EUGENE WATER & ELECTRIC BOARD REGULAR SESSION EWEB BOARD ROOM AUGUST 6, 2013 5:30 P.M.

Commissioners Present: John Simpson, President; John Brown, Vice President; Dick Helgeson, and Steve Mital

Others Present: Todd Simmons, Roger Kline, Steve Newcomb, Mel Damewood, Cathy Bloom, Suzanne Adkins, Mark Freeman, Lena Kostopulos, Jared Rubin, Lance Robertson, Brad Taylor, Susan Eicher, Dave Churchman, Harvey Hall, Greg Armstead, Adam Rue, Sibyl Geiselman, Dan Morehouse, Anne Kah, Erin Erben, Lisa Atkin, and Taryn Johnson of the EWEB staff; Vicki Maxon, recorder.

President Simpson convened the Regular Session of the Eugene Water & Electric Board (EWEB) at 5:30 p.m., and said that Commissioner Manning will arrive later.

AGENDA CHECK

President Simpson stated that the Board is working off Version 2 of tonight's agenda, as item #10 has been converted to one item instead of two, due to the Water Operations Department's continued work on system development charges.

There were no other items.

ITEMS FROM BOARD MEMBERS

President Simpson stated that he had traveled to Grand Coulee, Washington to tour the dam and hear a presentation by the Corps of Engineers and the Bureau of Reclamation. He said that it was entertaining and eye-opening trip and a great opportunity to do some team building, and that he appreciates the support from his fellow Commissioners and from staff.

Vice President Brown echoed President Simpson's comments regarding the tour of the dam, and added that it was great to hear about the fish screen technology at Chief Joseph Dam, where they have done away with fish screens. He noted that it was also helpful to get first hand information from other utilities about the shortage of skilled workers in all aspects of the utility industry.

Vice President Brown stated that he hasn't been able to contact anyone at Rosboro Lumber regarding the Rosboro Bridge, but that he had received an e-mail saying that they have plans to revisit whether or not they are going to decommission the bridge. He added that the email also stated that Rosboro would be glad to work with anyone who might want to restore the bridge, but he wasn't sure EWEB would be inclined to do that, and that he will report back when he gets more information. Regular Session August 6, 2013 Page 2 of 27

Commissioner Helgeson thanked staff for last week's tour of Carmen-Smith.

Commissioner Mital echoed his fellow Commissioners' appreciation regarding the tours of Grand Coulee and Carmen-Smith. He then recalled that a disconnect in the process for a public budget committee had been exposed at a previous meeting when some of the Commissioners had believed the process was going to happen in October 2013. He noted that when he read the minutes from that meeting, it was clear that all five Commissioners weren't completely clear about the timing of that process, and that because they weren't clear, staff wasn't clear. He suggested that some time be set aside at a future Board meeting to get consensus on what the Board is looking for in terms of public engagement for the budget process.

President Simpson suggested that a 15-minute discussion of the above be held at the end of tonight's meeting if there is time left. Roger Gray, General Manager, agreed, and recalled that he had sent an e-mail about what had been discussed in June.

PUBLIC INPUT

Joe LeFleur recalled that he had previously provided the Board with a video showing the general absence of birds upriver, in his opinion due to cell towers converting from 3G to 4G. He thanked the Board for their response (by letter), and read a portion of the letter that the Board had sent him. He noted that this is an ongoing issue and that a concerned scientist would have checked into it more thoroughly, and he asked the audience to notice how rare bird flocks have become next time they go to the Walterville Pond and Leaburg Lake areas. A concerned scientist would have checked on it more. Ongoing condition. The next time you drive in the countryside, notice how rare a flock of birds have become. Walterville Pond and Leaburg Lake. He then offered the following conclusions about smart meters (based upon his research and observation):

- 1) "Smart meters take away good jobs, replacing people with gadgets.
- 2) Time-adjusted rates will penalize those who cannot adjust their daily electric usage due to family or job time restrictions; in effect, creating additional tax on the working class families.
- 3) Smart meters will allow clever thieves to know when you are most likely not home during the day.
- 4) There is real controversy over whether smart meters actually result in savings for the utility in terms of significantly reducing peak power demand. It is questionable whether they will pay for themselves aside from the job reductions.
- 5) They will significantly add to the microwave smog we are already living in, especially if smart-enabled appliances begin sending microwaves from a number of sources through your home.

- 6) The microwave smog is having a terrible effect upon our environment that can be seen by anyone who is being observant. It has been well-documented in numerous studies, particularly on bees and birds. Our rural bird population has been decimated. It has become rare to see a flock of birds out in the country. Birds have abandoned Walterville Pond and Leaburg Lake.
- 7) Microwaves cause cancer and other medical problems in humans. This is pretty well documented. Other countries are ahead of the U.S. in coming to realize the health and environmental effects of the microwave smog.
- 8) Smart meters do make some people quite sick in a short time frame. There are numerous pending lawsuits by people who are obviously not making this up. There are lawyers and law firms announcing their eager willingness to help.

Summary: Smart meters equate to job loss, invasion of privacy, more environmental destruction, long-term health hazards, immediate illness to some, and legal liabilities.

It will be the rate payers who will suffer the consequences if EWEB assumes this huge liability risk and faces the legalities now being experienced by others."

Betty Porter gave the following testimony: "I am confused as to why you would be considering spending millions of dollars on wireless 'smart' meter technology as rates for electricity are about to increase again, conservation programs have been cut, and there are serious medical and safety issues.

Pending court cases across the country, including California, have not been adjudicated and potential future liability issues for EWEB are certainly a concern.

Dr. Dart noted that about 4500 people in Eugene would be 'hypersensitive' to EMFs, but this appears to be the tip of the iceberg.

I have been talking to people who had no health problems until wireless meters were installed.

In one case, a Neptune water meter was installed on the other half of a duplex, and in three days, a woman and her house mate developed tinnitus, then headaches, insomnia, heart palpitations, skin tingling, nerve problems and what is called 'brain fog', to the extent that she could not remember piano pieces that she had played for 30 years (she has a Masters degree in music.) And well-established house plants began to die. Her description of wireless meter technology: 'A hideous nightmare.'

Wireless gas meters were installed in Eugene in 2007. A woman in excellent health began getting sick in 2009, eventually experiencing profound fatigue, dizziness, tinnitus,

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malaise, confusion, brain fog and memory loss -- dry eye sockets, strange headaches, all-night insomnia, unquenchable thirst, balance problems, anxiety, chest pains and heart palpitations. When she finally discerned the cause, she canceled her gas service and now sees Dr. Paul Dart for what she knows will be a lengthy recovery, as she has developed hypersensitivity to ALL EMF sources.

The question is - how many additional people will be 'hypersensitive' in coming years?

We seem to be rushing pell-mell down this track and I don't understand why. What is pushing this along so quickly? Why can we not take the time to ponder and investigate more deeply?"

Megan Clark gave the following testimony:

"I am here today to point out to you a culture of denial that surrounds the smart meter proposition. In the report that was published about Dr. Dart's presentation on July 23, reporter Josephine Woolington of the Register-Guard doesn't once mention the word cancer. I, myself, saw Dr. Dart present graph after graph showing a correlation between cancer and the kind of radiofrequency that smart meters would emit. The Board only questioned that the studies were done in Europe. Did you think that would negate the studies?

I have been a breast cancer survivor for the past 10 years. I'm glad to have made it. I was able to survive, in part, because I embraced lifestyle changes that reduced the insults to my immune system. I stopped using carcinogens in hair dye, makeup, food, etc. I began cooking more nutritious foods. I retired after teaching in public schools for 30 years. I adopted many other healthy practices. I've declined to use a cell phone. These are choices that I have control over. However, if my community uses smart meters with frequent chatter, then I will have no control over that particular insult to my immune system, and it leaves me vulnerable to getting cancer again, even if I opt out of the program.

I'm not the only vulnerable one. We're all vulnerable. There is no level of acceptable risk here. I ask you to wait until you are sure that you have a truly safe meter to buy, and that you aren't just kidding yourselves.

Dr. Dart said that data collection every two weeks during the daytime would be the way to go if you went ahead with your proposal to adopt smart meters. Would you agree to that condition or would you succumb to pressure to mine for data more frequently?

How can we, the public, trust that you would adopt this way of doing things without changing it? What are your plans to safeguard your constituents now that you have been informed? If you cannot find a meter that doesn't barrage the public with radiofrequency emissions, then I ask that you drop this project. After all, a critical risk factor in our health and well-being is in your hands.

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Jack Dresser echoed what Ms. Clark stated, reiterating that the cost of litigation, settlements, judgments and potential lawsuits will ultimately be borne by EWEB ratepayers. He noted that radiation has been linked to DNA breakage and the inability to repair such damage, and that the World Health Organization (WHO) has stated that it is "a possible human carcinogen." He noted that an Austrian scientist who was working for the worker's compensation board had stated that cellular phone use results in broken DNA and increased cancer risk, and that cellular phones have opened the door to personal injury claims in the entire country, and he quoted several recommendations that the WHO has made in order to avoid a "potentially serious risk."

Bill Evans said smart metering feels like an invasion to him. He wonders if he will feel safe and if he can invite others to his home, and he said he is surprised that EWEB is representing it as a technology upgrade for their metering system, as it is way more than that with its health and privacy issues, and that the reason for it should be more important than to eliminate or reduce meter reading. He stated that he was disappointed in the recent smart metering information session when Dr. Valberg had basically said not to worry about it. He added that he was also disappointed that EWEB had asked Dr. Valberg to make a presentation because he is well-known for hiring himself out to promote industrial projects and that he has testified in favor of fracking and for several tobacco companies.

Cindy Allen gave the following testimony:

"As someone who worked in the Emergency Room and is originally from the South, I saw firsthand the devastation to my town, first from industrial pollution and then the Gulf Oil spill.

The rhetoric that the public is given to tell them 'how safe they are' does not match up to what the people are actually experiencing.

Unfortunately, I see similarities to the new technology of the smart meters--one of the most controversial subjects on the Internet today.

I have health challenges, as do many people I know. I do not want a smart meter attached to my home, beaming out a microwave signal—something that I can't turn off even when I'm trying to sleep.

In Dr. Paul Dart's presentation, he detailed how the technology, when used especially at night, disrupts melatonin--one of the body's strongest antioxidants for cellular repair.

I have read the stories on the Internet and listened to friends who had the new smart meter forced on them. Symptoms include insomnia, fatigue, headaches, memory loss, heart arrhythmia, worsening of health problems, etc.--the observable symptoms. When the body is compromised, one is at increased risks for cancer and auto-immune disorders. Regular Session August 6, 2013 Page 6 of 27

EWEB has the extra responsibility of being a publicly owned utility. In addition to the initial meter cost, what type of liability insurance will be carried to protect the people of Eugene from having to pay in class action lawsuits?

What about your own personal liability for choosing the company and its technology?

England and Italy have said, 'No to the smart meter.' Several cities in our country have a moratorium on them. The reason that smart meter technology is one of the most Googled and controversial subjects today is that citizens feel that their rights have been taken away, and the negative feedback about them is overwhelming.

Doctors are coming forward to tell what they are observing in their patients. A film is soon to be released about them, Take Back Your Power; see the trailer at <u>www.takebackyourpower.net</u>, and also several books.

Do you really want to sign on a public utility to this 'hornet's nest?'

If I were in your place, my response to the smart meter would be 'what's the rush?""

Ruth Duemler gave the Board a copy of an article called "Smart Meter Dangers: The Health Hazards of Wireless Electromagnetic Radiation Exposure," by Dr. Ilya Sandra Perlingieri (from <u>Global Research</u>, July 13, 2012). She also gave the following testimony:

"I have worked for over 30 years on health care issues. I had my doubts and I didn't understand when people commented on the possible dangers of electromagnetic radiation exposure. These last few months I have had four friends with brain tumors, with two passing away. They were all cell phone and wi-fi users. I am a senior citizen and I have never before experienced having friends suffer with brain tumors. I have to ask why all of a sudden brain tumors are becoming common, and cancer--among men, one in two, and among women, one in three. It has made me consider the dangers of exposure to cell phones, wi-fi, and now smart meters.

Dr. David Carpenter, a former Dean of the School of Public Health, State University in Albany, New York, notes that evidence of the link between long-term cell phone use and brain cancer comes primarily from northern Europe, where cell phones have been in use a long time. It is now thought to be epidemic.

Dr. Carpenter's statement was signed by over 40 medical doctors and researchers.

He states that public fears about wireless smart meters are well-founded. They are backed by the Public Health Departments of Santa Cruz County and Salzburg State in Austria. These authorities are worried about the growing number of citizens that have developed electro-hypersensitivity after the installation of such meters. According to seven European studies in six countries, they have found that 10% are electro sensitive and experts believe 50% could be by 2017.

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The most famous person to claim electro sensitivity is Gro Harlem Brundtland, former Prime Minister of Norway and retired Director of the World Health Organization. She has always been a personal hero of mine and I could never doubt a word she says-- not ever.

Organizations such as the Austrian Medical Association and the American Academy of Environmental Medicine have recognized that the ideal way to treat electro-hypersensitivity (EHS) is to reduce electromagnetic field (EMF) exposure.

I urge you to use the precautionary principle and put off the use of smart meters until more research is done by reputable medical research not funded by industry. The precautionary principle was used to eliminate lead from gasoline and we applaud the results! At that time lead research was usually by Ethel Corporation, the producer of lead batteries."

Joshua Parker stated that microwave radiation from cell phones, cell towers and all wifi technology is creating a blanket of microwave radiation known as "electro smog." This is a new phenomenon in industry which is the rapid breakdown of physical materials—concrete, wood, metals, etc., degraded by actual microwave radiation, and also an increasing phenomenon known to break down nuclear radiation. Because micro transmitters are used extensively in controlling nuclear reactors, rapid breakdown is noticed much faster than previously normal breakdowns in nuclear reactors. It is also happening without nuclear reactors, and engineers are noticing breakdown of pipes, building materials and bridges, and gas pipes are leaking. These are known as "molecular earthquakes," causing millions and billions of dollars of infrastructure damage, and shouldn't be taken lightly. He added that when smart meters are installed in homes and businesses, the potential liability is huge for customers and the businesses, and these serious implications are another reason to reconsider implementing smart meters.

Yaqin Sliwinski urged the Board to watch a video on the website <u>www.emfsse.com</u> (the home page will direct one to a link to smart metering), as it is an important video to watch. The video is unique because it features reports from studies done by the military, the Central Intelligence Agency (CIA), the Environmental Protection Agency (EPA), and multiple industry sources, and it opens one's eyes to understanding what's at stake regarding their health, finances and privacy. He asked the Board to respond to him with a short personal note after they have viewed the video. He stated that there are many communities across the U.S. who have stopped smart meter installation or are having them removed, or have successfully enacted moratoriums, and that in California alone, more than 50 communities have blocked smart metering. He added that many other countries have either banned installation or put forth a lengthy moratorium, including the United Kingdom, because of evidence in more than 2,000 independent worldwide studies that shows cause for alarm and a precautionary approach. Because of this and a blatant disregard of constitutional rights, Mr. Sliwinski asked for either a permanent suspension of the smart metering project or a five-year moratorium in order to address the latency period of biological harm and environmental impact.

Matt Nelson recalled that one of the benefits of smart metering would be a possible savings after 20 years. He wondered what the public will lose—jobs, finances, privacy, safety and health? He stated that Dr. Valberg is a scientific resume for hire who shows up with an

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impeccable diploma and has already decided what the results will be, and then will testify in court later on behalf of whatever corporation he is working for that there is no way that smart meters are responsible for the sickness in that particular area. Mr. Nelson believes that advanced metering infrastructure (AMI) is a waste of money and that EWEB is in no financial position to take it on as they have struggled to keep up with future budget projections, and that it will likely end up costing more than \$30 million. He asked the Board to listen to the ratepayers whom they are elected to represent, to not submit to the pressure of President Simpson, Vice President Brown and General Manager Roger Gray; and to say no to AMI.

Artie Gilad gave the following testimony: "Smart meters operate like a cell phone. They can connect to any type of wireless devices with a built-in wi-fi capacity such as washing machines, computers, ovens, TVs, stereos, gym equipment, medical devices, or any other appliance. Such an interactive system is called HAN (Home Area Network). It is conceivable that in the next five years all new appliances could have RF capability.

Utilities can sell your home's data to a third party and any potential hackers can capture the same with a handheld device.

From the Electronic Frontier Foundation: Given the advances in technology and the increased number of data points, this allows anyone who has access to the energy data to learn more about what activities are going on inside your home. The smart meter is essentially like a telescope into your home.

From the Foundation for Economic Education: The national government's criminal investigative agencies can execute their own warrants without court approval, present them to private companies, and demand information about people who are not necessarily suspected of criminal wrongdoing.

The warrant-like orders requiring no judge's signature are called national security letters. In the last nine years, the FBI, Defense Department, and CIA have issued well over 100,000 national security letters.

The *Harvard Journal of Law & Technology* Fall 2011 entire issue covers the topic: Privacy and the modern grid.

To protect individual privacy and ensure consumer trust during the deployment of smart meter technology, it is vital that an individual's smart meter data be protected from suspicionless access by law enforcement. Despite growing concern about access by law enforcement to other types of sensitive information, however, the prospect of unconstrained law enforcement access to smart meter data has received relatively little attention.

The Supreme Court's interpretation of the third-party doctrine, which has long been accused of doing 'great violence to the Fourth Amendment, is utterly inadequate to protect privacy given recent technological innovations.'

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Some have even declared that the Fourth Amendment is already dead. Securing consumer trust during the deployment of smart meter technology, therefore, may require greater assurance than prognostications about a future Court's ruling can provide.

I am sure very few of EWEB's customers, employees, or even Board members would want a smart meter on their house if they knew the government could spy on them and their families inside their homes."

Barbara Nugent gave the following testimony:

"Smart metering is an assault by the growing world of technology on the four kingdoms-minerals, plants, animals and humans. The public is fighting for their lives while you sit in this nice room in your nice chairs and air conditioning, with your comfortable salaries. This isn't an adequate public process. You sit there in your smug complacency and have to endure us a few times so you can take responsibility to fulfill one checkmark to do your duty to the public. You talked about smart meters before any of us knew about it. This has been on your agenda for 10 years, and Roger Gray was brought here to fulfill that mandate. You don't care what anyone says. But sooner or later it will affect your health, wives or families, and you will suffer like the rest of us. We have to fight such oppression. It is life against death. Our planet is being killed. We will fight because we have no other choice."

Robin Bloomgarden gave the following testimony:

"I want to address the serious problem of cyber security. For several years, security experts have identified cyber security vulnerability as an enormous weakness of smart grids in any form.

An October 2010 Scientific American article described the smart grid as 'a dangerously dumb idea' since 'connecting what are now isolated systems to the internet will make it possible to gain access to remote sites through the use of modems, wireless networks, and both public and private networks...providing hackers with a potential source of private information to steal.' They continued, 'Smart meters injected with malware could disrupt the entire grid just as PC bonnets now disrupt the internet.'

The federal government has 'catalogued tens of thousands of reported vulnerabilities in the grid.' Building in robust security greatly increases the cost and will probably never be adequate to keep ahead of inventive hackers.

In August 2011, nCircle, the leader in automated security and compliance auditing solutions, reported results of a survey of 544 IT security professionals. Asked, 'are you concerned about smart grid cyber security,' 77% said yes.

In January 2012, Pike Research described the current state of security for smart grids as 'near chaos.' 'The attackers clearly have the upper hand,' they reported. 'Many attacks simply cannot be defended.'

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In April 2012, hacking expert David Chalk stated, 'There is not a power meter or device on the grid that is protected from hacking, if not already infected with some sort of trojan horse that can cause the grid to be shut down or completely annihilated.' Chalk continued, 'bring forward a technology and I'll show you it's penetrable.' He predicted 'a 100% certainty of total catastrophic failure of the entire power infrastructure within three years.'

Former CentCom commander and CIA director David Petraeus told a meeting of the CIA's venture capital firm that governments will use wireless smart meters to spy on citizens.

The recent revelations in Edward Snowden's leaked information on government surveillance have increased our distrust of smart meters as vehicles of government snooping and potential government control over our power and communications grid.

Former CIA director James Woolsey described it as 'a really, really stupid grid.'

In July 2012 the information security firm SecureState released 'Terminator," an open source framework designed, they say, to give authorized individuals access to manipulate and test the security of smart meters. Although intended to help companies find vulnerabilities and test their products, Terminator can also be used maliciously to modify consumer data, inflicting financial loss on multiple victims.

Also in 2012, the FBI reported that a series of hacks perpetrated against smart meter installations over the past several years may have cost a single U.S. electric utility hundreds of millions of dollars annually, and predicted much more to come."

Steven Baker worked in technology for Microsoft, and assisted Dr. Dart with his study as a technical person. He asked the Board to be prudent about smart metering from a financial standpoint, as we know that the cost of smart meters will drop over time. He doesn't see the advantage of locking into a contract now when it is very likely that the cost of components for the meters will drop over time and there will be more competition using the same technology. He also asked for reasonable projections for the opt-out, and used the example of a bank of 21 meters and on the other side of that wall is an apartment, and on the other side of the wall is a bedroom. He warned that these are tested for safety one at a time, not as a bank. He noted that EWEB can't charge for an opt out policy. He also voiced a technical concern, that the Sensus (meter manufacturer) brochures talk about two-watt transmitters for a household meter, but in the Federal Communications Commission (FCC) information, the actual output of the Icon 1 and 2 meter was listed as 1100-1200 milliwatts, while typical output for old meters is 66 milliwatts.

Kathy Ging gave the following testimony:

"Instead of assimilating and probing multifarious concerns from professionals, many with advanced degrees in diverse fields, EWEB management continues to fast track AMI, confounding increasingly self-educated concentric circles of ratepayers of diverse political stripes as they discover that AMI+ (advanced meter infrastructure + smart-enabled appliances) plans have not been fully explained or fiscally justified.

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Fast tracking is evidenced in that EWEB staff overlooked or deliberately ignored several directives from the Board at the April 2012 work session and similar meetings.

One: Staff solicited comments within the state only and did not consult doctors or medical studies nationally and worldwide that cast doubt on antiquated FCC guidelines regarding biological effects of non-ionizing (non-thermal) radiation.

Staff secured letters from state and county health offices quoting federal agencies about radiofrequency/microwave effects of non-thermal radiation without initially tapping original recent research by Dr. Paul Dart's team--staff knew that Dr. Dart had spent over a year at that time researching a report he planned to present to the Board.

Two: The 2012 Board also asked staff to address privacy and cyber-hacking; since then, articles have emerged about the high vulnerability of smart grids; warnings by information technology pros and government insiders have not been adequately conveyed to the board.

Three: Staff was directed to provide an alternative to the four AMI business case scenarios presented in the April 2012 report. Being an attentive spectator of the fiasco, I was appalled that this directive was ignored by staff. Where is the scenario staff was to assemble as to how EWEB objectives could be met without smart meters?

EWEB stated that there have been no problems with Sensus smart meters installed by Portland General Electric (PGE). Yet, before I requested and paid for research to be done by Oregon PUC in July - Nobody had requested that complaints be compiled - and several concerned health and erratic bills!

A short circuit has occurred within EWEB's matrix by management and Board in the information dissemination process.

Notice staff comments in the news and errors by some Board members nonchalantly saying that EPUD and Lane Electric have smart meters and have no problems.

Egregious in that it is still happening two years after Families for SAFE Meters tried to educate themselves about wireless smart meter problems, is that the media is publicizing partial and confusing information about meters installed by EPUD and Lane Electric.

To clarify, per EPUD - EPUD did not install smart meters - they use a low - not high - frequency signal carried on power lines not allowing time of use pricing. Their wired technology could be upgraded.

It is a warning to ratepayers about how they are not being educated by EWEB about details, when the devil is in the details.

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Board members had memory slips: one, forgetting he had read a letter by Julie, who had become debilitated after sleeping 28 inches from a natural gas digital smart meter for two years, and continuing to say that digital gas meters had no problems!

EWEB Board members have publicly and privately remarked in 2012 that 50,000 natural gas smart meters have been installed locally and, again: no problems. This memory loss occurred again in 2013 when the same EWEB Board member repeated that there have been no problems with gas smart meters.

By the way, a Northwest Natural Gas employee told me: 'I guarantee you that there is NO smart gas meter in the country!'

In local papers, EWEB public relations staff has sometimes substituted phrases like 'meters capable of integrating into the advanced meter infrastructure' for 'smart.' Strange that 'smart' has become stigmatized and has assumed disparaging connotations.

EWEB engineering staff have sometimes been unable to provide accurate answers about numbers and types of transmissions emitted by pilot meters and by 9,000 AMR (automatic or advanced) meters already installed and those proposed by Sensus and other vendors.

Board members may not be aware that EWEB discreetly removed the sentence "no" from its initial FAQ on its website for the question whether there are issues regarding RF. Fortunately, I had downloaded the page - later noticing that they removed the sentence no (see attachment, which Ms. Ging gave to the Board).

This indicates staff ignorance about historical data about what Dr. Dart observed was called radiofrequency sickness, now called electromagnetic frequency (EMF) sensitivity.

Removing the sentence no was EWEB's tacit admission that it had been mistakes in its assessment or omission of information regarding possible adverse health issues.

Finally, my brother, an attorney for 40 years, educated at Georgetown Law School, said that he is seriously concerned about privacy - invasion of the home and 4th Amendment issues posed by smart meters. *The Harvard Journal of Law and Technology* Fall 2011, is dedicated solely to privacy and the smart grid conundrum.

Why not invite those folks from Harvard to speak since privacy invasion was a question raised and still not answered by the 2012 EWEB Board?

Eve Woodward Shawl gave the following testimony:

For nine years I was employed by the University of Oregon as Administrative Assistant for the Human Rights Investigator in the Office of Affirmative Action & Equal Opportunity. This office is charged with ensuring the University's compliance with Federal, State, Local and Organizational Affirmative Action & Equal Opportunity regulations. I became familiar with the Regular Session August 6, 2013 Page 13 of 27

Americans with Disability Act and the responsibilities, requirements and legal obligations of receiving federal funds.

ADA:

As with Title III of the ADA the federal regulations implementing Title II: Unambiguously forbid the use of surcharges on people with disabilities to cover the cost of providing accommodation, stating:

'The opt-out fee for customers who simply prefer an analog meter in this brief; however, to the extent to show that the decision to maintain an analog meter is not simply a preference, but rather is a medical necessity due to a disability, the ADA and its supporting regulations require that the standard policy of installing a smart meter be modified, with no charge to the customer.

Customers who have a medical reason to require an analog meter in order to obtain electrical service are to be accommodated without a burdensome surcharge.

The analog meter can be considered an auxiliary aid provided to a customer in place of the standard smart meter. Under this conceptualization, too, no surcharge is permitted.

If a person cannot tolerate use of a wireless smart meter for medical reasons, the person must have access to an analog meter or be denied necessary utility service, putting their health and safety at greater risk. To the extent that a person's ability to live independently and to fully participate in society is compromised by installation of a wireless smart meter.

The affected person must be accommodated, or else he or she will be denied opportunity solely due to a physical condition, a situation which has resoundingly been rejected by state and federal policy-makers.

ELECTROMAGNETIC SENSITIVITY:

Electromagnetic Sensitivities is recognized as a disability under the ADA if they so severely impair the neurological, respiratory or other functions of an individual that it substantially limits one or more of the individual's major life activities.

People are getting sick following smart meter installation. Among hundreds of serious documented health effects and the worsening of existing health problems.

Radiofrequency sickness has real and disabling consequences. People with radiofrequency sickness experience illness (or even death) upon exposure. Pulsed microwaves, as utilized by transmitting meters, are very potent biologically.

A large part of the population is already electro-sensitive and many more will become so after being overexposed to the constant pulsing of high frequencies emitted by wireless meters.

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No one is impervious. Radiofrequency sickness results from overexposure to radiofrequency radiation. Radiofrequency sickness is not a disease. It is an environmentally induced functional impairment.

METAL IMPLANTS:

People who have medical implants, particularly metal implants, are more sensitive to spurious Radio Frequency; Electromagnetic interference (EMI) with critical care medical equipment and medal implants is a serious threat.

Patients with deep-brain stimulators (Parkinson's disease patients) have reported the devices to be reprogramming or electrodes shut down as a result of exposure to Radio Frequencies.

The wireless systems send out radio waves that can interfere with medical equipment such as respirators, external pacemakers and kidney dialysis machines. Cases involved hazardous malfunctions. These included breathing machines that switched off; mechanical syringe pumps that stopped delivering medication as well as external pacemakers regulating the heart.

Because Smart Meters produce radiofrequency emissions, it is recommended that patients with disabilities be accommodated to protect their health.

That, when denied, NO Smart Meters be installed on the home of the disabled, smart meters must be removed within a reasonable distance of patient's homes depending on the patient's perceptions and/or symptoms, and that no collection meters be placed near patient's homes depending on patient's perception and/or symptoms.

Jerry Shawl stated that he would rather have EWEB spend \$27 million on a second source for water rather than AMI.

Daniela Arnon is considering moving to Eugene from California. She stated that smart meters are being protested in California and that she has symptoms of nausea, ear pain and palpitations, among others, and that after a smart meter was replaced in her neighborhood, she felt better. She added that she has shielded her bed with heavy-duty aluminum foil because of a large "Medusa" meter at a water utility near her home, which has helped, but that a eucalyptus tree on the same property had nearly died because of shock from the meter being installed there. She gave the example of someone she knows losing beehives, a teenager starting to sleep 14 hours a day, and another woman having tinnitus (ringing ears) because there was a smart meter located on the other side of a wall in her home. She noted that 1,500 cell towers were removed in Taiwan in 2007, and she urged the Board to be cautious about smart metering, and to protect the public, the bees and the trees.

Lisa-Marie DiVincent encouraged the Board and the audience to watch the video that Mr. Sliwinski had referred to in his testimony as the evidence is extremely disturbing, and she

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believes that EWEB staff should also be required to watch it. She stated that every person who is testifying this evening represents 50 people, and that she believes there needs to be a disclosure (similar to the black box on medication containers) that lists the side effects of smart metering. She asked the Board to represent the public, and reminded them that the consensus from the Families for Safe Meters group was that while they appreciate Dr. Dart's and his colleagues' testimony on wireless, cell phone towers, etc., there are many other areas of concern, and these will not be adequately addressed by any smart meter, including those from Sensus USA."

David Bichog stated that he hasn't taken a position on smart metering, but that he was told that they emit electromagnetic radiation. Since light and fire have electromagnetic radiation, and so do gamma rays, and some are harmful and some are beneficial, he wondered what the frequency of smart meters is and whether the level is above visible light or above ultraviolet. He noted that some electromagnetic radiation is not harmful.

Dallas Graham stated that if EWEB took the \$30 million smart metering cost and put it somewhere where it can gain 5% interest, they could pay for all their meter readers and still have the \$30 million.

Carrie Gribskov stated that she has had some strange health effects—thyroid problems, heart palpitations and ear pain, and that she lives near a cell tower. She doesn't remember the last time she has slept through the night, and she has had to sleep at other people's houses or in a tent in their yard. She said she has gone to other locations and knows people who are living on the fringes because they can't live in the city anymore, and that she believes that is where the residents of Eugene are headed. She wonders where she will go and where she will live to get away from cell towers and smart meters, as she really has no place to go.

Barbara Nugent reiterated that radiofrequency is a finite resource and that it is a dumb idea to use a portion of those radiofrequencies to connect to a building immobile-ly when they are better served as mobile technology.

Commissioner Mital appreciated the time that the public took to come to the meeting to offer testimony, and also appreciated their passionate concern about this issue. He said it strikes him that EWEB has a community trust issue, when it used to be that the community in general trusted the various institutions that were around them to provide guidance—those funded by government, industry, the health industry, etc. He added that the lack of trust in science is making it a difficult decision, and that the standards he would have preferred to apply to the decision regarding smart metering might not be appropriate.

Commissioner Helgeson thanked the public for their testimony and added that he has some questions about a few issues that were mentioned. He reminded the audience that tonight's Board discussion is not for the purposes of making a decision on smart metering, and that the decision is scheduled for consideration in October. Regular Session August 6, 2013 Page 16 of 27

Vice President Brown echoed his fellow Commissioners' comments. He stated that the Board is learning as well, and that smart metering is not being fast tracked, and that the Board is listening to public comment, and also listening to the presentations regarding technology, some perceived as being worse than others. He added that recognized that Eugene has cell towers all over town and that one was recently installed next to an apartment complex. He noted that when cell towers are sited, they don't consider the ability to put four or five different computers on that tower. He also appreciated the ADA information and other factual information that was presented this evening.

President Simpson echoed the appreciation of his colleagues. He stated that whether or not EWEB makes a decision to go forward with smart meters, there are a variety of concerns about smart meters--quality, jumping into declining price technology, concerns about price relative to radio transmission, cyber security, spying on people's private lives, etc., and concerns about being able to be penalized for opting out and a single meter in a bank of meters not being a complete opt out, etc. He reminded the audience that there is also a laundry list of positives, and that the Board's job is to balance the positives and negatives in order to make an assessment, and that they depend on experts, public testimony, community groups that they speak to, and information that is gathered from people they connect with throughout their daily lives. He noted that the use of outdated analog meters is quickly coming to a close, and that EWEB could erratically continue to use analog, however customers would pay more than they need to, as smart meters are designed to save money in the long term. He stated that an expenditure of \$27 million is a big chunk of change, but when you pull in the discount and a 20-year view, it promises payback, which means lower rates and more money in the customer's hands. He said that he is pretty much in favor of smart metering but hasn't made up his mind, as many people have provided compelling stories about their friends' experience that ring very profoundly. Whether the Board approves smart meters or not, there are radios everywhere, and radio usage is increasing daily. Our society has had radios for nearly a century, and he wondered if they are causing problems or if cancer rates are higher because of them. He acknowledged that there are risks at every turn, even when one walks to their car or rides their bike, or uses wi-fi. He closed by saying that it is okay when he has the freedom to balance those risks but it's not okay when the balances are imposed upon him, but that there are many things one just has to live with.

Commissioner Manning arrived during President Simpson's comments. He apologized for having a prior commitment and also for missing tonight's public input.

APPROVAL OF CONSENT CALENDAR

MINUTES

1. July 16, 2013 Regular Session

CONTRACTS

2. 2G Construction – to provide construction services for the Carmen-Smith Campus Garage Additions – \$328,000. Contact Person is Roger Kline.

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3. Sanipac – for solid waste and recycling services – \$200,000 (over five years, estimate). Contact Person is Todd Simmons.

RESOLUTIONS

4. Resolution No. 1309 - Wire Transfer - Contact Person is Cathy Bloom.

5. Resolution No. 1310 – Local Government Investment Pool (LGIP) – Contact Person is Cathy Bloom.

6. Resolution No. 1311 - Bank of America - Contact Person is Cathy Bloom.

7. Resolution No. 1312 – U.S. Bank – Contact Person is Cathy Bloom.

8. Resolution No. 1313 – Wells Fargo – Contact Person is Cathy Bloom.

9. Resolution No. 1314 – EWEB Section 457 Deferred Compensation Plan Committee Charter – Contact Person is Cathy Bloom.

10. Resolution No. 1320 – EWEB Public Contracting Rule 2-0159: Board Approval Thresholds and Board Policy EL2 – Purchasing Controls – Contact Person is Cathy Bloom.

Vice President Brown pulled item #2. Commissioner Mital pulled item #10.

It was moved by Vice President Brown, seconded by Commissioner Manning, to approve the remainder of the Consent Calendar. The motion passed unanimously (5-0).

ITEMS REMOVED FROM CONSENT CALENDAR

Regarding item #10, Resolution No. 1320, Commissioner Mital stated that he is fine with the language as written regarding the revision of contract amount thresholds, but given that it is a significant departure from policy to date, he asked the Board to consider adding an automatic review in one year as to whether to continue this practice, make changes, or revert to the former process.

It was then moved by Commissioner Mital, seconded by Vice President Brown to add verbage to Resolution #1320 regarding automatic review in one year.

President Simpson supported Commissioner Mital's suggestion and explained the change in contract amount thresholds to the audience.

General Manager Roger Gray voiced understanding of Commissioner Mital's suggestion and noted that there are several things that can trigger that review, including quarterly financial reports and the annual auditor review. Regular Session August 6, 2013 Page 18 of 27

Commissioner Mital noted that he doesn't have reason to doubt the decision but that he believes that one year is a good interim period in which to review.

Commissioner Helgeson supported Commissioner Mital's suggestion and added that if there are other reasons at that time to discuss a certain contract that might be a good opportunity.

General Manager Gray noted that the first report under the new policy will be presented in third quarter 2013 and that there will be a staff assessment of how the new policy is working during second quarter 2014.

The above motion passed unanimously (5-0). President Simpson asked Taryn Johnson, Executive Assistant to the Board and General Manager, to send the Board a revised resolution.

Regarding item #2, construction services for Carmen-Smith campus garage additions, Vice President Brown thanked Roger Kline, Generation Supervisor, for his previous response and said he wanted to be sure he understood his answer. He recalled that several years ago the Board had approved funds to repair a house at Carmen-Smith because of lack of insulation, and he asked for clarification that insulation and siding was indeed done at that time.

Mr. Kline replied that some skirting, roofing and painting had been done on a modular home, but no siding was installed, and the contract doesn't refer to any siding being installed.

Vice President Brown stated that he will support this contract but that he will look up the history of the work that was done so he can get clarification.

It was moved by Vice President Brown, seconded by Commissioner Helgeson, to approve item #2. The motion passed unanimously (5-0).

2014 CUSTOMER GENERATION RATES

Using overheads, Mark Freeman, Energy Management & Customer Services Manager, with the assistance of rate staff, presented a history of customer-owned generation programs, including distributed generation and net metered generation. He noted that the Board reviews and approves rate changes for the above on an annual basis.

He then reviewed the proposed 2014 customer generation rates.

Staff requested Board approval of this recommendation and execution of Resolution 1316.

President Simpson asked how many net metered accounts exceed consumption. Dan Morehouse, Energy Management Programs Supervisor, replied that approximately half of them, or 400 out of 800 accounts, exceed consumption at least once a year.

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Commissioner Helgeson asked if there have been any changes to the methodology. Mr. Morehouse replied that the long-term contract was reduced from 20 to 15 years.

Commissioner Helgeson then asked about the approximate 25% increase and wondered if that is driven by the forecast of forward power prices over 10-15 years. Mr. Freeman replied that it is driven by what EWEB is currently contracted to purchase in 2014.

Commissioner Helgeson asked if the monthly shape of power prices is taken into account when the calculation is made for photovoltaic, as a customer had asked him that question, since most generation happens during the sunny months of the year. Adam Rue, Energy Resource Analyst, replied that the calculation is weighted toward that.

Vice President Brown asked if staff is optimistic about the price curve. General Manager Gray replied that this rate is actually what EWEB is trading with right now but that it is one-third of where it was a few years ago. He added that there has been a partial recovery of the wholesale market, and that with a major nuclear power plant closing in California, the economy is picking up a bit.

Commissioner Mital asked for clarification that customers who do not participate in EWEB's green power program or are not beneficiaries of it are not subsidizing this program. Mr. Freeman said that is correct.

President Simpson asked if delivery charges are included in net metering. Mr. Freeman replied that if there is excess generation, that is calculated into the rate for the limited amount of transmission that would be needed. Sibyl Geiselman, Energy Resource Analyst, added that anything captured in the variable rate is able to be offset with net metered generation, i.e., EWEB is enabling customers to offset anything that is left after the kWh charge, and that the rate provided for surplus generation does include avoided transmission.

In reply to a question from Commissioner Manning regarding selling power on the grid, General Manager Gray replied that EWEB sells power to Canada, California and others, but California's load tends to drive the western market, and hydroelectric conditions can swing the market up or down. He added the net metering exists in many other states, and that EWEB complies with Oregon statutes where they buy power on a net metering basis. He then explained the co-mingling of delivery charges on rates and how they reflect on transmission, noting that net metering customers get the full benefit of their generation (inter-customer fairness), and that is not to be confused with subsidy or fixed cost.

President Simpson called for a 10-minute recess.

PUBLIC HEARING ON PROPOSED 2014 CUSTOMER GENERATION RATES

Steve Baker has worked for the Department of Energy and the University of Oregon. He stated that he believes utility boards should have somewhat longer-term projections, and he noted that past EWEB Boards were providing incentives in the 1980s for local generation, while now

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they are just providing a minimal level that complies with net metering requirements. He said that he understands the balance between customers, and that currently gas and other fuels are being watched, but that the Board needs to have the vision to go beyond that in the long-term and decide how we're going to get there. He reiterated that it seemed that the Board should be considering these rates as an incentive for increasing the amount of renewable energy that is produced in the Eugene community, because that is what is needed in the long term.

2014 CUSTOMER GENERATION RATES – RESOLUTION #1316

Commissioner Helgeson stated that the Board is concerned about long-term perspective and that EWEB is paying incentives comparable to what was paid previously, and that the year 2011 significantly exceeded the payoffs that were forecasted as compared to 2014. He added that these rates are not so much about incentive and reimbursement for excess generation, but for recognition of the value that the system affords EWEB and its customers. He assured the audience that the Board continues to take that long-term view.

President Simpson stated that any member of the audience is invited to come back for the public hearings during budget season, as the Board continues to hear customers telling the Board not to raise rates and asking why EWEB's rates are so high. He noted that the Board tries hard to keep costs low and not cross-subsidize, and that he is very much in favor of net metering, but that he feels that the customers who invest in that need to be okay with that investment, and that the Board can't impose their satisfaction with their investment on low-income customers or customers who have no interest in this type of development, just as a social experiment. He reminded the audience that that is where the voluntary Green Power programs come in, in which folks can pay 1 cent/kWh or more if they choose to donate back to the Green Power program.

It was then moved by Commissioner Helgeson, seconded by Vice President Brown to approve Resolution #1316, enacting the 2014 customer generation rates. The motion passed unanimously (5-0).

VENETA WHOLESALE RATE SCHEDULE – RESOLUTION #1318

President Simpson reminded the audience that tonight's agenda has been revised such that the Board is not considering the system development charges, but only the Veneta wholesale rate schedule.

With the aid of overheads, Brad Taylor, Water Operations Manager, presented an overview of the Veneta water transmission project, the EWEB/Veneta contract, and Veneta's wholesale rate schedule. He pointed out the benefits/cost differences between retail customers and firm surplus customers and also reviewed the types of wholesale water sales.

Staff recommended approval of Resolution #1318 to enact a rate of \$1.24 per 1,000 gallons and a monthly charge (for an 8" meter) of \$1,732.50.

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Vice President Brown voiced concern that EWEB is not setting up the City of Veneta to compete for EWEB's third water right. Mr. Taylor replied that the City of Veneta takes no ownership of the water right, as the citizens of Eugene own the water right, and the contracts explicitly separate the two. He added that the City of Portland separates their water rights in the same fashion.

Vice President Brown stated that he realizes that EWEB is still attempting to get the third water right, and he asked whether or not others are trying to get it, and also asked for a brief update. Mr. Taylor replied that EWEB is still in a good position to get the third water right, but the challenge is to adequately demonstrate the need for the water within a reasonable planning horizon, and that all staff can do is be prudent and demonstrate responsible planning for the need for that water over time.

Commissioner Manning stated that he is happy to hear that the final connection for Veneta is drawing near. He asked how the connection for Veneta is going to affect future water rate increases. Mr. Taylor replied that staff takes the high cost of business and spreads it over a larger rate base, therefore "dampening" water rate increases over time. He added that EWEB also benefits from the sale of water to Veneta by adding a 10% rate of return, which reduces the pressure on EWEB's ratepayers to fund the infrastructure that is needed for delivery. He noted that every year when water rates are reviewed, wholesale contracts are wrapped into that and costs are reallocated to look at cost of service for those customers.

Commissioner Helgeson voiced his support for the Veneta wholesale water rate and generally agreed with Mr. Taylor's points on cost of service. He noted that a back-up water supply capable of furnishing the demands of a small community being available at a reservation charge of \$20,000 per year is cheap insurance and a good value. He added that if staff contemplates many of these types of arrangements with appreciable lines of water, he believes EWEB would want to offer optimal price to wholesale customers, and that staff might look for something better than a 10% return in the long run, while also recognizing that EWEB bears the risk of those investments.

Commissioner Mital asked how staff arrived at the 10% rate of return. Mr. Taylor explained that initially it was tied to cost of capital for the water utility and, once that was understood, a factor was applied to an increase of 10%, and staff also looked at other wholesale and retail arrangements around the state, along with receiving advice from EWEB's water rate consultant. He added that water is so inexpensive that the Veneta deal took quite an effort in order to make it pencil out, but that he believes ratepayers are benefiting and that Veneta is paying a reasonable rate. He noted that this is a 40-year commitment for Veneta and that it is subject to Board action down the road as relates to rates.

Commissioner Mital asked for an explanation of the emergency water plan Veneta is required to maintain. Mr. Taylor replied that it was important that the contract state that Veneta is to maintain the water for their customers and that they will maintain their groundwater system enough to provide basic needs to their customers for the life of the contract, and that it is mutually overseen by both parties. He added that, quite frankly, EWEB has no obligation to get Regular Session August 6, 2013 Page 22 of 27

water to Veneta's customers at a priority above EWEB's own customers, if Veneta chooses not to do so, and that there is specific language in the contract regarding that in the contract, though there are no penalties for them if they do not do that. Mr. Taylor reiterated that the contract is for 40 years with a 10-year renewal, and the rate is updated annually according to typical EWEB rate actions with EWEB customers. He noted that the reason for a longer contract was to align with the repayment period on the loan to cover construction of the pipeline.

President Simpson asked if EWEB incurred costs in order to take the pipe to the demarcation. Mr. Taylor replied that both EWEB and Veneta incurred costs for this, and that EWEB's costs were for extra capacity for demand of pipeline that will materialize, and adding hydrant capacity in the city limits of Eugene. He noted that Veneta will reimburse EWEB for their component of that pipeline.

President Simpson asked if Veneta has a minimum purchase quantity per month. Mr. Taylor replied that Veneta pays EWEB for a minimum but they don't have to use it, and that it is strictly monthly, with no rollover credit, in order to maintain a certain amount of water in the pipe. He added that their monthly fee is just a meter charge and that there is no pumping necessary, as the water gets there essentially through gravity.

Commissioner Mital wondered if EWEB could impose a penalty at the time of the yearly review, if necessary, regarding water that EWEB might owe them. Mr. Taylor stated that EWEB could.

Vice President Brown recalled that when the Hynix plant shut down, EWEB's water rates went up 6%. He reiterated that the best thing EWEB can secure is the third water right.

Commissioner Helgeson asked members of the audience who are Veneta residents or know people who are, to convey the Board's appreciation for working with EWEB on this agreement, and noted that, as new Commissioners, his questions and those of the other two new Commissioners are only a matter of due diligence.

It was then moved by Vice President Brown, seconded by Commissioner Manning, to approve Resolution #1318, enacting the Veneta wholesale water rate. The motion passed unanimously (5-0).

ADVANCED METERING INFRASTRUCTURE (AMI) UPDATE

Using overheads, General Manager Gray and Greg Armstead, AMI Project Manager, presented an update on the AMI business case. General Manager Gray noted that representatives from Sensus (the meter manufacturer) are also in the audience this evening.

General Manager Gray recognized the public's concerns from earlier in tonight's meeting.

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General Manager Gray and Mr. Armstead then reviewed AMI project customer benefits, the 20-year net present value of AMI vs. no AMI, a refresher of the 2013 business case, the cash flow/debt impacts of AMI, the schedule for testing, acceptance and installation, the project costs.

Vice President Brown asked if some demand side (DS) and demand response (DR) programs can be done without smart meters and, if so, what would be the options. General Manager Gray replied that feed-in tariffs are an option, but would be the most expensive, and that solar is also expensive. He also listed natural gas and wind power, but stated that he doesn't believe any of those alone is viable.

President Simpson noted that EWEB's Integrated Energy Resource Plan (IERP) was developed by a community advisory committee with staff and Board support.

Commissioner Helgeson stated that he is somewhat reticent to use the IERP as a significant justification for AMI, and that he believes that Board and staff have some things to learn and develop before the instrumentation return is known. He added that the immediate benefits might be justifiable but that the Board needs to be clear about near-term benefits and economic value, which in turn might help customers understand why they should consider AMI.

Commissioner Mital stated that the water reliability piece is new to him. He wondered if water can be measured in fine granularity so that high signals at 10 gallons, for example, can be sent. General Manager Gray replied that there is a different concept now regarding the 10 MGD supply, and he and Mr. Taylor explained the impact if water had to be curtailed. Mr. Taylor added that these meters would provide information immediately in an emergency situation and would give them customers an X amount of water per day allocation, and if they consume above that, they would be cut off. Mr. Taylor added that the biggest limitation is how often the meter can be pinged, but that they can measure a very small amount of water.

President Simpson asked if the meters have registers that allow them to remember consumption and if they have enough memory to do so. General Manager Gray replied that they do, and that staff will provide the Board more detail.

Commissioner Manning stated that he had not heard of the water reliability piece either, and that it is important for the consumer to understand what this technology brings and also, for example, how much of a deposit a new customer has to pay if they don't have the money up front. General Manager Gray replied that EWEB no longer requires up front deposits but that pre-pay would become an option.

Commissioner Manning also stated that one of his top priorities is social responsibility for low-income and jobless customers, because they are entitled to the same opportunities as everyone else.

Mr. Armstead continued, reviewing the upcoming Board decision points for October 2013 and beyond. He clarified questions from the Board regarding the amount of inflation (3%) over the next 16 years in order to establish cost projections.

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General Manager Gray then reviewed management conclusions regarding risk mitigation principles, and radiofrequency issues and mitigation principles.

President Simpson asked what the wattage of the base station collectors is. Mr. Armstead replied that it is 30 watts, and he added that they aren't typically pulled for data, but only when told to or to do a start and stop.

Vice President Brown noted that Sensus had said that average total transmission time was two minutes per year. Mr. Armstead noted that a 57-millisecond data transmission is comparable to a garage door opener.

Vice President Brown also noted that radio stations transmit 24/7. General Manager Gray added that power, distance and duration are all important factors.

President Simpson asked several questions about last gasp situations and if all meters report when there is no electricity.

Vice President Brown stated that the water side is still unanswered for him, as a lot of meters are in sidewalks or underwater in the winter.

Using an actual meter, Eric Ongstad from Sensus answered Vice President Brown's questions about water protection and reviewed the different parts of the meter.

Commissioner Mital asked if any clients lease meters instead of purchasing them. Mr. Ongstad replied that for a significant fee, a performance contract can be drawn up, i.e., for Honeywell or some other client of that size.

Vice President Brown asked how EWEB would get replacement parts from Sensus if they are out of business. Mr. Ongstad replied that there are over 300 utilities who share this technology, but that he will forward that question to a colleague. Mr. Armstead added that the contract states that EWEB would have the right to ask another manufacturer for replacement parts of Sensus went out of business. Joel Westvold from Sensus added that there is an escrow process, and that EWEB would have the ability to access replacement parts from other companies.

Commissioner Mital asked if the lost value of switching out existing meters has been factored into the cost. General Manager Gray replied that some depreciation will be lost but in some cases meter stock has been under-appreciated, and meter replacement has been put into a complete slowdown, so throwing away meters that have 50% life left shouldn't be an issue. He also pointed out that EWEB hasn't used analog meters for years, and only uses digital meters.

Commissioner Helgeson stated that he wants to make sure that the 10-year plan is synched up for the future business case for meter replacements, and that he also wants to be sure that a near-term advantage is reached so year on year meter replacements don't have to be done, causing part of the cost savings to be used to pay for the system. He added that he would like Regular Session August 6, 2013 Page 25 of 27

staff to look at the business case cash flows for cost/benefit streams, as he doesn't want to add to EWEB's near-term financial challenges, i.e., the "bill of rights" may need to be tweaked.

General Manager Gray summarized the Board's questions and comments and stated that he will follow up on the questions that were not answered. He asked the Board to e-mail any other questions or ask for a one-on-one session previous to the October Board meeting.

2013 SECOND QUARTER FINANCIALS

Susan Eicher, General Accounting and Treasury Supervisor, reviewed a summary of the electric and water utility second quarter financials, including payroll and benefits expenses.

Electric Utility:

Year to date net income increased \$8.2 million from last year.

Operating Revenue: Retail sales \$148,000 less than 2012 and electric consumption 2.74% less than 2012, due to the milder 2013 winter months.

Operating Expenses: \$2.6 million less than last year, due to cuts in programs and staff. The only operating expense that increased over last year was purchased power, up by \$5.4 million.

Working cash is above target and all other reserves are at or higher than target.

Water Utility:

Year to date net income was \$3.5 million compared to a net loss of \$860,000 at this time last year, mostly attributable to higher operating revenues.

Operating Revenue: \$3.9 million higher than the previous year and about \$3.1 million above the seasonally adjusted budget, primarily due to May 2012 and February 2013 rate increases. Pumping volume was also about 9.1% over 2012 levels.

Operating Expenses: \$196,000 less than last year

General cash levels are below the year-end targeted level, but May and June sales were higher than expected, and with continued sales consumption at budgeted levels, general cash levels are projected to meet the targeted level by year-end.

2013 QUARTER 2 OPERATING PLAN DASHBOARD RESULTS

General Manager Gray thanked Erin Erben, Power Resources and Strategic Planning and Lisa Atkin, Power Planning Supervisor for their assistance. He stated that EWEB's overall financial situation is improving but that he continues to be concerned about employee engagement and morale, and that these issues are continuing to be addressed. Specifically:

Areas of notable success for both Water and Electric:

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- Budget adherence
- Financial health recovery plan implementation

Areas of notable concern:

• Employee engagement

Areas to watch:

- Product delivery conservation, demand response and energy efficiency
- Customer communication and engagement initiative (surveys will occur later in the year), i.e., lobby wait times. Phone wait times are improving with the addition of new staff
- Carmen-Smith relicensing project

Commissioner Mital noted that EWEB's rates are currently the highest compared to its peer utilities, and he asked how EWEB sees itself improving on that trend. General Manager Gray replied that the recent decisions to put the brakes on spending are positioning the utility to move toward a better rate position. He added that the Board needs to consider whether they want EWEB to be at the bottom, top, or in the middle of the pack related to their peers.

A brief discussion ensued regarding strategic planning, EWEB's budget, and public engagement.

CORRESPONDENCE AND BOARD AGENDAS

General Manager Gray highlighted the recent research and development updates regarding resource planning.

He reminded the Board that their next meeting on September 17 is the annual meeting held upriver, which will focus mostly on upriver issues, with some normal EWEB business toward the end of the meeting.

President Simpson appreciated staff for the answers to the drilldown questions regarding the audit management letter.

General Manager Gray summarized tonight's action items:

- Commissioner Mital's suggested follow-up on changes to the Board's policy on contracting (language change), and will also ask EWEB's auditor to look at it
- Enforcement mechanisms on the care and feeding of the Veneta water system
- Follow-up on questions regarding AMI bill of rights and principles issues
- President Simpson and Commissioner Helgeson will meet with General Manager Gray re: strategic planning

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Vice President Brown noted that there is no way to know what wards the public who testified tonight live in, or whether or not they are EWEB customers, unless they identify themselves as such. General Manager Gray replied that it might be possible to ask the public who testify to identify what ward they live in.

Commissioner Mital reiterated his previous concern about energy conservation programs. He stated that he doesn't want to repeat the previous problems, and also reiterated his deeper concern for low-income residents and their ability to absorb rate increases despite mitigation. He recalled that staff had previously brought up working with the City of Eugene to effect a change to City Code which would require landlords to conduct energy audits, and if they don't meet a particular threshold, money is held specifically for that group of people. He stated that he is still pursuing that and will continue to pursue it, and that he has had conversations with the Mayor and City Council about it, and if they are willing, then the Board might be willing. He cautioned that that may happen out of synch with whatever staff is planning to launch.

President Simpson asked Taryn Johnson, Executive Assistant to the Board and General Manager, to place this item on the starboard report. Mr. Freeman also asked that a refresher on the above rental energy audit issue be placed on the starboard report.

General Manager Gray replied that the above issue may require a bit longer than the usual 48-hour requirement for a starboard report item. President Simpson then asked to cancel the starboard report request and include it in the September meeting agenda instead.

Commissioner Mital stated that he was merely reporting that he was pursuing the above issue, and that his statements do not necessarily require a response.

President Simpson adjourned the Regular Session at 10:05 p.m.

Assistant Secretary

President