

MINUTES
(Subject to approval by the Committee)
Solar Energy Task Force
Monday, November 30, 2015
9:00 A.M.
WW55
Boise, Idaho

Co-chair Senator Curt McKenzie called the meeting of the Solar Energy Task Force to order at 9:02 a.m. and requested an audible roll. Members present were: Co-chair Representative Jeff Thompson; Senators Jeff Siddoway, Jim Guthrie, Michelle Stennett; Representatives Gary Collins, and Ilana Rubel, substituting for Representative Mat Erpleding. Representative Clark Kauffman was absent and excused. Legislative Services Office staff present was Mike Nugent.

Others in attendance: Alan Dornfest and Steve Fiscus, Idaho State Tax Commission; John Williams, Bonneville Power Administration; Jim Yost, Northwest Power and Conservation Council; Will Hart, Idaho Consumer-Owned Utilities Association; Ron Williams, Grandview PV Solar Two, LLC; Russell Westerberg, Rocky Mountain Power; Neil Colwell, Avista; John Chatburn and Scott Pugrud, Office of Energy Resources; Ben Otto, Idaho Conservation League; Don Reading, Ben Johnson and Associates; Rich Hahn, Idaho Power Company; Russ Hendricks, Idaho Farm Bureau Federation; Adam Pishl, Clenera Renewables; Ben Fairbanks, SunEdison; Scott Turlington, Origis Energy LLC; and Pete Richardson.

NOTE: Copies of most presentations, handouts, reference materials and public testimony can be found at: <http://legislature.idaho.gov/sessioninfo/2015/interim/solarenergy.htm> and are also on file at the Legislative Services Office.

Co-chair McKenzie stated the purpose of the task force is to study the issue of solar energy in relation to House Bill 134, which was introduced during the 2015 Legislative Session. If enacted, House Bill 134 would have provided for a solar energy tax in lieu of a property tax. This tax treatment is in place for wind energy and geothermal energy producers and, in regard to the Idaho Public Utilities Commission (PUC), orders that reduced the length of certain Public Utility Regulatory Policies Act (PURPA) contracts from twenty years to two years.

Co-chair McKenzie introduced Mr. Pete Richardson, a Boise energy attorney, who shared with the members that his presentation will provide: an overview of PURPA - what works and what does not work, as well as its successes and lack of successes in Idaho; and the PUC's most recent order on PURPA contract length and his thoughts on how it affects two distinct classes of independent power producers and larger projects. Mr. Richardson observed that all politics is local and the production and delivery of electricity is no different. He said the Legislature makes the policy choices to determine how we in Idaho will keep our lights on.

He explained that many years ago Idaho granted monopoly status to utilities and secured their service territories from competition. He stated that this concept remains the basic tenet of electric policy in Idaho. Additionally, the state utilities are state-sanctioned monopolies; hence, it is illegal for you to generate electricity on your farm or at your factory and sell that power to your neighbor. Specifically, he observed there are even strict limits on how much electricity you are allowed to generate and use for your own purposes at your farm or factory. He stated that this concept is well ingrained in our law and has allowed utilities to be shielded from any realistic economic competition for over a century. When Idaho sanctioned monopoly electric utility providers, there were two basic types of utilities operating: (1) publicly-owned, not-for-profit cooperatives and municipals; and (2) investor-owned, private corporations. He stated that because both of these business models have been frozen in place since the turn of the last century, it doesn't matter how

much electric generation potential you may have on your land or in your factory, the market for that power has been closed to you.

Federal PURPA Law Enacted in 1978. Mr. Richardson reviewed the basic problems PURPA identified and the solutions PURPA now offers in order to overcome the state-sanctioned monopolies that the states have granted over the generation of electric power and energy. He explained that this federal law requires the states to implement the law, but each state is given wide latitude as to just how it is implemented. He highlighted the two types of qualifying facilities (QFs) that are entitled to the protections of PURPA: (1) a cogeneration facility, which is an old and highly efficient technology. In fact, in southern Idaho at the turn of the century, he remarked that it was not uncommon for food processing facilities to generate all of the electricity they used through cogeneration; and (2) in addition to small power production facilities, the utility is required to purchase from small power production facilities, such as generators using waste fuel (wood waste and manure-to-methane, or hydro, wind and solar projects).

PURPA – To Whom Does It Apply? Mr. Richardson stated that PURPA applies to every electric utility operating in Idaho, and this includes cooperative and municipal utilities. PURPA is implemented for investor-owned utilities by the Public Utilities Commission, in contrast to cooperative and municipal utilities, which are essentially self-regulated, where implementation decisions are made by their elected boards and councils.

Purchase Price for PURPA Projects. Mr. Richardson noted that though PURPA's definitions for "avoided cost rates" that were adopted by the Federal Energy Regulatory Commission (FERC) seem straightforward, they are extremely broad and may be implemented in a variety of ways. He emphasized that the utilities' avoided cost rates have become a benchmark against which its own built-and-owned resources are typically measured against for determining prudence and reasonableness for ratepayer recovery. Additionally, he explained that avoided cost rates are defined as the "incremental" cost to the utility. Incremental costs are often confused with average costs. He related that the average cost of all of a utility's generating plants is going to be typically much lower than the cost of its latest and greatest new power plant. The avoided cost rates are to mirror incremental costs, not average costs.

Mr. Richardson listed rate requirements, including that rates: shall be just and reasonable; shall not discriminate against concentrated solar power (CSP) systems or cogenerators; shall not exceed the incremental cost to the electric utility of alternative energy; and the rates must equal the utility's "full avoided costs." He stated that the incremental costs to the electric utility of electric energy or capacity, or both, which but for the purchase from the QF, the utility would generate itself or purchase from another source. He explained that the proxy resource method is used by the Idaho PUC. And, he added that the cost of the utility's next planned resource addition includes energy cost (heat rate, fuel cost forecast, variable, capacity factor) and capacity cost (plant cost of construction, fixed operation and maintenance, etc.).

Standard Avoided Cost Rates. Mr. Richardson stated that the FERC only requires standard published off-the-shelf rates for QFs up to 100 KW. He said that states are allowed to publish standard rates for larger QFs and the Idaho PUC has historically published standard rates for QFs up to 10,000 KW or 10 MW.

Standard Versus Nonstandard Rates. Mr. Richardson stated that nonstandard rates are set using the utility's power supply cost model and are individualized for each project's unique generating profile, and the utilities receive the "black box" number, which is a number not arrived at openly. He stated that standard rates are set based on the proxy plant, and then they are published and not subject to negotiation. He added that they are transparent and subject to the public rate setting process.

Mr. Richardson said as of November 11, 2015, Idaho Power has purchased 26,849,973,165 kWh of PURPA power from QFs under contracts approved by the Idaho PUC since PURPA's inception in Idaho in the early 1980s. He noted that the total cost to Idaho Power's ratepayers is 6.07 cents per kWh

and there are 109 projects online, with a total capacity of 783 MW. In light of the negative publicity PURPA has received recently, Mr. Richardson suggested a legitimate question to ask is "how does that six cent figure stack up against the commission-approved cost for projects Idaho Power has brought online over the same time period?" He answered this question by stating that the costs compare very favorably, and over time, PURPA projects have proven to be cost competitive when compared to utility-built projects. He noted that there are caveats; for example, a project's Idaho PUC-approved ratepayer cost is based on information available to the commission at the time the project is approved, and not based on actual operating costs, which can vary up and down based on a lot of different factors. Mr. Richardson said the Idaho PUC just concluded a docket in which it ruled that QF contracts for integrated resource plan (IRP)-based projects are only entitled to two-year contracts.

Senator Stennett asked what the length of contract has been for these facilities in the past, and Mr. Richardson said that the length has been up to twenty years, particularly the plants that were built in the 1980s and 1990s. Senator Guthrie asked for clarification regarding the term "avoided costs" – whether the term means what the utility can buy power for on the market or whether it means what the cost of new generation is. Mr. Richardson responded that by the PURPA law it is supposed to mirror the next generation of the utility. He added that there are costs that will be unique to each project, such as fixed costs, financing costs, and variable costs. He also noted that Idaho Power's Danskin Gas Plant in southwestern Idaho came online at about eleven cents per kWh.

Co-chair McKenzie commented that it seems like some contracts would have some uncertainty associated with them if the utility has to have a firm source of power to balance the load for some renewables, such as wind, solar or low-impact hydro. Mr. Richardson remarked that the Co-chair's observation is accurate. He added that the Bell Rapids wind project is somewhat unpredictable with regard to generation, but then, so also are some of Idaho Power's other generation sources. He said it is a challenge to balance the generation and load that is not unique to PURPA projects.

Representative Rubel asked why a utility would prefer its own generating facility over a PURPA project, even when the utility's project is more costly. Mr. Richardson explained that the utility-owned project is in the utility's rate base and PURPA projects are treated as pass-through costs. Also, Wall Street views power purchase agreements as a debt of the utility. He noted that moving to a two-year contract period from a twenty-year period is a policy decision and it makes it difficult for owners of these facilities to obtain financing. Senator Stennett asked why the commission allowed the period of the contract to be reduced. Mr. Richardson said the commission's decision was that the utilities did not need the power now and that it was too expensive to the ratepayers. Senator Siddoway asked how many proposed solar power systems there are, and Mr. Richardson stated there is one 200 MW plant under contract but none are being constructed under the two-year contract.

Co-chair McKenzie introduced Mr. Alan Dornfest, State Tax Commission, who provided more details regarding House Bill 134. He stated that if this bill is enacted it would include solar electric producers under the identical tax provisions of the Idaho Code as producers of wind and geothermal energy, which would subject the solar electricity producers to a tax on the production of electricity in lieu of a property tax. The legislation would also clarify that the three percent production tax only applies to wind, geothermal or solar energy facilities capable of producing more than one megawatt of electricity. Mr. Dornfest explained that under current law the Kuna solar plant will be put on the 2016 property tax rolls as new construction. Co-chair McKenzie asked how that plant would be taxed under the current system versus the system proposed in House Bill 134. Mr. Dornfest responded that the costs of the plant, approximately \$40 million, would be added to the taxable value of all property in the county and to the taxing districts within the county. With this there will be the implication of the three percent cap prescribed in Section 63-802, Idaho Code. If the property is owned by a public utility that is regulated by the PUC, it would be centrally assessed and the taxable value would be apportioned to taxing districts over the utilities service area. As it is not owned by a public utility, the taxable base would accrue to Ada County and to the taxing districts in it. Mr. Dornfest stated that if House Bill 134 were in place, the three percent tax would not be

counted for the three percent prescribed in Section 63-802, Idaho Code, purposes, whereas the property tax would be. Senator Guthrie asked if the three percent tax would apply to a facility if it generated below 1,000 KW. Mr. Dornfest responded that as the bill was written it would not. Senator Guthrie asked if there would be any tax advantage for a facility to stay under 1,000 KW and Mr. Dornfest answered it would depend upon where the facility was located, what the tax rates were there, after factoring in the levies in versus the three percent gross receipts tax, and what money it would bring into the taxing districts in the area.

Co-chair McKenzie introduced Mr. Ron Williams, who served as the moderator for presentations from Clenera Renewables, SunEdison and Origis Energy.

Clenera Renewables. Mr. Adam Pishl stated that Clenera operates as an end-to-end service provider in developing, acquiring and managing large-scale solar power assets. The company has twenty-four employees and a 105 MW solar plant in Grandview that it has contracted with Pacific Gas and Electric. He indicated that the two-year contract is a problem, not so much with banks, but with investors, because this length of contract scares them away and these investors are the source of a lot of his company's financing. Senator Stennett asked, given that Clenera has operations in other states, could he suggest what it would take to get Idaho out of 51st place in the nation for solar energy production. Mr. Pishl answered that his experience with the Idaho PUC is somewhat limited; however, in states where he has worked, such as California, he observed that while the utilities are tough negotiators, the state's PUC has injected a level of fairness in the process. He noted that the access in Idaho isn't there yet. Representative Collins asked if he was building a big project with the two-year contract, and Mr. Pishl responded that contract was for a 20-year power purchase agreement. Representative Collins asked if he was aware of any twenty-year contracts in Idaho, and Mr. Pishl answered that there are some contracts of this length but it is a very small handful. Representative Collins stated that he has heard that Idaho is overbuilt for electric power. Mr. Pishl responded that he can't speak to Idaho Power's numbers; however, he noted there are markets in the West where these projects would be very competitive and needed. And, he opined that with the right transmission Idaho could become an export power market.

Senator Guthrie asked how his company views the three percent production tax versus the property tax. Mr. Pishl opined that the property tax assessment and collection is very complicated and complex and the production tax is reliable. He explained that his company would end up paying probably more property tax initially than the production tax; however, that would level out over the years, as depreciation would kick in for market value purposes. And, over twenty years the two total amounts should be pretty equal, with the three percent production tax being more consistent overall than the property tax. He added that the production tax is fairly simple to calculate. Co-chair Thompson asked if his company has completed calculation from the property tax to the production tax, and Mr. Pishl answered that they have; for example, at the Elmore County facility, over thirty years, the production tax would generate about \$3 million more than the property tax would. Co-chair Thompson asked how it would be better for the company to pay more in taxes, and Mr. Pishl explained that it is better because it is more predictable and it is better because it makes it easier to plan for. Also, he stated that his company believes that the useful life of the plant will be thirty years rather than twenty years.

Representative Collins asked Mr. Pishl to compare wind versus solar in terms of firm energy capacity. Mr. Pishl stated that solar has a twenty percent capacity factor, which is comparable to wind, but that it is a little more predictable than wind. He remarked that they can know when the sun will shine or not but wind is not that way. Senator Guthrie asked if Clenera has assumed a situation where the taxable value does not decrease for property tax purposes. Mr. Pishl answered that there is always a depreciation factor that can be utilized in calculating the taxable value.

SunEdison. Mr. Ben Fairbanks stated that his company has 1,000 MW of solar projects across the western United States and there are five planned southern Idaho projects. His company has a lot of

clients beyond utilities but that Avista and Rocky Mountain Power utilize some of its power. He said his company has five wind projects of 550 MW. These projects in southern and eastern Idaho are: Ridgeline (2 projects); Goshen; Meadow Creek; and Rockland Wind. He added that his company has five solar projects planned with American Falls I and II, Murphy, Simco and Orchard Solar, with a combined value of \$207.6 million. These projects are not subject to the two-year contract limitation. Mr. Fairbanks said the price of this power is about \$17.50 per KW, and over thirty years the price is expected to run from 11¢ per kWh to 17¢ per kWh by the end of the contract. He stated his support for a production tax like the one presented in House Bill 134, opining that a production tax is easier for both the counties and the company to plan for. Co-chair McKenzie asked if the counties were on board with this proposal, as they would get less dollars initially with the production tax than with the property tax. Mr. Fairbanks responded that the production tax is easier for both the counties and the company to calculate and plan for. Senator Siddoway asked how many people it takes to build a \$40 million project, and Mr. Fairbanks responded that initial construction could include 100-to-200 people at the peak of construction, and then one-to-two people for maintenance once the project is built. He stated that a lot of the maintenance personnel will probably be shared with the company's wind projects, as the maintenance on these sites is minimal. Senator Siddoway asked what services the counties need to provide, and Mr. Fairbanks stated that they need access to the property but not much else. Senator Siddoway asked if he had an opinion regarding the two-year contract. Mr. Fairbanks answered that the two-year contract would be hard for financing and with investors. He added there could be opportunities to sign power purchase contracts out of state if they can get transmission. Senator Stennett asked if the 2016 projects he listed were twenty-year contracts, and Mr. Fairbanks responded that they were.

Origis Energy. Mr. Scott Turlington stated that Origis has a fully entitled 40 MW solar facility located just outside of Kuna. He noted that construction will commence before the end of the year. The project sits on approximately 550 acres, and Origis owns this land. Additionally, there will be approximately 350 construction jobs during the construction period. Origis is one of seven solar projects in Idaho that have a power purchase agreement approved by the PUC; furthermore, he stated that the seven projects represent 220 MW. He explained that this summer, the PUC issued an order that reduced PURPA contracts from 20-year contracts to 2-year contracts and the seven solar projects most likely represent the only solar projects that will be developed in Idaho at commercial scale. Because of the PUC's new rule for PURPA projects, he explained that the probability of any more renewable PURPA projects, especially solar, being developed in Idaho is extremely low. He added that solar projects have a very low burden on local services because of their efficiency. He observed that with approximately five full-time employees, once the plants are operational, local services are unlikely to be disrupted. Consequently, with very few FTEs, the local economy will experience a surge during construction without the benefit of an ongoing surge of population.

Mr. Turlington noted that during the 2015 Legislative Session, Origis and the other project companies introduced House Bill 134, which amended several sections of the Idaho Code, including Section 63-3501, Idaho Code. This amended code section added solar energy to the already existing methodology for taxation for renewable energy projects, namely wind and geothermal energy, that are currently taxed under the present version of Section 63-3501, Idaho Code. He recounted that following the print hearing for House Bill 134, in the House Revenue and Taxation Committee, Idaho Power came forward and expressed grave concern about the potential onslaught of solar projects in Idaho. Idaho Power indicated it had received inquiries for some 1,000 additional MW of solar, which factored into its decision to oppose House Bill 134. Mr. Turlington stated that Origis and the other project developers met with the co-sponsor of House Bill 134, as well as with other legislators, and came to the conclusion that efforts would soon be underway by the PUC to curtail the length of PURPA contracts that were not already approved. He stated that the solar companies agreed to hold off on House Bill 134 until the 2016 Legislative Session to allow the PUC to take action on the length of PURPA contracts that were not already approved. He emphasized that Origis was, and remains, indifferent to the PUC's ruling on the PURPA contracts that will reduce the length of contracts from

twenty years to two years. He noted that as a result of all these events, the solar companies requested that a task force be authorized to meet during the off-session and review the merits of House Bill 134. The task force would specifically address whether or not solar should be treated on an equal taxation basis with other renewable energy, namely wind and geothermal, under Section 63-501, Idaho Code. He stated that it is a reasonable interpretation, based on the recent ruling of the PUC, that Idaho will see only seven commercial solar projects, 220 MW, developed for the foreseeable future, as these seven projects already had approved power purchase agreements prior to the PUC's ruling to reduce the length of PURPA contracts from twenty to two years.

Mr. Turlington observed that as the dust has settled with the PUC, and the PURPA contract length concern has been resolved (for any company that did not have an approved contract prior to the PUC ruling) and it is Origis' intent to move forward again this upcoming session with legislation mirroring House Bill 134. He opined that it seems clear, because of the PUC ruling, that Idaho Power is no longer facing imminent danger of being forced to take on thousands of unwanted, and perhaps unnecessary, megawatts of power produced by solar and other renewables in Idaho. With that threat gone, he stated that Origis is requesting that the existing solar projects be afforded the same taxation structure that is afforded to wind and geothermal found under Section 63-501, Idaho Code.

Senator Guthrie asked whether it was good tax policy to have a three percent production tax versus a full property tax. Mr. Turlington said that the three percent production tax would be an ongoing tax to the counties and taxing districts where the project is located and it could be used for public purposes. Co-chair McKenzie asked how solar projects are taxed now. Mr. Steve Fiscus, State Tax Commission, observed that without legislation like House Bill 134, solar is taxed by property tax, because the commission does not have the discretion to tax it like wind or geothermal; specifically, they will value the work in progress, then the cost, as there is not income initially. Then, an income/cost approach would be utilized later and the taxpayer would be able to take depreciation from that calculation.

Mr. Williams stated that the approach used in House Bill 134 was preferred by Mr. Dan John, formerly of the State Tax Commission, based on avoided cost and a discount rate. Mr. Williams explained that the lines cross about halfway through the useful life of a project over a twenty-year period and comes within five percent of each other by the end of the twenty-year period.

Idaho Consumer-Owned Utility Association. Mr. Will Hart said there are twenty-two public power entities in Idaho and they have no PUC jurisdiction with approximately 135,000 customers. He said the integration of solar energy into their systems has not been a challenge; yet, as the Bonneville Power Administration supplies their power and BPA does charge an integration cost, that does get passed on to his association's members. He stated that rooftop solar has yet to come to fruition, though eventually it could provide a challenge to his members. He noted there has been talk about exporting power but currently the transmission system is a problem because the association is currently maxed out and he emphasized that this is an issue that needs to be tackled. Senator Stennett asked where they are on the threshold for a purchase agreement from a PURPA project. Mr. Hart said he did not know and agreed to get back to the task force with an answer. Senator Stennett asked about rooftop installation and how they would integrate that into their system. Mr. Hart answered that about three-quarters of their twenty-two utilities had that issue come up and he suggested that generally it would be subject to net-metering with a service charge. Senator Stennett asked how they would reliably gauge for a cloudy day. Mr. Hart responded that in order to find the appropriate model, they would look to similar systems with similar weather patterns.

Pacific Northwest Power Council. Mr. Jim Yost noted that the council is developing the twenty-year power plan for the region, with the comment period ending December 20, 2015. He stated that the four-state region of Washington, Oregon, Montana and Idaho does not need more renewable energy until late in the twenty-year period because right now there is a plethora of variable energy on the market currently. At present, Idaho and the region are constrained by a lack of transmission, but he

suggested that it might be a different story if there was a way to get renewable energy to different markets. He said electric energy generated from solar and wind is non-firm power and can be difficult to integrate. He said geothermal energy producing electricity is a different story; however, there are not a lot of those facilities in the West. He stated that the council's plan recognizes that states have to honor existing contracts for purchase of energy and they must honor renewable portfolio standards that are on the books. Mr. Yost observed that subsidies for renewable energy, as well as the length and avoided cost of PURPA contracts, are policy decisions.

Senator Stennett asked if this is going to be the situation for the next twenty years, and Mr. Yost responded that there may be a need for some more energy in the next five years and, if variable renewable projects are brought online, there may also be a need for a gas-fired peaker, or peakers, to go online to firm up that energy. Senator Siddoway asked if the council is prepared to deal with the eventuality of coal plants being retired, or being forced to retire, by the federal government. Mr. Yost responded that the council and utilities are looking to using energy efficiency, demand-side management, and conservation, as much as possible, to offset growth. Mr. Yost added that if coal plants are taken out of service, they more than likely will be replaced by new combined-cycle gas turbines, which will be fifty percent cleaner than the coal plants. Senator Siddoway asked if Mr. Yost had an idea concerning what Congress would do on this subject. Mr. Yost answered that he did not know. Following up, Senator Siddoway asked if hydro will ever be considered renewable energy by the federal government. Mr. Yost responded that the federal government does not consider it renewable energy, though he observed that we do get the benefits both rate-wise and by reduced greenhouse gas emissions.

Representative Rubel observed there are some states that really need a reduction in carbon emissions, and she asked, if overcapacity is a problem, could we offload clean energy to those states. Mr. Yost said that if we had transmission capability we could move the clean surplus power to those states but, at the present time, the transmission system is pretty much fully subscribed; so, without new transmission capabilities, moving power is a problem. Co-chair McKenzie added that another issue with new transmission is that generally the lines would have to pass through federal lands and that brings up issues regarding endangered, listed, and threatened species, as well as other environmental concerns.

Co-chair McKenzie asked the task force to discuss tax policy and how it affects or does not affect renewables. He stated that PURPA is a major driver and current tax policy in Idaho may or may not be. Noting that Idaho does not have renewable portfolio standards like some states do, Co-chair McKenzie stated that the committee needs to answer the question, "what do we recommend about legislation that would be similar to House Bill 134?" He stated there are also integration issues to electric utilities both private and public power. Co-chair Thompson added that any legislation regarding this issue would have to start in the House Revenue and Taxation Committee, and they would be receiving comments both pro and con on the subject.

Senator Guthrie stated that he sees two issues to address: the three percent generation tax versus property tax for solar; and the two-year PURPA contracts. He stated that he would like to hear from the PUC regarding its rationale for shortening the length of the contract. Co-chair McKenzie stated that he does not see the Legislature mandating on the contract issue. Representative Collins stated that the Legislature really does not have oversight over the PUC but there are a number of projects that have been approved or were in the pipeline when the PUC came down with its order. He remarked that it seems that it is a matter of fairness to hear from the developers of those projects regarding the production versus property tax issue.

Representative Rubel stated her concern regarding the two-year contract issue, and she commented that it seems like the solar industry has fairly quickly had the rules changed on them. Senator Guthrie stated he was concerned about the length of the contract going from twenty years to two years, noting there were probably some projects in the approval stage that were impacted.

Senator Siddoway said he would hate to see companies that have produced the energy, or were close to producing the energy, not be able to recoup their costs. He said being an energy exporter would be a good thing for Idaho if we can bring transmission capability up to speed. He felt the three percent production tax, versus a property tax, for solar energy projects is fair. Senator Stennett commented that some particular companies are a benefit to the system.

The Task Force adjourned at 11:56 a.m.