

EUGENE WATER & ELECTRIC BOARD
WORK SESSION
EWEB BOARD ROOM
500 EAST 4TH AVENUE
NOVEMBER 3, 2009
5:30 P.M.

Commissioners Present: Ron Farmer, President; John Brown, Vice President; Bob Cassidy, Rich Cunningham, Joann Ernst.

Others Present: Debra Smith, Sheila Crawford, Lance Robertson, Jim Wiley, Jim Origliosso, Cathy Bloom, Tom Buckhouse, Gene Austin, Mark Freeman, Eric Hiaasen, Joe Harwood, Jeannine Parisi, Dick Varner, Bill Welch, Clay Norris, Dan Morehouse, Ken Beeson, Travis Reeder, Kathy Grey, and Judy Chase of the EWEB staff; Ruth Atcherson, City of Eugene minutes recorder.

President Farmer convened the work session of the Eugene Water & Electric Board (EWEB). He noted for the record that Commissioner Ernst was not available at this time.

2010 Photovoltaic Rate Proposal

Bill Welch, Energy Management Department Manager, introduced Dan Morehouse, the Commercial Engineering Supervisor and manager of the Photovoltaic (PV) Program. He said they intended to provide some background on the program, as well as information on rates. He provided a power point presentation on *2010 Customer Generation Rates*. He stated that the Net Metered Program was required by statute and the Solar Generation Purchase Program required EWEB to purchase all output at a fixed rate.

Mr. Morehouse explained that the net metering system allowed power generated by a homeowner that exceeded use to flow back into the system. He delineated the Direct Generation (DG) configuration, which featured stand-alone PV generation that flowed directly into the grid.

President Farmer asked what the driving consideration for a customer to choose one over another. Mr. Morehouse replied that it had to do with size and economics.

Mr. Morehouse showed a slide that indicated how EWEB “stacked up” against other utilities. He observed that for the most part, the prices were comparable. He said they had an upfront incentive based on the system size.

Mr. Welch commented that this was another reason EWEB might want to offer a generation purchase rate for larger systems. He noted that the net metering system did not have a meter that measured how much power was generated; it all went back to the building and any power in excess of what was used was channeled back into the system through the meter.

Mr. Morehouse highlighted a graph delineating how many PV systems had been installed.

President Farmer asked how EWEB's rates compared for DG facilities. Mr. Welch replied that EWEB was the only utility that was purchasing DG power.

Ms. Smith asked them to clarify that a customer had to qualify for the DG program. Mr. Morehouse confirmed this. He explained that the minimum size of such a facility was 10 kilowatts (kW).

Mr. Welch stated that the solar generation facilities installed between 2001 and 2006 received 25 cents per kilowatt hour (kWh) and this had dropped to 15 cents per kWh in 2007 and then 12 cents per kWh in 2008 and 2009. He commented that it was staff's belief that the EWEB rates were the "butter on the bread," the real driver for solar installations was tax incentives

President Farmer asked if staff had any anecdotal evidence regarding what level of price would begin to make a project falter, should the tax incentives remain the same. Mr. Welch replied that staff had not conducted that analysis. Mr. Morehouse added that the PV installation costs had come down by approximately 15 percent in the last year. He said if they compared the proposed 11 cent purchase rate for 2010 with the new installation prices and the past purchase rates, the customer benefit-to-cost ratio was essentially changed.

In response to a question from Commissioner Cassidy, Mr. Morehouse stated that per kW in the area, the amount of power generated per kW of the system had not changed. He said there were more "players on the market" and manufacturers that were making them, which had contributed to the cost coming down.

President Farmer remarked that at present the biggest factor was the Business Energy Tax Credit (BETC) package and whether or not a company was making enough money to use it.

Vice President Brown asked if the new law requiring a certain percentage of government buildings to have PV systems would mean they would receive the same rate. He believed that the government would ultimately be a bigger participant in the program. Mr. Welch replied that they "struggled" with what to do with public buildings because they were not billed for taxes and received the 33 percent pass-through. He said the incentive had not been changed for them; the same limits in the other programs applied. He noted that PacifiCorp and Pacific Gas and Electric (PGE) had a slightly higher cap on their net metering program for public buildings and non-profit agencies.

Mr. Morehouse stated that they already had slated some PV installation in the new University arena for the next year.

Mr. Welch discussed the slide on *The Cost of Resources Available in the Near-term*. He stated that PV power was the most expensive, at more than twice the next most expensive resource. He said this led to the question of how they would value what they would share with the customer in a PV program. He related that they would not enter into a PV limited income program because they could do so much more for someone with energy efficiency. He said the practice had been to "promote conservation, support solar," and the policy question was whether they should do anything more than they had to, which was to provide the net metering program. He stated that the answer was that they had been offering more than they had to with the EWEB

DG program. He related that past practice had been to pass all of the benefit of solar power to the customer and not more and not less, striving for a benefit-to-cost ratio of 1.0.

Mr. Welch said the third question, regarding policy, was how to distribute the benefits. He reported that they had introduced a two-tiered generation rate the previous year wherein they strove for a cap on the size of the system so that they could distribute the cost to all of their customers. He observed that there was value in having energy both generated and consumed locally, and they built the rate accordingly.

President Farmer asked why they did not tie it to an index. Mr. Welch responded that forecasts were low at present, but he was not certain it would stay that way. He said the original basis for the construct was that they wanted to ensure that the customer would have a return on their investment. They had signed a 10-year contract at the fixed rate.

President Farmer asked if they were not just locking in the downside for EWEB with a ten-year deal for 25 cents per kW. Mr. Welch replied that they had not done this intentionally; it was not intended to capitalize on a short-term downturn.

Commissioner Ernst arrived at 5:52 p.m.

President Farmer remarked that what really drove such projects was whether or not they were able to obtain financing for them.

Vice President Brown asked where the money came from to subsidize the PV contracts. Mr. Welch replied that it came out of all rates.

Vice President Brown asked if this was a positive or negative impact. Mr. Welch estimated that it had cost \$3,000. He noted that the first 25-cent per kWh contracts would be expiring very soon, because they had been made in 2001.

Commissioner Cassidy asked if EWEB had a philosophical attitude about absorbing some cost in order to promote PV. Ms. Smith responded that initially they were not promoting PV. She said the early years it had been a pilot project and the rates had been structured to bring customers in to try it. She stated that now they were trying to bring the costs more in line with the real costs.

Mr. Welch stated that they had not conducted a rate analysis on the pilot rates.

President Farmer observed that the real subsidy was coming from the taxpayers and not the ratepayers.

Mr. Welch reiterated that they were trying to keep PV power rate neutral.

Commissioner Cunningham asked if it would be possible to create an investment trust at some point in the future so that people could invest in PV energy and receive a return on their investment. Mr. Welch replied that this concept had been discussed but had not gone anywhere "for lack of a champion."

Commissioner Cunningham asked if staff could estimate what the potential return on such an investment would be. Mr. Welch replied that he would not be able to make such an estimate.

Mr. Morehouse highlighted the *Generation Purchase Rate Schedules*, noting that staff was proposing four distinct rates, as follows:

- Small renewable net-metered (generation of less than 100 kW)
- Solar electric generation (generation greater than 10 kW and less than 1,000 kW)
- Renewable electric generation (generation greater than 10 kW and less than 1,000 kW)
- Non-renewable electric net-metered (generation less than 1,000 kW).

He reviewed the rate schedules. He noted that no one had inquired about any non-renewable net metered generation.

Mr. Welch said the item would come forward in the Consent Calendar.

Harvest Wind Project Update

Power Management & Planning Manager, Dick Varner, provided a PowerPoint presentation on the *Harvest Wind Update*. He said the Board had given staff fairly broad authority to execute agreements to bring the project to completion, but they were getting to the point at which they would have to take action that went beyond the scope of the resolutions approved thus far. He noted that the two tax owners of the White Creek project had been Lehman Brothers and Prudential – Lehman Brothers had failed in the economic crisis – and the firms that had been involved in these kinds of deals did not have significant tax liabilities any longer and were not looking to be partners in such projects. He related that the last stimulus bill provided some benefit to wind projects; a person could still pursue production tax credits but it would require that person to either have a tax liability and to take a risk on what the energy production would be over time. He said the tax credit provided 2 cents per kWh.

Mr. Varner stated that Congress had offered either production tax credits or investment tax credits, or an investor could take a 30 percent grant in lieu of the credit. He said the old entrants had given between 7 and 10 percent rates of return on investments and they were now seeing 11 to 13 percent rates of return from the new entrants. This had started to make the economics for utilities look less attractive. He related that they had felt concern about going forward with a tax owner concept, so the attorneys had come up with a project structure that would allow them access to the federal grant without having another tax owner involved in the project.

President Farmer asked if there was a risk that the federal government would decide that EWEB did not qualify. Mr. Varner affirmed that there was. He explained that it was due to it being a structure that appeared to be allowable but was unique and had not been acted upon by the treasury.

President Farmer asked if there was competition for the money. Mr. Varner responded that there was not. If an entity qualified for it, it received the money.

Vice President Brown understood that the government wanted EWEB to set up a 'Tenants in Common' arrangement with the other three utilities. He asked if this could cause trouble for EWEB with the Internal Revenue Service. Mr. Varner responded that EWEB and its counsel had been very clear about having full disclosure with treasury. They planned to open up and show them the structure along with attorney opinions that said this was how the statutes qualified this type of joint venture.

Vice President Brown understood from the information that the plan was to dissolve the agreement when the economy changed. He asked what contingency plan they had in case this did not happen. Mr. Varner replied that they could always remain taxable; it was simply a difference in interest rate. He said it was a little more advantageous to have a tax-exempt situation if and when they had the need for the power to serve EWEB's customers and to use the Renewable Energy Certificates (RECs) to supply the utility's Renewable Portfolio Standards (RPS) needs. He stated that until then, it served EWEB better to utilize taxable financing because that opened up everyone to EWEB as a market for power and RECs.

Ms. Smith related that it was General Manager Randy Berggren's feeling that given that the Board and staff had identified a couple of areas of key risk, maintaining as much flexibility in the first five years of the project relative to the output was important.

President Farmer observed that EWEB would have to come up with \$25 million upfront if they did not receive the grant money. He asked if that meant the reserve funds would have to "take a hit." Mr. Varner estimated that it would be a 1 percent impact on rates.

Commissioner Cassidy asked if EWEB had political influence it could call on. Mr. Varner responded that staff had engaged in some discussion about whether or not to "play this card up front or not." He related that the advice they received from the consultants working on the project was not to do so up front, but rather to hold it in reserve. He said then if they received a bad ruling from treasury they would look into whether there was a political option to consider. He explained that the problem with trying to exert influence up front was that it made it appear that EWEB was doing something that was not "on the up and up." He stated that they would draw more attention from treasury from making a political play up front than they would by just submitting the application.

In response to a question from Vice President Brown, Mr. Varner clarified that EWEB was not the lead on the project; all decisions had to be unanimous among the four parties.

Vice President Brown asked what the capacity of the other three utilities was to pay for the project if the grant did not come through. Mr. Varner replied that the other partners already had to secure financing for it. Ms. Smith added that EWEB had also done this. Mr. Varner said the other utilities had already worked through this with lenders, with the exception of the Cowlitz County Public Utility District (PUD), which planned to use cash. He stated that the joint ownership agreement had been structured so that no party would be required to step up for another party. He explained that if a party defaulted, their share would be marketed.

Commissioner Cunningham ascertained that the project entailed the construction of 43 wind turbines at the Harvest Wind site.

Mr. Varner highlighted the *Construction Status*, and noted that the project was almost entirely completed.

Commissioner Cunningham asked how many more turbines could be placed there. Mr. Varner replied that there was no room for additional turbines. He explained that in order to keep the turbines from interfering with each other, they had to be 250 to 300 meters apart. He added that the turbines needed at least 5 miles per hour (mph) of wind and would cut out at 40 to 45 mph of wind because at that point too much stress was being put on the blades.

Commissioner Cunningham thought it would be good to visit the site. Mr. Varner anticipated that there would be a formal dedication of the facility some time after the first of the year.

Commissioner Ernst commented that the sixth plan in the Northwest Energy Coalition (NEC) was looking to natural gas as the back-up for wind.

Mr. Varner said they would have to do something on the demand side to effectively manage the fluctuations of wind. Commissioner Ernst remarked that this was when smart grid technology should come in. She had read that some areas of Washington were using the technology.

Mr. Varner reviewed the *Power Costs/Cash Flow*. He stated that the Klickitat PUD had developed their transmission lines as a revenue center to support retail rates. He explained that there were so many wind projects in that area that they made a significant amount of money by providing transmission lines. He said what they were charging now was significantly more than what they had charged for the White Creek project two years earlier.

President Farmer asked what the control factor was: could they just charge whatever they wanted? Mr. Varner replied that once they signed the contract the rates would be locked in, subject to a known inflationary escalation over time.

Mr. Varner reported that the Bonneville Power Administration (BPA) had doubled its integration rates. He said this was largely attributable to opportunity costs in the hydro system, in other words being able to hold back significant amounts of the hydro generation.

Mr. Varner reviewed the *Power Costs Comparison*. He said the original cost estimate was very close to the latest cost estimate. He stated that they should add \$14 to the estimate for 2029 for the integration and transmission costs.

Continuing, Mr. Varner provided an overview of the *Harvest Wind 5-Year Cash Flow Estimate*. He related that the cash flow from the sale of power only was negative, but could be reduced by selling RECs. He said if they could find a party with a need to bundle power purchases and RECs together it could make the negative cash flow number fairly small. He underscored that EWEB would not have need for the power for the next five years, nor was there a need for the resource to meet the RPS. He said the option to bundle power and RECs might make the best sense to them.

President Farmer asked why the Board would want to support losing \$3 million over the next five years. Mr. Varner replied that they would want to support the project because it made sense over the course of 25 years.

Mr. Varner stated that they had put together the team that would operate the facility, listed on the slide entitled *O&M Team* and their respective responsibilities. He noted that the entity in charge of scheduling, The Energy Authority, was public power-owned.

Commissioner Ernst asked what the most expensive element was in the turbines and what lifespan they were projected to have. Mr. Varner responded that the thing most prone to failure was the gearbox. He stated that units like these had been in service for five to seven years and a number of the “wrinkles” had been worked out. He added that the availability of the White Creek turbines had been approximately 98 percent.

Vice President Brown asked if staff had conducted a sensitivity analysis on the rate projections to see what percentage of the rate projections they would have to be off to get it to be unproductive. Mr. Varner replied that if power prices, instead of increasing at inflation or slightly above inflation, were to increase at 1 percent or so they would begin to come to a point at which the project would either break even or prove to be uneconomic.

Mr. Varner reviewed the three actions that would be coming before the Board, the first of which – the 20-year power purchase agreement – was on the Consent Calendar for the subsequent regular meeting. He related that Peninsula Light (PenLight) would own the project at the utility level but will have set up a taxable subsidiary to be the power purchaser. He explained that this would ensure there would not be a complete overlap between the purchasers.

President Farmer observed that if this construct did not exist, EWEB would be selling power to itself and, if there was a default on the power purchase agreement, it would be suing itself. He asked if EWEB’s counsel had carefully reviewed the anomaly to ensure that in the event of a default somewhere, this would not happen. Mr. Varner replied that it would not create a problem because PenLight was ultimately “on the hook” for its subsidiary in the way the agreement was structured.

Mr. Varner said the other two items coming for approval would be a long-term financing agreement and the disposition of the power and RECs.

President Farmer adjourned the work session at 6:49 p.m.

Assistant Secretary

President