

EUGENE WATER & ELECTRIC BOARD
WORK SESSION
EWEB BOARD ROOM
NOVEMBER 15, 2011
5:30 P.M.

Commissioners Present: John Brown, President; John Simpson, Vice President; Bob Cassidy, Joann Ernst and Rich Cunningham

Others Present: General Manager Roger Gray, Debra Smith, Tom Buckhouse, Clay Norris, Bill Welch, Colleen Wedin, Eric Hiaasen, Sibyl Gieselman, Erin Erben, Adam Rue, Edward Yan, Michelle Martin, Susan Fahey, Cathy Gray, Joe Harwood, Cathy Bloom, and Anne Kah of the EWEB staff; and Vicki Maxon, recorder.

President Brown convened the Work Session of the Eugene Water & Electric Board (EWEB) at 5:30 p.m.

IERP DRAFT AND BOARD DISCUSSION ON IERP

Clay Norris, Power Resources Division Director, recalled that there is no prepared presentation for tonight's discussion, and that it will instead be a general discussion among Commissioners and staff with an opportunity for both to ask questions and offer comments.

President Brown explained the process for the discussion, with an opportunity for all Commissioners to comment, followed by a group discussion at the end of the first round of comments. He said he will try his best not to let anyone dominate the discussion and that he wants to be sure everyone gets a chance to participate.

Commissioner Cassidy made the following comments:

- Happy with the IERP's focus on conservation
- Every IERP advisory committee meeting he attended was a learning process for him
- Concerned about the IERP advisory committee not getting all the information necessary to make their decision, but liked their conclusion
- Was not impressed with the modeling that was used (polls) – not a fan of polls

After reading an excerpt from a book regarding about models for decision-making, Commissioner Cassidy reiterated that he is concerned about the criteria that was used in order to make changes to the IERP. Regarding the assumptions and goals, he still wonders "how we will know when we get there," particularly in the area of customer generation.

He added that he would like to maintain an even keel regarding solar generation and subsidizing rates by what is installed, whether that will be too much or not enough. He added that he doesn't want to interfere with the photovoltaic program or run it up or down, but again, "how are we going to know unless we have that kind of criteria?" He closed by saying that he wants to be caution about decision-making for the future.

Commissioner Ernst offered a historical perspective: When EWEB faced an energy crisis and was short on electricity; they borrowed money on the open market and paid a huge price for electricity. EWEB then looked at diversifying so that wouldn't happen again, and started accumulating other types of generation, including renewables. It was shortly after this that Commissioner Ernst was elected to the Board. EWEB acquired wind, hydroelectric, small photovoltaic, and now biomass, and everything was fine until the wholesale market crashed and made EWEB's diversified portfolio not look so good because of the cost of renewables.

Commissioner Ernst commented that she believes the IERP's philosophy is the way to go—that EWEB needs a diversified portfolio and that the next five years look pretty stable with surplus and additional conservation. She added that she would like to continue the diversified portfolio, but also be ready to accommodate any new technologies that come on line in the future.

President Brown thanked staff for their hard work on the IERP. He also thanked the IERP advisory panel members for their intelligence, diversity, engagement, and the value that their work provided to the Board. He said he looks forward to seeing the final draft of the IERP, as the Executive Summary that was provided captures some great points.

He agreed with Commissioner Ernst that the wholesale market did crash, but that he knew it wouldn't be that way forever. He urged staff to pay attention to economic forces and not be caught like they were in 2001, though some regulatory forces and policies have been adopted to try to ward off EWEB experiencing that type of economic shock again. He said the Northwest is very fortunate to have as much hydroelectric power as we have, and that can never be forgotten because that really what built up the Northwest from pre-electrified times, and is also what built rural areas and the region into what they are today. He added that since he grew up in the Northwest, he remembers direct service customers and the eight or nine smelting plants that sucked up a lot of power, most of which was off the grid. He wondered where we would be today if they were on the grid.

President Brown continued, saying that he is extremely pleased with the outcome of the IERP, and that its conservation targets, in his opinion, did a great job with targeting the point of diminishing return and where too much money will be spent. He added that he wants to be sure there is wiggle room to decide whether benefits should start to go out into the region vs. keeping them here, but that he would like to keep them here.

President Brown added that he is primarily interested in finding out if EWEB will move into a feed and tariff type format and, if so, where the money would come from, if not from rates. He said he does not want to hard code something, for example, no fossil fuels, in the IERP at this time, as there is still too much uncertainty about when the market will crack open and be better. He reminded his fellow Commissioners and staff that all it would take is one large load on EWEB's system for EWEB to be scrambling, and that must be addressed.

Commissioner Cunningham also thanked staff for their hard work, and that he feels the time spent has been a Godsend. He reiterated that he said in the beginning that any final IERP should show the goals of the community and where we want to be, within reason. He said he was not quite comfortable that would be arrived at until Commissioner's Simpson's recent e-

mail, which put him right where he hoped the Board would be. He agreed that EWEB needs wiggle room to move if photovoltaics become economical and if there is a need to vary that way or this way, and that he doesn't believe that fossil fuels are done, and that they are still much needed. He added that he is comfortable that the final draft of the IERP will be something in the middle of the above-mentioned goals. He reiterated that Vice President Simpson has an uncanny ability to set his position and feelings in writing, and that he admires that very much.

President Brown offered a different perspective, in that "I know what I don't know." He said he feels he cannot get to the level of expertise that this process deserves in his volunteer position. He added that his job as a Board member is to reflect community values, as his peer group elected him to the Board, and, with that said, it's not the way but the will, and the proposal has addressed that. He said that by what staff is proposing, EWEB can't control the way, but the will, and that conservation is a very good thing to do. He reiterated that he is not saying that he has a level of understanding of the "low-hanging fruit," but that he doesn't think many others in the community have been building with a more technical eye than him for appraisal and analysis of that fruit. He said there are still many "electric eyes" that keep the electricity on 24/7, and that there is still so much left to do to conserve. He doesn't believe he can give staff a technical recommendation beyond what the panel has decided, and reiterated that with their diverse backgrounds, they did an exemplary job, which will get EWEB to where they need to be through the next five to 10 years.

President Brown then commented that he agrees with Vice President Simpson that nothing should be codified that will lock the hands of the group and the ability to adapt to the market, and that the ability to change the charge on a customer's bill will be paramount. He noted that in the last six years he has not had to deal with a more demanding topic than electric bills and rates, and that customer's are very angry about the cost they are incurring for electricity. He urged Board and staff to look at the solar hot water heating system that has been installed at 15th & Chambers, which is just one of many. He closed by saying that he can't sit here and tell staff what to do, as he is still having trouble figuring out how to compute kilowatt consumption, but that he appreciates their hard work and is anxious to see the final draft of the IERP. He reiterated that he wants to make sure of where EWEB is and where they are going, but that he doesn't have the technical expertise, and that he has to interpret community feedback, primarily the ability to control power costs.

President Brown then began the next round of discussion, which has been allotted 30 minutes.

Regarding maintaining load growth through conservation, Commissioner Cassidy commented that he is not thinking about using reserves but more about the rate that will be paid for that conservation, and is it enough, and that the ability to monitor this will be key.

President Brown agreed this is a great point.

In response to Commissioner Cassidy's comment, Commissioner Ernst commented that no EWEB conservation program is stand-alone and that they are funded by 5% of rates. She said she had just received a list of conservation programs along with the cost/Kwhr or MW, and that

she believed the Board had given staff adequate direction on what they want to spend on those programs. She asked Commissioner Cassidy if he is referring to the possibility of ramp-up and asking whether or not it should be detailed.

Commissioner Cassidy replied that he indeed is asking about that possibility, but that he thinks it should be generalized not detailed, and that if those are EWEB's resources for the next five years, there is going to be a budget issue.

He then read a prepared statement:

“We currently have surplus power, but the scales will eventually tip the other way, so our long-term position shouldn't sway our thinking too much. Our policy must always be forward-looking and must take the swing into account.

We are currently diverse in our power portfolio. This is a good thing, and we should strive to be ahead of the State renewable portfolio standards (RPS) to maintain our industry leadership position.

I want to emphasize hydro power, conservation, storage, efficiency, time-of-use tariffs, residential (kW) demand charges, and combined cycle natural gas to meet an unexpected load increase.

I will bring resources forward to defeat a solar feed-in tariff (FIT) because I believe the financial model is unfair, and that the Pacific Northwest is not an ideal place for photovoltaic (PV) panels.

I have no interest in hard-coding any commitment in the IERP to move away from fossil fuels. I would be in favor, instead, of terminology that slowly steers us away from technologies which have large pollution footprints, such as un-scrubbed and un-sequestered coal.

I am supportive of demand response technology (utility-controlled load shedding/adding) to help integrate variable renewable resources and to avoid sizing our plant based on peak power. I want EWEB to fully explore this option to the point of diminishing returns before enacting a time of use (TOU) tariff.

I care for our environment. We should make efforts to reduce CO2 and greenhouse gas emissions over the long run, and do our part to help protect native fish runs.

On a final note, economic prosperity is extremely important, and our long-term decisions should not stifle or burden business growth in our community.”

Regarding the “low-hanging fruit,” Vice President Simpson noted that there are plenty of options, i.e., compact fluorescent bulbs (though other communities may not have them yet), more homes to be weatherized, and a possible rejuvenation of the hot water heater blanket program, as many have probably corroded over the years. He added that he is also excited about the density of high-efficiency hot water.

He reiterated that conservation involves not only efficiency but also customer behavior, and encouraging people to get by with less if so inclined, with the community as a whole leading the way and plenty of opportunities to address the waste not/want not factor.

He continued, saying that conservation also includes education messaging and feedback. For example, 15-20 years ago you could walk into almost any business or restaurant and there would be a sticker affixed to the light switches that said “turn me off.” He said he doesn’t see those now, and that EWEB should do that again. When consumers consume products of any sort, as long as they are given a direct matrix of how much they are using and when, they naturally conserve, and right now EWEB doesn’t do that, either. He noted that the smart meter program can reduce consumption by 18% when the customer is given the feedback to do so.

He closed by saying that the electricity landscape is changing--long on energy but not capacity--and that electricity or water is a combination of the product itself and also its rate (i.e., how many gallons per hour of water are running through a pipe or hose). If you fill up a five-gallon bucket with a tiny hose and run it all night, and in the morning you have five gallons, or you open up a fire hydrant and fill it in half a second, it yields the same amount of water or energy, only the fire hydrant puts a major demand on the system. The same is true with transmission and distribution, but with power plants in the background, and EWEB will soon be dealing with capacity and not as much with energy.

Commissioner Ernst commented that she has read IERPS from other utilities, including Clark County PUD and Snohomish County PUD. She recalled that the notes she had previously sent to the Board listed what she would like discussed in the executive summary, i.e., detail about power generation, loads and demand response; an updated discussion on AMI and how it would benefit customers; a discussion about conservation and its various programs; and a blurb about distributed efficiency—how EWEB is updating its own power generating stations, etc.

Commissioner Ernst then confirmed that she is speaking in terms of the next 20 years, not the next five. She said she hears the preference to strive for flexibility and diversity and to not omit anything. She said she would at least like to approach the subject of getting completely away from fossil fuels from a sustainability viewpoint, but that doesn’t mean that is set in stone and, in order to have that flexibility, she feels the IERP doesn’t have to say where the power generation should come from or how much. She believes the important information is how the Board has developed a policy that looks at acquiring power generation and using the TBL, and to include that in the IERP, and that any power generation sources put out there will then be subject to the TBL decision-making process in order to maintain that diversity and flexibility.

She continued, saying that she is seeing a lot of small hydroelectric, utility scale solar, customer-owned generation, geothermal, landfill gas and biomass (only with combined heat power), and that some of those are in the summary that staff gave the Board, but she wants to look at new power generation and energy store technologies as they appear, and thermal is also important. She also said she would like to see something that talks about fuel source comparisons for renewables and non-renewables, and to possibly include charts regarding power generation and how much of that is resource and how much is capital, i.e., an allocation of costs.

In summary, she said she hopes that as a Board, they will be able to give General Manager and staff direction on what they would like to see and how staff can make that work.

She added that she had heard in the IERP meetings that power generation is traditionally based on demand, but for the future EWEB should think about demand based on the amount of power generation available, and also look at decentralized power with EWEB as the distributor in order to for generation to become a greater portion of total diversity in the power portfolio.

Commissioner Cunningham commented that he doesn't think the TBL needs to be used in decisions like this, and that this is a policy decision. He believes that the real bottom line is that the average customer isn't going to know that an IERP exists, nor will they care; and that as long as power is delivered at a reasonable cost and there is good service behind it, that's all they care about. He said he doesn't believe power should be based on availability, but on a community need and that it is there when they need it. As far as the angle for AMI, it also boils down to consumer needs, as the average customer just wants efficient energy and water, and EWEB does this best, with very few outages, probably better than any other utility in the region. He closed by saying that there are going to be days when the trading floor will dictate what EWEB does, and so be it, or a new business into town will dictate it, i.e., another Hynix. He added that he would like to continue to move forward, and to let EWEB's legacy follow Vice President Simpson's statement, and that that statement should be the cover letter for the IERP.

President Brown then asked for questions from the Board. He said that he heard "low-level hydro" mentioned, yet Blue River can't be used. He then asked for an example of low-level hydro. Vice President Simpson gave the example of a customer who does not live in the core of town but lives in the hills and has access to a creek, who gets some type of permit or license to build a mini dam and run a pipe downhill about 100 feet and spins it through a small generator, whereby they fill up a couple of batteries and generate a few kilowatts.

President Brown asked if there will be environmental problems with touching a stream and if there will be any more hydroelectric permits issued. Mr. Norris replied that that will be a challenge, but one example is the Carmen diversion tunnel, which has a lot of flow but little head. He added that the existing infrastructure has already affected the environment so there would not be an incremental change.

President Brown recalled that there was a large customer who came close to relocating to Eugene, and wondered if five years into the future this same customer does relocate to Eugene and is ready to launch, could we meet that load at 30 MW?

Eric Hiaasen, Senior Energy Resource Analyst, replied that with the Hynix situation, they built their facility faster than EWEB could build a power plant. He said that EWEB could serve that power in the initial year or two from the market and then find sufficient time to build something else, and evaluate as soon as possible if they wanted to continue serving from the market or acquire a long-term contract. Mr. Norris added that even with 30 MWs, there would be some months when EWEB probably wouldn't need to buy anything.

President Brown then asked how the CILT would be structured if EWEB has demand response and feed tariffs, etc. He wondered if the City would get a percentage of that revenue and if that would be subject to 6% or 18%. Mr. Hiaasen replied that if it's a net meter, that customer wouldn't be buying EWEB's product and that in turn would reduce the CILT payments. Mr. Norris replied that the only exception to that would be if EWEB had to raise rates to cover the cost, which would then result in EWEB getting more revenue.

Vice President Simpson asked if EWEB is able to specify the type of fuel, or just generic electricity, when they go to market to buy power. Mr. Norris replied that it depends on the transaction, and in many cases EWEB just gets index power, and that is whatever the supplier provides, but in some cases EWEB can go to a generator and say they want the output of that generator and, if it is out, EWEB doesn't get the power.

Vice President Simpson commented that his view is in contrast to Commissioner Cunningham's view—he believes that the average customer is very smart and very aware, and if they are not, they are interested in learning and capable of absorbing the information. He said he believes EWEB as a utility is still pretty old-fashioned, with 100 years of delivering power in only one way. EWEB provides extremely reliable high-quality power and that takes a lot of money, but if EWEB fails to plan, “mark my words, there will be rolling blackouts.” He added that electric generation, consumption and technology is a real time deal, and every single second there needs to be the correct amount of generation for the correct amount of load.

He said that if one reads the background on adjustment of the solar tariff, every distributed generator is required to install their system according to electric code and have a disconnect, with a clear view of the disconnect. The trucks can roll, the lock can be cracked open, and power can be cut off, but when EWEB has 88,000 electric customers, they're going to have to start to think differently. He said this is not something the current EWEB Board has to worry about, but in 20-30 years that Board will have to think hard about that.

Commissioner Cassidy said that he disagrees with Commissioner Cunningham's comment regarding the TBL, and that he thinks it is in fact essential for decision-making. He said he doesn't believe the average EWEB customer wants just low rates and nothing else, and that EWEB's rate is very good considering what the customer gets for that rate.

Commissioner Cassidy then said he agrees with customer behavior being an integral part of conservation, and that the main point he got out of the IERP summary was that “competition” and motivation is what spurs people to do more conservation, i.e., when they are told that they are not doing as well as their neighbor regarding conservation, recycling, etc. He believes that the key focus for conservation for the next five years should be renters and low-income customers.

Commissioner Cunningham commented that he has served on three elected boards in Rhode Island and now two in Oregon, and that when he came to Oregon he was amazed that so much time, money and effort is spent to promote their wonderful diversity and human rights programs, etc., when in the Northeast that isn't necessary because people are brought up and taught to be that way. He also wondered why so much time and money are spent on the TBL,

when he would rather spend taxpayers' money on doing something for the public, and not on diversity, because it should already be happening. He added that his feelings are just as true as Commissioner Cassidy's and that he feels strongly about community, but that if he talks to 20 blue collar workers, the majority of them would not know what conservation is. He closed by saying that Vice President Simpson's comments will help to make sure that one special interest isn't favored over another.

Commissioner Ernst commented that she agrees on a certain level that there are a lot of customers who don't think about conservation and just turn the lights on, but she believes that makes it that much more EWEB's responsibility to make sure energy security is maintained now and in the future. She added that EWEB has always had a great reputation for not only providing reliable power at low cost, but also being good stewards of the environment and sensitive to customers' needs, and that she would like to see that maintained into the future by developing conservation programs and power generation.

Commissioner Ernst continued, saying that some power generation sources EWEB has now aren't as clean as they could be, and if some of those contracts run out, EWEB should look at new technology and replace those with renewables that are cleaner and more sensitive to climate changes, CO₂ emissions, etc.

Commissioner Ernst closed by saying that she believes the Board should look at the IERP on an annual basis and make every effort possible to update it every 3-5 years, especially if new technology or a new large load comes on, or if there is loss of a large load. At the very least, she believes that EWEB could write an Executive Summary action plan for the IERP on an annual basis.

Commissioner Cassidy agreed with Commissioner Ernst.

President Brown commented that he agrees with diversification and cleaning up power generation sources, but only if it is affordable, and that EWEB can't just do everything that is environmentally sensitive. He believes education is key, i.e., he recently found out he either has to use the old refrigerator in his garage or spend \$1,100 for a new refrigerator, because current electrical code causes the old one to shut off when it gets cold. He said he was amazed to hear that, and that is an example of education for the customer. He said he can't wait to have a machine that turns on the clothes dryer or dishwasher at whatever time he decides to in the early morning, and that he is looking forward to the technology change and the AMI program. He again thanked staff for their hard work.

Vice President Simpson commented that he had pushed the defer button on his dishwasher this morning and that it came on at 11:00 a.m. instead of 8:00 a.m., which he thinks is better in terms of conservation. He said he hears Commissioner Ernst's call to review the IERP more often but that he is not convinced that annual review is necessary, and he suggested that it be at least every three years, which would allow a single-term Commissioner one opportunity to go through the review process.

Vice President Simpson continued, saying that the history of environmental stewardship is sordid and ugly in our nation, and that we haven't been kind to the environment for a long time. He believes that his generation is cleaning up a lot of that, and that has a lot to do with additional environmental sensitivity and the additional cost to do business, yet, as President Brown mentioned, affordability is extremely important, especially in soft economic times. He added that he doesn't want to dismiss the TBL but he would be interested in talking about putting various weighting factors on it to shift one way or the other.

Commissioner Cunningham commented that he would like to see a moderate review of the IERP every three years and a major review every five to seven years. He added in his opinion, the least amount of time the Board has to put their fingers on things, the more work gets done, and he would like to eliminate micro-managing by the Board.

Commissioner Cassidy noted that the IERP advisory committee had focused on the TBL and that if there is going to be Board revision of that issue, it needs to be clarified. He asked for further comments from staff and the Board regarding this issue.

Commissioner Ernst commented that when she read the TBL policy, it didn't state that each tool gets an equal decision-making process, and that the model she has seen leaves that open for the final decision-making process. She said that five years from now, if the economy is better and EWEB is faced with a lot of load, the decision-making process will be different.

President Brown commented that he feels TBL is important but not all-encompassing, and that he agrees with Commissioner Ernst that it is subjective, and an opinion. He used the example of spending \$1 million on a high-technology water system in a building in which the toilets are flushed only about six months out of the year—so how much energy is wasted on stainless steel, etc. so that 1,000 gallons of water can be saved?

Commissioner Cunningham confirmed that he did not say he wanted to eliminate the TBL, but rather that he doesn't think it needs to be used in every situation, because it's extensive and slows down projects. He reiterated that he believes TBL needs to be considered at General Manager Gray's discretion.

President Brown asked each Commissioner to take up to three minutes each to make closing comments or ask questions of staff.

Regarding TBL, Commissioner Cassidy commented that it is sometimes too expensive and that if EWEB wants to achieve the lowest possible cost, it shouldn't be used. He added that the Board should pick and choose when they use TBL to get a certain answer, and focus more on long-range goals.

Commissioner Ernst commented that it is important to think about what legislation can and can't do in the future, and that the state of Washington is different than Oregon in how they use IERP portfolios, as they have to follow mandates from the energy plan and the regional council. She believes that may happen in Oregon some time in the future, and that may change EWEB's IERP. She said she had just learned this evening about a bill passed in Washington that

excludes hydro, so that when they set their renewable portfolio standard, hydro can't be included. She added that the way EWEB sets their renewable portfolio standard is to set a renewable limit and then be able to take the load and subtract all hydro that serves that load, and whatever is left over is what is looked at in order to have a percentage of that renewable.

Mr. Hiaasen noted that the key difference between Washington and Oregon is that Washington's RPS requires that an IERP be done every two years in order to displace old renewables with new ones. He said that EWEB and most public utilities in Washington are overwhelmingly non-fossil fuel, and that the Washington RPS requires going out to build for 3%, 6% or 15% based on the year of new renewable resources, even if they're going to turn around and sell to the market. He added that Oregon is much smarter, in that they have an exemption for legacy hydro such that a utility isn't required to build new renewables, but to displace old legacy renewables sources. He noted that legacy is not part of the problem and that EWEB is not forced to go out and do that.

Commissioner Ernst suggested putting something in the IERP to clarify the differences between Washington and Oregon requirements for displacing old renewable resources.

Mr. Hiaasen replied that it is his understanding that Washington is changing their law to be more like Oregon's, and that Washington's law was largely written by the wind lobby in order to encourage a reaction in Washington.

Commissioner Ernst said she was amazed to read that by 2019, Clark County PUD is required to have 90 aMW in place in addition to what they already have. She added that this type of a requirement would put EWEB in a difficult position.

Vice President Simpson commented that he believes an IERP constitutes long-term planning and not short-term, and that he appreciates and welcomes many forward-looking pro-environment renewable options that Commissioner Ernst is pulling for, and will embrace that in the long-term view. However, he said he gets cold feet (as much as he loves and promotes renewables) about the cost, especially in today's soft economy. While he believes that an IERP is long-term, he doesn't believe this economic climate is long-term and, as such, it is acceptable to green up EWEB's IERP appropriately and have forward-looking vision statements included in it that are not hard-coded to be implemented in any particular year, and that it could almost serve as a vision and direction type of policy document. He reiterated that he is very pleased with the proposed IERP in executive summary form and looks forward to seeing the final version, including power diversification.

Commissioner Cunningham again thanked staff for their efforts, and also said he would like the Board to send a letter to each of the IERP advisory committee members, thanking them for their time and efforts. He said that just because the state of Washington does something, that doesn't mean it's right, and that he worries only about the state of Oregon and its requirements, because that's where he lives. He said he agrees with reviewing the IERP every three years and also with the renewable basis in the sixth year, and that he will leave that up to staff. He reiterated that he wants to leave some wiggle room for veering this way or that if the need arises, and that it should be that way for the next five years to hopefully battle the recession. He closed

by saying he looks forward not with fear, but with the glass being half full, and he believes the community will move forward and good things will happen.

President Brown commented that he hears 100% load growth through conservation so that there is not much to acquire as EWEB doesn't need it and that EWEB has ways to buy rather than acquire resources for the long-term. He said he is very much in support of the community going forward and demonstrating its conservation ability, as that is a wonderful thing to do. He noted that EWEB is no longer spending money on a project on Foote Creek or somewhere else, but rather in Eugene, with local workers contributing to meeting that load growth and the TBL, so there's a double benefit. He said he believes EWEB can change customers' bills in the right direction and he looks forward to spending money wisely, locally, and on education.

Commissioner Ernst reiterated that in a 20-year plan she would like to see a vision of what it would take to bring those resources on line, especially as some of the long-term contracts run out and EWEB considers replacing them.

Vice President Simpson commented that increased conservation is important because EWEB won't need to build additional transmission facilities, as no one wants them in their backyard. He said that is the message that he would like to see EWEB emphasize as they get the word out about the IERP and the chosen path to increase conservation and get other benefits out there.

President Brown then asked for feedback from staff.

Mr. Norris commended the Board had a healthy discussion which brought up some very good points. He recalled what he had heard from the Board:

- General support for the direction of recommendations focused on conservation to meet all load growth
- Would like to see more emphasis on the long-term and recognition that we want monitor technologies, and how that might shape the portfolio beyond five years (staff has been focusing more on the first five years, and this reminds staff to think beyond that)
- Consensus like the Northwest Public Power Council has done with the 6th plan, a long-term plan with a five-year action plan with mid-term check-in, and before the 7th plan, a check-in to see how they're doing, partially in response to feedback on conservation targets.
- Utilities have a chance to weigh in this way. In the three-year time frame, it makes perfect sense to come back with not only a review but an assessment on how things are going and how it compares to what was planned.

Mr. Hiaasen said that he agrees that staff needs to plan more frequently, and that Commissioner Cassidy is correct that models are often wrong. He said he feels it is important to not allow too many years to go by before work and assumptions are checked to see if they make sense, and to constantly reevaluate. He gave the Board a heads up that there will be a conflict that will raise folks' attention, that being, by virtue of the fact that the IERP will go further in meeting all forecasted need with conservation, combined with long-term 20- or 25-year power

purchase agreements expiring at the end of that, EWEB's portfolio will look less diverse than it does now. He said customers need to understand that it was a conscious choice to go after conservation as the lowest cost resource, but the pie chart in 2030 will show smaller slivers because the contracts are expiring and won't be renewed because staff doesn't think they will be needed.

He added that there are advantages to diversity, but they are not so great that EWEB would want to say give us conservation and go get a renewable resource, and that may change in a few years if the price of solar photovoltaic declines, so that may be sought instead.

Erin Erben, Power Planning Manager, thanked the Board for a great discussion and said that she had worked with Mr. Hiaasen and Sibyl Gieselman, Power Resources Analyst, and their directions are aligned. She added that she was glad the Board requested a vision mandate or direction instead of trying to be prescriptive 20 years out, as things change and EWEB needs to be flexible in order to adapt.

Jeannine Parisi, Community and Local Government Outreach Coordinator, said she had heard a lot tonight about a balanced approach and community values, and a lot of that had to do with the IERP advisory committee. She gave the advisory committee another shout out for their efforts and also appreciated the Board for listening to the committee's suggestions. She said that staff conducted a feedback survey with the advisory committee at the end of the IERP process to ask them if they felt like they got what they signed up for, and that the feedback was very positive. She added that one of the questions they were asked was would they do it again, and they unanimously said they would.

Commissioner Cassidy said he would like the IERP executive summary to explain how staff will evaluate whether or not they are on target so that the Board has something to go by when they allocate funding.

Commissioner Ernst asked for confirmation that the Wauna contract expires in 2013 and that the International Paper contract expires in 2016.

Mr. Norris replied that the International Paper contract expires in 2016, and that the Wauna contract starts in 2016 and will be shared with Clatskanie PUD for five years, then expires in 2021, and will be re-negotiated.

Commissioner Ernst reiterated that she believes it is important for the IERP to state that just because renewables and their costs are mentioned, that doesn't mean they will be acquired, and that customers will acquire them anyway as they go along. She asked for confirmation of her understanding that the law is if someone puts out generated power, EWEB has to purchase it.

Mr. Norris replied that is correct under certain criteria.

In regard to Commissioner Cassidy's comment regarding models, General Manager Gray commented that 20 years ago utilities debated assumptions, and they were so focused on the assumptions that they realized they had the wrong model, and the paradigm shifted completely

for a situation that no longer existed. He thanked the Board for a great discussion and said that they are now going to put EWEB's entire resource plan on energy efficiency and demand response. He urged the importance of capacity, and noted that the Northwest has never focused on capacity, but that it has become critical with the demise of hydro systems and using less and less hydro for a variety of reasons. He added that the Board now has consensus even with some tactical differences, and with the help of an amazing citizen advisory committee who ended up being "frighteningly aligned" with the Board and staff. He said what becomes most important is the ability not to focus so much on the forecast and being confident that it is right, but the ability to develop a strategy that is adaptable, can be monitored, and can be adjusted if necessary.

General Manager Gray continued, saying he is in favor of routine lighter IERP reviews as opposed to a major review every 5-7 years. He wondered how far away EWEB is from a 5- or 20-year vision, and he noted that in today's utility industry, one cannot do a hard right or a hard left, but must go toward a vision and make adjustments along the way. He closed by saying that he believes the IERP contains a good strategy that the community and EWEB can be proud of.

President Brown thanked his fellow Commissioners and EWEB staff for a great job of staying within the allotted time limits and for a great discussion.

President Brown adjourned the Work Session at 7:18 p.m.

Assistant Secretary

President