. Another part of avoided costs is the requirement that customers must remain neutral in the cost paid for PURPA energy.

Senator Fulcher asked for Idaho Power's opinion of whether the volatility of natural gas and baseload exists. **Mr. Walker** said that natural gas prices fluctuate and are volatile but that is not the end of the story. It is a consideration.

In response to a question from **Representative Anderson, Mr. Walker** said they do take into consideration that the federal government could institute carbon standards for natural gas.

Representative Anderson commented that their integrated resource plan shows geothermal at the same price as natural gas and asked why geothermal is not being developed. He asked whether it was because it is easier to build a natural gas plant. **Mr. Walker** said that is a consideration. He said that sometimes it is difficult to get landholder access and/or leases for geothermal projects.

Senator Tippetts asked whether utilities can curtail production from a PURPA project if they do not need it. **Mr. Walker** said they currently have a very limited ability to curtail or not take energy and that is primarily due to safety issues. There is no ability to do this for economic issues alone.

Mr. Neil Colwell, Avista commented that PURPA is a federal law implemented by the PUC. He explained that last year he had legislation proposing a 100 kw limitation on wind and solar projects for PURPA designation. They also exercised the opportunity to go to the PUC with this request.

Representative Eskridge said that the intent of this discussion was education and that he thought it would be helpful for committee to understand the background of PURPA.

Representative Stevenson said he had seen several different numbers as to the percentages of renewable versus nonrenewable projects (not just PURPA projects) that utilities own and said he would like to have that information from the PUC at the next meeting.

Representative Jaquet distributed draft legislation that expands the deduction for energy efficiency upgrades on homes from the 1974 law for the committee to review. **Senator Werk** thanked **Representative Jaquet** for trying to move this forward.

Mr. Leon Duce, Idaho Association of Cities spoke to the committee about their energy conference on October 19 through 21 at the DoubleTree Riverside. He said the association had set aside the Tamarack Room on October 20 for the next Energy Interim Committee meeting.

The committee recessed at 4:15 p.m.

The committee was reconvened at 8:00 on September 29 by Cochairman Representative George Eskridge. Other committee members present included Cochairman Senator Curt McKenzie, Senator Russ Fulcher, Senator Steve Bair, Senator John Tippetts, Senator Elliot Werk, Representative Maxine Bell, Representative Bert Stevenson, Representative Eric Anderson, Representative Jeff Thompson, Representative Reed DeMordaunt and ad hoc members Senator Dan Schmidt and Representative Brian Cronin. Senator Patti Anne Lodge and Representative Wendy Jaquet were absent and excused. Legislative Services Office staff members present included Mike Nugent, Ray Houston and Toni Hobbs.

Others present were Ben Otto, Idaho Conservation League; Micah E. Mills, Idaho Optometric Association; Gerry Fleischman; Rich Hahn, Idaho Power; Beth Markley, Idaho Council on Industry and the Environment; Jesse Taylor; Brenda Tominaga, Idaho Irrigation Pumps Association; Stephen Goodson, Governor's Office; Neil Colwell, Avista Corp; Teresa Molitor, Stan Hawkins and Tauna Christensen, Energy Integrity Project; and John Chatburn, Office of Energy Resources.

Senator Werk moved to approve minutes from the last meeting, **Representative Stevenson** seconded and the minutes were approved unanimously by voice vote.

Mr. Jim Yost, Northwest Power and Conservation Council (NWPCC) was the first speaker. His complete Powerpoint is available at:

<http://www.legislature.idaho.gov/sessioninfo/2011/interim/energy.htm>.

Mr. Yost explained that the council was formed by the Northwest Power Act of 1980 and includes two members from Idaho, Oregon, Montana and Washington. The Council responsibilities are to develop a power plan and update it every 5 years; develop a fish and wildlife program and update it every 5 years; and to inform and involve the public.

Council duties in the law for fish and wildlife include:

- Power Act:
 - “Protect, mitigate and enhance fish and wildlife affected by the hydroelectric dams in the Columbia River Basin”
- Council:
 - Create fish and wildlife program, solicit projects
 - Submit every project to review by a panel of 11 independent scientists to ensure credibility of the public expenditures

Key themes in the 2009 fish and wildlife programs include focusing on habitat protection and restoration, integration of biological opinions and the 2008 Columbia Basin Fish Accords, scientific review of all projects, new monitoring and evaluation strategy, refine and implement indicators for success and more stringent project reporting guidelines. His Powerpoint presentation goes into more detail of these areas.

Mr. Yost explained that the 2008 Fish Accords raised spending from \$150 million to \$220 million annually. \$41.4 million was spent in Idaho in fiscal year 2009. State agencies that received funding included the Department of Fish and Game, the Office of Species Conservation, Latah, Nez Perce, Custer Soil and Water Conservation Districts and the Idaho Department of Water Resources.

Mr. Yost said that the overall cost to Bonneville Power (BPA) was just over \$800 million.

Representative Stevenson asked whether that \$802 million covers the entire region. **Mr. Yost** said that Montana does not get the same amount as Idaho but that they do have some habitat projects. He said that they do not have anadromous fish like Idaho so they do not get as much.

Representative Stevenson asked whether the NWPCC is monitoring the issue of dam removal and the Columbia Basin treaty. **Mr. Yost** commented that the Sovereigns involved in the treaty include representatives from each of the states, the federal government and tribal chairs. He said he has not heard of any tribe in the process thus far that wants to remove any of the four lower snake dams. **Representative Stevenson** said the tribes from Oregon were most vocal at a meeting this summer. **Mr. Yost** said he believes that some tribes would still be in favor of

removing dams but in the Columbia Basin Treaty this has not been an issue. **Representative Eskridge** commented that even though dam removal is not on table, there is concern that environmental requests for fish management could have an impact on the dam situation. He asked what the Canadians are saying. **Mr. Yost** said that those involved are still trying to determine whether or not to continue the treaty. **Representative Eskridge** asked what would happen if the treaty was terminated. **Mr. Yost** said he that he would guess nothing. He explained that the river is being operated for flood control and power generation and the rest is controlled by biological opinions and in Canada, BPA operates it for power. In his opinion, none of this would change.

Mr. Yost commented that the fish planning is not necessary to save salmon, it is done to try to provide as many fish so they will be available for harvest by all who want them.

Mr. Yost went on to discuss the council duties with regard to power planning. Their duties include development of a regional plan to “assure the Northwest an adequate, efficient, economical and reliable power supply.” They also analyze the adequacy and reliability of the power supply.

According to **Mr. Yost**, the demand forecast regionwide is 1% with conservation and in Idaho it is approximately 1.4%. In response to a question from **Representative Eskridge**, **Mr. Yost** explained that this forecast is for how much more electricity will be needed overall, not just in the BPA area. He said that conservation is the first priority. Without conservation regionwide the demand forecast is 1.6%. **Mr. Yost** said that conservation is the first priority because it is the lowest cost resource by far, it has no greenhouse gas emissions and therefore reduces risk from potential carbon pricing policies, it avoids fuel price risks, it provide both capacity and energy and it is a source of local jobs and economic activity. **Mr. Yost’s** Powerpoint goes into more detail regarding energy conservation that has been achieved and states that the average cost of conservation was less than three cents per kilowatt-hour.

Senator Fulcher asked how far out are they looking with the forecast and what data is used to find this. **Mr. Yost** said that growth projection is done by visiting with utilities, looking at the economy, business environment and the housing market. He said that a five year action plan is the main focus.

Mr. Yost went on to discuss the amount of existing, committed and new wind development in terms of generating capacity. He noted that generating capacity is distinguished from energy, which is reduced by about 1/3, and from reliable capacity, which is only about five percent of that capacity number. His Powerpoint contains graphs showing cumulative committed and planned wind power in the four state region and the location of northwest capacity.

Representative Eskridge asked whether the issue regarding wind and oversupply is changing how the council is looking at wind power. **Mr. Yost** said he thought it would change but it really did not. He noted that something needs to be done to solve the problem of oversupply and that the most limiting factor will be transmission. He said they expect wind power to double in the next five years to about 9,000 mw. **Senator McKenzie** said that there would be no way there would be enough transmission to handle that. **Mr. Yost** said that is a problem and they are trying to solve that.

Senator McKenzie said it was his understanding that regional wind can firm up with wind from other areas as long as transmission available. **Mr. Yost** said yes but they cannot move energy in that manner because there is no free flow of electrons. **Representative Eskridge** asked whether that meant that they are lacking transmission to provide that free flow of electrons. **Mr. Yost** commented that transmission could be a useful tool if we were able free up local transmission lines as well as some major transmission lines.

Mr. Yost went on to say that natural gas-fired generation can provide energy, firm capacity and flexibility when needed. He said that gas-fired generation options provide protection against rapid growth and offer reduced carbon-emission generation if carbon prices are high. He noted that the role of natural gas-fired generation varies among different scenarios.

Mr. Yost stated that exploration of long term alternatives includes

- Demand response (firm capacity, flexibility)
- Smart grid development (system operation, demand-side opportunities)
- Energy storage (firm capacity, flexibility)
- Coal gasification with carbon sequestration (reduced CO₂)
- Advanced nuclear technology (baseload energy, reduced CO₂)

Senator Fulcher commented on the fact that in discussing long term alternatives, the first focus item is demand response. In his opinion if planning for the long term includes demand response, this means they are planning for not having enough power. He added that trying to bring business to the state requires a long term affordable power supply and a focus on demand response seems counterintuitive to him. **Mr. Yost** stated that the long term alternatives above are not listed in any specific order but that the concern is understandable. Demand response has been to reduce the peak of a load but long term use of demand response will be like everyone plugging in electric cars after midnight when demand is lower. **Senator Fulcher** said he was not critical of idea but it feels like we are planning for the status quo. He said he would argue that we should be looking at more proactive steps to make Idaho attractive for businesses from other states and suggested this be discussed further at another time. **Senator Werk** said in his opinion demand response could be a very good way to enhance conservation.

Representative Eskridge asked whether the requirement to shut down Centralia and Boardman was factored into their forecast. **Mr. Yost** commented that the decision to shut down was made by the companies because they could not meet air quality standards. He said there are plans to put gas-fired turbines in their place. **Representative Eskridge** said he had heard that if the lower Snake dams were breached gas-fired turbines would have to be built to take their place. **Mr. Yost** said that would be hard to determine but, in his opinion, today there is more reason than ever to keep all existing hydro facilities because no carbon is produced. He added that without those dams BPA could not integrate wind. **Senator McKenzie** noted that the policies today are gas generation incentivized because gas-fired plants are used to integrate wind. He added that this is also the same with regard to when coal plants are taken off line. In his opinion, the focus

should be on transmission. An energy grid should be the next step to get the energy where it needs to be.

Representative Cronin asked what the NWPCC is doing on transmission side and what is being done with the integration issue. **Mr. Yost** said that wind is a good thing and is popular. The problem is integrating it into the system without impacting reliability. **Representative Cronin** asked what the biggest obstacle to integration was. **Mr. Yost** said overgeneration in spring.

Representative Anderson said that the amount of energy used could double in a short period of time so demand response will still have to be in the mix because of people using electricity. He noted that he is not in favor of the concept of natural gas turbines only to be used as balancing components. In his opinion it does not take much to take out a gas turbine with regard to terrorism and asked about transmission of natural gas and what happens when residences are told to curtail. **Mr. Yost** said that the supply of natural gas is not a large obstacle. He said that the delivery might need upgrades to pipelines and transmission.

In summary, **Mr. Yost** said that the NWPCC Power Plan will include

- Aggressive efficiency improvement
- Renewable generation to meet RPS requirements
 - Cost-effective, small-scale, local renewable and cogeneration opportunities should be developed
- Additional energy, capacity, and flexibility needs provided by natural gas-fired generation
- Improve power system operation and invest in transmission capacity
- Explore future low-carbon resource potential

Mr. Gerry Fleishman, an audience member asked to testify regarding geothermal energy. He informed the committee that one of the leading geothermal experts in the world, Carl Austin, died last Saturday. He said that will be a big loss of expertise to the state.

Mr. Fleishman said that in terms of matching up with or firming up wind, there are resources that could be on standby to come online when wind cuts back and vice versa. He noted that coal can also cut back when wind blows. He stated that China uses plasma that keeps coal plant stable when at low capacity. **Mr. Fleischman** said the plasma tool used is relatively new and is something that could be done in this region.

Ms. Teresa Molitor and Ms. Tauna Christensen, Energy Integrity Project were introduced to give the next presentation. It was noted that they are the same group that was formerly known as Idahoans for Responsible Wind Energy. Their complete Powerpoint is available at: <http://www.legislature.idaho.gov/sessioninfo/2011/interim/interimcommittees.htm>.

Ms. Molitor commented that last year they proposed a two year moratorium on wind developments to the legislature that did not pass. The reason they requested the moratorium was so the legislature could do a more thorough review and see what direction wind power is going.

Ms. Christensen explained that she first became involved in the issue because a wind turbine was proposed within 500 feet of her home. As she did more research she found many other problems with the process. She suggested that wind projects need independent review and oversight similar to what the FDA does

Her Powerpoint contains various quotes from industry experts regarding wind energy and “green jobs.” She also touched on the amount of subsidies that wind receives and the fact that, in her opinion, taxpayers do not receive any benefits from wind power.

The presentation suggested that “green jobs” actually destroy jobs in other sectors of the economy including the industrial sector.

Senator Werk stated, regarding one of the quotes in her presentation, that there was a lot of information online about the study published by the Juan Carlos University and how it was created and who was behind the study.

Representative Cronin asked why they are comparing jobs created in the renewable sector with jobs in the industrial sector, that is like comparing apples to oranges. **Ms. Christensen** said that means that we are losing jobs from one sector and moving less jobs to the renewable sector. She also said it has to be taken into account that the increased power rates created by wind energy cause lost jobs.

Ms. Molitor said they are trying to present what the value of a job is and asked what is a green job anyway. She said there is a study that says applications for grants are more likely to be approved if they contain statements saying they will create green jobs. Sometimes there is a net loss of jobs instead of jobs created. **Representative Anderson** commented that the government does spend taxpayer dollars to incentivize these projects and perhaps they should have the Department of Labor do a study of how many jobs these projects create. **Senator Werk** said that he has not seen that the installation of wind energy causes increase in power rates. **Ms. Molitor** said studies express concern for ratepayers.

Ms. Christensen went on to say that since 2011 legislative session, Fremont County has adopted a moratorium on wind development. Madison County has also adopted a one mile setback for wind development. She added that residents in counties who do not want wind development will still suffer the effect of increased power rates from decisions made in other counties. (e.g. Cedar Creek Wind Project) and noted that there are no statutory protections for property owners who live near county lines.

Representative Eskridge summarized the presentation as follows:

- Recognition that there are many differences of opinion in wind generation and the benefits and non-benefits of wind power.

- There is a dispute about the number of green jobs created and are questioning how many jobs have been lost.
- Wind industry is highly subsidized by taxpayer money with no benefit to the taxpayer.
- Concern with lack of siting oversight that looks at all aspects of siting including protection of those in overlapping counties.

With no further questions, **Representative Eskridge** reminded the committee that the next meeting will be held on October 20 in conjunction with the Association of Idaho Cities Energy Conference at the DoubleTree Riverside Hotel in Boise.

The meeting was adjourned at 11:15 a.m.