MINUTES

DEPARTMENT OF WATER SUPPLY
COUNTY OF HAWAI'I
WATER BOARD MEETING

November 24, 2015
West Hawai'i Civic Center, Community Center, Bldg. G, 74-5044 Ane Keohokalole Hwy, Kailua-Kona

MEMBERS PRESENT:
Mr. Rick Robinson, Chairperson
Mr. Craig Takamine, Vice-Chairperson
Mr. Russell Arikawa
Mr. Bryant Balog
Mr. Leningrad Elarionoff
Ms. Brenda Iokepa-Moses
Ms. Susan Lee Loy
Mr. Jay Uyeda

ABSENT:
Ms. Kanoe Wilson, Water Board Member
Mr. Duane Kanuha, Director, Planning Department (ex-officio member)
Mr. Warren Lee, Director, Department of Public Works (ex-officio member)

OTHERS PRESENT:
Ms. Amy Self, Deputy Corporation Counsel
Mr. Steven Lim, Carlsmith Ball LLP
Mr. Jeff Zimpfer, National Parks Service
Ms. Lisa Reddinger, Johnson Controls
Mr. Will Rolston, County Department of Research and Development

Department of Water Supply Staff
Mr. Keith Okamoto, Manager-Chief Engineer
Mr. Kawika Uyehara, Deputy
Mr. Kurt Inaba, Engineering Division Head
Mr. Richard Sumada, Waterworks Controller
Mr. Daryl Ikeda, Operations Chief
Ms. Kanani Aton, Public Information and Education Specialist
Mr. Clyde Young, Operations
Ms. Judy Hayducsko, Operations

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1) CALL TO ORDER – Chairperson Robinson called the meeting to order at 10:02 a.m.

2) STATEMENTS FROM THE PUBLIC

None.

3) APPROVAL OF MINUTES

The Chairperson entertained a Motion to approve the Minutes of the October 27, 2015, Water Board meeting.

ACTION: Mr. Elarionoff moved to approve; seconded by Mr. Balog; and carried unanimously by voice vote.

4) APPROVAL OF ADDENDUM AND/OR SUPPLEMENTAL AGENDA

Chairperson Robinson entertained a Motion to approve Supplemental Agenda Item 5(A), JOB NO. 2015-1031, PARKER RANCH DEEPWELL REPAIR.

ACTION: Mr. Arikawa moved to approve; seconded by Ms. Iokepa-Moses, and carried unanimously by voice vote.

5) SOUTH KOHALA:

A. **JOB NO. 2015-1031, PARKER RANCH DEEPWELL REPAIR:**

This project generally consists of the replacement of the existing deepwell submersible motor, pump, column pipe, motor shroud, chlorination of the well and pumping assembly, and all appurtenant equipment, such as strapping and cable guards; replacement of 500kVA step-up transformer; and furnishing all incidental information necessary for completion of work, in accordance with the plans and specifications.

Bids for this project were opened on November 19, 2015, at 2:00 p.m., and the following are the bid results:

Bidder	Bid Amount
Beylik Drilling and Pump Service, Inc.	$464,600.00
Derrick's Well Drilling and Pump Services, LLC	**$444,000.00**

Project Costs:

1) Low Bidder (Derrick's Well Drilling and Pump Services, LLC)	$ 444,000.00
2) Contingencies (10%)	$ 44,400.00
Total Cost:	**$ 488,400.00**

Funding for this project will be from DWS's CIP Budget under Deepwell Pump Replacement. The contractor will have 270 calendar days to complete this project. The Engineering estimate for this project was $440,000.00.

The Manager-Chief Engineer recommended that the Board award the contract for JOB NO. 2015-1031, PARKER RANCH DEEPWELL REPAIR, to the lowest responsible bidder, Derrick's Well Drilling and Pump Services, LLC, for their bid amount of $444,000.00, plus $44,400.00 for contingencies, for a total contract amount of **$488,400.00**. It is further recommended that either the Chairperson or the Vice-Chairperson be authorized to sign the contract, subject to review as to form and legality by Corporation Counsel.

MOTION: Mr. Arikawa moved to approve; seconded by Mr. Takamine.

The Manager-Chief Engineer said this is another straightforward well repair. This repair is in Waimea, as part of DWS's efforts to mitigate the wells that are currently out-of-service. This repair is especially important because DWS is anticipating drier upcoming months in the Waimea area, which relies primarily on surface water sources. He noted that DWS has two wells that provide supplemental sources in the area, including this Parker Ranch Deepwell.

Mr. Elarionoff asked how this affects the farmers in Waimea.

The Manager-Chief Engineer said it depends on where the farmers are getting their water from; there is an agricultural (ag) water system in Waimea. The users of that ag system are basically in

the same situation as DWS users in the area; the ag users are reliant on the reservoir above White Road, he said. That reservoir is fed by surface water, as is the DWS system. The Manager-Chief Engineer said he himself had limited knowledge of the situation with the Department of Agriculture system; he did know that there were a limited number of people doing agriculture off of the DWS system. He noted that there are some services along the main highway in Waimea. DWS has issued a Conservation Notice, whereby the Department is asking for voluntary compliance with a 10 percent reduction in usage. DWS is asking for consumers to water at night, etc. DWS is trying to be proactive by getting this well online in a timely manner, in anticipation of what is expected to be a dry season in Waimea.

Mr. Elarionoff said that both the ag and DWS sources are taken from surface water; he asked how the two systems affect each other.

The Manager-Chief Engineer said that the two systems are different; DWS has two sources on the Kohala Mountain.

Mr. Elarionoff asked if that was before the farmers get their water.

The Manager-Chief Engineer said that the farmers are getting their water off of the ditch, which feeds their ag system in the Lakeland subdivision. From Lakeland, the water is boosted to the 60-MG reservoir on White Road. Therefore, the farmers and DWS are served by different sources, but both of them are affected if dry conditions prevail.

Mr. Arikawa asked whether Mr. Eric Takamoto of Operations did the Engineering estimate for this bid; he noted that the the bid price was spot on with the estimate. He suggested that Mr. Takamoto be commended.

Chairperson Robinson asked how deep this well is.

The Manager-Chief Engineer said that it is just under 2,000 feet deep.

Mr. Young said that the Parker Ranch and Waimea wells are both about 2,000 feet deep.

The Manager-Chief Engineer noted that because both wells are deep, DWS really wants to retain the Waimea Water Treatment Plant for energy reasons. During dry times, DWS really needs those sources to be online, just in case.

ACTION: Motion carried unanimously by voice vote.

6) SOUTH KONA:

A. **1250 OCEANSIDE (HŌKULIA) WELLSITE DEVELOPMENT AGREEMENT:**

(This Item was deferred from the October 27, 2015, Board meeting.)

The Manager-Chief Engineer said that the Department was working on the Fourth Amendment with Corporation Counsel, wrapping up DWS's comments as late as last night. DWS and Corporation Counsel have been going over the Fourth Amendment line by line, and DWS does have some comments. Unfortunately, DWS is not ready to bring to the Board the actual Fourth Amendment with DWS's comments at today's meeting, he said. The Department intends to get its comments to the parties very soon, and plans to agendize the assignment of 50 water units from the Kealakekua Source Agreement, as well as the Fourth Amendment, for the December 15

Board meeting. The Manager-Chief Engineer noted that Mr. Steve Lim was available to answer questions.

Chairperson Robinson asked Mr. Lim how soon this well can be outfitted; he asked if the developer was ready to start right away.

Mr. Lim said that the developer is still doing some of the planning, so they will not be starting the outfitting, etc., in this particular agreement. The terms of the equivalent units of water will run 20 years from the date of the dedication of the well, he said. Therefore, there is no deadline for the completion of the water system such as one might see in other agreements, he said. Mr. Lim said that the developer is moving forward on all aspects of their infrastructure, following the emergence from bankruptcy. However, there is no specific construction schedule yet.

The Manager-Chief Engineer said that the lack of timeline was among DWS's concerns. DWS does not want to leave things open-ended, whereby DWS has water commitments on the table, but no assurances for the infrastructure to be completed. Those concerns are included among the comments which DWS will get to Mr. Lim and to Mr. Roy Vitousek, (the attorney for the second party).

Ms. Self confirmed this.

The Manager-Chief Engineer said that DWS put in a timeline, as well as indemnification language to make sure that the Department and the Board are protected and indemnified.

Ms. Lee Loy noted that the Board had requested that the indemnification language be inserted into the Fourth Amendment. She asked Mr. Lim about his timing requirements, and asked if his deadline would be met if this Fourth Amendment were done by the end of the year.

Mr. Lim said that if final action on the matter is taken at the December 15 meeting, the deadline will be met.

Mr. Elarionoff said that he would prefer that the Board take no action on this matter today, to avoid mistakes. He said that he would prefer that the parties finish the Fourth Amendment off first, and then bring it back to the Board. He asked that a decision on this Item be deferred one more time.

Mr. Lim requested that the Board in its December Agenda take action separately on the assignment of the 50 equivalent units from 1250 Oceanside LLC to Kalukalu Properties, and then take action the Fourth Amendment.

Chairperson Robinson said that in that case, it would be two separate Agenda Items.

Mr. Lim confirmed this.

Chairperson Robinson said that the Board is all in agreement to do that.

The Manager-Chief Engineer said that it makes sense, and that is what DWS intends to do.

7) MISCELLANEOUS:

A. **DEDICATIONS:**

The Department has received the following documents for action by the Water Board. The water systems have been constructed in accordance with the Department's standards and are in acceptable condition for dedication.

1. **GRANT OF EASEMENT AND BILL OF SALE**
   SUB 2009-000947
   Grantor/Seller: Lake View Estates, LLC
   Tax Map Key: (3) 2-3-040: 046
   Facilities Charge: $113,576.00 Date Paid: 1/9/2015
   Final Inspection Date: 10/12/2015
   Water System Cost: $148,937.00

2. **GRANT OF EASEMENT**
   POD 7 – Easement 14 and 15
   Grantor: Kohanaiki Shores, LLC
   Tax Map Key: (3) 7-3-068:003 to 054

The Manager-Chief Engineer recommended that the Water Board accept these documents subject to the approval of the Corporation Counsel, and that either the Chairperson or the Vice-Chairperson be authorized to sign the documents.

Chairperson Robinson asked why they called it "POD 7". He said he supposed it was one of the tranches of the development.

Mr. Inaba confirmed this.

MOTION: Mr. Arikawa moved to approve; seconded by Mr. Balog.

Mr. Inaba said that the Grant of Easement for POD 7 is just modifying what already existed; there is no new water system involved.

Chairperson Robinson asked if Kohanaiki would be served entirely by DWS; he asked if County water meters would be within Kohanaiki.

Mr. Inaba confirmed this. He noted that this POD 7 is just one of many "pods," or development areas, within Kohanaiki. He said that some of the pods will have a master meter, while some others will have individual meters. There may also be a few small, private water systems within Kohanaiki. DWS meter readers will drive into Kohanaiki to read meters, he said.

ACTION: Motion carried unanimously by voice vote.

B. **POWER COST CHARGE:**

Departmental power costs have declined as a result of a decline in Hawai'i Electric Light Company (HELCO) billings for electricity for the Department's wells and pumps. The Department proposes reducing the Power Cost Charge from $1.85 to **$1.81** per thousand gallons to reflect this decline. In order to accept public testimony on this change, a Public Hearing should be scheduled before the new Power Cost Charge is reduced.

The Manager-Chief Engineer recommended that the Board approve holding a Public Hearing on January 26, 2016, at 9:45 a.m., to receive testimony on reducing the Power Cost Charge from $1.85 to **$1.81**, effective February 1, 2016.

MOTION: Mr. Takamine moved to approve; seconded by Mr. Arikawa.

The Manager-Chief Engineer said that DWS could send out a press release about the decrease in the Power Cost Charge (PCC).

Chairperson Robinson urged DWS to do so.

Mr. Elarionoff noted that DWS had decreased the PCC a couple of months ago. He asked if this was a duplication of that.

The Manager-Chief Engineer said no, DWS can recalculate the PCC every two months if necessary. If the PCC stays the same, DWS would not seek an adjustment. However, if the PCC goes up, DWS would also seek an adjustment.

Mr. Elarionoff asked if it were worth the effort to hold a Public Hearing for a mere four-cent decrease.

The Manager-Chief Engineer said that the Board may want to consider implementing triggers for when an adjustment is needed.

Mr. Elarionoff agreed; he said that holding Public Hearing costs money. If it is only four cents, it may be a waste, he said.

The Manager-Chief Engineer explained that DWS ties its PCC Public Hearings to a regular Board meeting; the Public Hearing is held at 9:45 a.m., just prior to the regular Board meeting.

Ms. Iokepa-Moses said that decreasing the PCC is important because every penny counts; it is a good public relations move which shows that DWS is paying attention and keeping track of the PCC. She said she agreed with Mr. Elarionoff that holding the Public Hearing is a lot of effort, but DWS needs to do it. The public appreciates it, she said.

The Manager-Chief Engineer said that DWS also needs to adjust the PCC when it rises; DWS needs to indicate that it is adjusting in a timely manner.

Ms. Iokepa-Moses asked if the Public Hearing takes place in one location, or in both Hilo and Kona.

The Manager-Chief Engineer said it was held just in one location.

Chairperson Robinson noted that the last Public Hearing on the PCC was held in Kona.

Mr. Elarionoff asked if the ability to hold the Public Hearing every two months gives DWS enough of a cushion so that DWS will not fall short.

The Manager-Chief Engineer said that DWS can only adjust every two months; prior to this, DWS was only able to adjust the PCC on an annual basis. Back in 2007 and 2008, DWS got hit hard by rising oil prices, and the Department did not have the ability to stay on top of it. Therefore, the Board at that time decided to reduce the evaluation period to every two months, to enable DWS to adjust as costs fluctuate.

Mr. Elarionoff said that in that case, DWS is operating in a safe zone.

Mr. Arikawa said he agreed with Ms. Iokepa-Moses; DWS needs to be consistent and adjust as needed, in fairness to the Department and to the public.

Ms. Lee Loy noted that if DWS wants to contemplate something like a trigger or a threshold at which to adjust the PCC, it would call for a larger Rule change by State Statute. She said that this is governed by HRS 54-26.

The Manager-Chief Engineer said that it was good to know.

Chairperson Robinson said that in that case, the Board is obligated by State Statute to adjust the PCC.

ACTION: Motion carried unanimously by voice vote.

(The Board took a brief recess, from 10:22 a.m. to 10:26 a.m.)

C. **HONOLULU BOARD OF WATER SUPPLY PRESENTATION RE: ENERGY PERFORMANCE CONTRACT:**

The Manager-Chief Engineer said that Mr. Marc Chun, project manager at the Honolulu Board of Water Supply (BWS), did a presentation on BWS's energy savings performance contract process at the recent Hawai'i Water Works Association (HWWA) conference in Honolulu. Energy savings performance contracting (ESPC) was among the recommendations made to DWS by Mr. Steve Bolles, who presented his energy audit to the Board in August. DWS considers ESPC an important initiative to undertake, and is fortunate that BWS has already blazed the trail, the Manager-Chief Engineer said. DWS invited Mr. Chun, with the blessing of BWS Manager-Chief Engineer Ernie Lau and Mr. Chun's supervisor, Mr. Barry Usagawa, to share his knowledge and experiences with the Board today.

Mr. Chun said that he read the Water Board Minutes for August 25, 2015, in which Mr. Bolles spoke about ESPCs; it is clear that the Board and DWS are keen to pursue this initiative. Mr. Chun explained that he has been with BWS for 19 years, and is currently working in the Water Resources Division, which handles BWS's long-range planning.

Mr. Chun said that an ESPC is a contract where comprehensive energy savings improvements can be made to water system buildings, etc. The key element is the performance contract part of the ESPC, where energy cost savings actually *pay for* these improvements. With an ESPC, energy savings are contractually guaranteed. Under State Procurement rules, ESPCs can have a contract period of up to 20 years. Under an ESPC, the construction period is typically about three years, and the energy savings for the remaining 17 years are under contractual guarantee. There can be a Monitoring and Verification (M&V) process during the entire life of the contract, to verify that what the contractor put in is actually producing the specified energy savings, Mr. Chun said.

Mr. Chun noted that this ESPC process has been a hit with a number of other agencies that have done them, including the State Department of Business, Economic Development and Tourism (DBEDT) and the State Department of Accounting and General Services (DAGS). These departments were among the forerunners in the process, even ahead of Honolulu BWS, Mr. Chun said. BWS is probably the first water utility in Hawai'i to have undertaken an ESPC. The Manager-Chief Engineer of BWS, Mr. Lau, was one of the architects of the ESPC process in Hawai'i, dating back to his tenure at DAGS' Division of Public Works.

Mr. Chun explained how an ESPC works. Using the example of BWS, their utility cost is around $27 million a year. Under the energy savings performance contract, an energy service company (a state pre-authorized ESCO) will guarantee to reduce the utility cost by $3 million a year. After negotiations with the ESCO, BWS agrees to pay the ESCO $35 million to do the improvements or provide equipment, to reduce BWS's annual utility bill by $3 million a year. After construction is completed, typically in about three years, BWS then uses those avoided utility costs to pay the ESCO off in about 17 years. After the 17-year life of the contract, the various loans will be paid off, and BWS will enjoy annual utility savings of $3 million per year, to use as BWS wishes. The equipment will still be there, he noted.

If BWS were to do nothing (i.e., did not do an ESPC), it would be paying the full utility cost every year of about $27-28 million, Mr. Chun said. Under the ESPC, the energy savings company guarantees $3 million in utility savings per year for the entire 17 years; $3 million times 17 equals $51 million. That would mean that BWS would pay off the loan well before the 17 years is up, and BWS would not use the entire $51 million to pay off the loan. He noted that BWS was figuring in maintenance costs for the life of the contract as well, as well as Monitoring and Verification fees to verify the upgrades by the ESCO continued to perform. The ESCO will provide BWS with periodic reports to verify that the equipment is actually working the way it is supposed to, Mr. Chun said.

The beauty part of this arrangement is that if the equipment fails to work and fails to produce the savings that the ESCO promised, the ESCO will write BWS a check. That is the guarantee part of the contract; BWS will get this gross energy savings amount every single year of the contract, Mr. Chun said. At the end of the contract, when all of the loans are paid off, BWS will have all of these net energy savings to use however BWS wants. Mr. Chun said that BWS will probably maintain a little bit of a maintenance fee, or do the maintenance in-house.

Mr. Chun said that the bottom line is that BWS gets to leverage its savings in its electricity budget, to finance these energy efficiency improvements. These improvements are likely to be things that BWS would have done anyway, but the ESPC provides a financing mechanism to do so. The ESPC arrangement also insulates part of BWS's electrical costs from future rate increases by Hawaiian Electric Company (HECO).

The entire process is set up like a design/build project, so that BWS can get these improvements in fast. The three years of construction includes design, construction and everything needed to get the project in the ground and ready to go, Mr. Chun said. He noted that in Honolulu, it is almost unheard of to get a project out as quickly as that.

Under an ESPC, there can be long-term monitoring which produces the financial guarantee of the ESCO's performance goals, Mr. Chun reiterated.

Mr. Chun cautioned that BWS's electric bills will still probably go up over the years, due to whatever rate increases take place. However, their electric bills will be lower than they would have been if BWS had not done an ESPC.

The basic ESPC process starts with the Department head giving the go-ahead. The Department then sends out a Request for Information (RFI) to the vendor list of ESCOs pre-approved by the State Procurement Office. (Mr. Chun said that the most up-to-date list has six ESCOs.) The Department sends the ESCOs a letter soliciting interest in doing an energy savings project. The interested ESCOs respond, and the Department then sets up an in-house evaluation committee, to

review the proposals that come in. The Department then sends out an Invitation for Proposal (IFP), a letter which provides the ESCOs with a wealth of information, such as recent as-builts, several years of electrical data and pumping data, vehicle data, and building square-footage information. All of this information is designed to help the ESCO come up with proposals to reduce the Department's energy usage. BWS chose to reduce its energy usage by 20 percent, so it directed the ESCOs to gear their proposals towards that goal, Mr. Chun said.

The ESCOs submit binders full of reports and proposals, which the evaluation committee reviews and accords a ranking. This is similar to a Request for Proposals (RFP), in the sense that the awardee is not the lowest bidder. Instead, there are criteria that must be followed, with points scored, etc. The evaluation committee selects the best value for the Department.

Once the ESCO is selected, the Department starts actually talking with them.

Mr. Chun noted that up to this point, the process will have cost the Department nothing, aside from labor for writing letters, reviewing the proposals, etc. By contrast, all of these ESCOs are spending a lot of money to get this far, without getting a dime from the Department. The ESCOs tend to be big companies, based on the Mainland, he said. BWS conducted site visits to every single one of its approximately 200 sites, over a period of about six weeks. The ESCOs flew in their staff, who stayed on Oahu for six weeks to visit every single BWS site. The ESCO staff produced voluminous reports, etc. – all on their own company time, with the possible prospect of a big payoff later on.

Once the ESCO is selected, the process moves to the Investment Grade Audit (IGA) stage. This is the stage at which the ESCO goes back and refines its numbers, delving deep into the details of what the project entails. This IGA stage is actually a contract with the ESCO, under which the Department pays the ESCO for the IGA report. The Department at this point has two options:

- The Department can take the report, pay the ESCO off and say goodbye; or
- The Department can continue with the process.

If the decision is to continue, the Department goes into the next stage, which is to enter into a Guaranteed Energy Savings (GES) contract with the ESCO. Under that contract, the ESCO builds the Energy Conservation Measures improvements chosen by the Department that the contract includes. Once this agreement is finalized, the ESCO builds the improvements, and after construction is done (in about three years), the 17-year Monitoring and Verification stage takes place. BWS reaches its goal after the 17 years, Mr. Chun said.

Currently, BWS is at the stage of finalizing its IGA report with its selected ESCO, whose name is NORESCO. BWS is reviewing the second draft of the IGA report, to make sure that NORESCO's numbers match what BWS can actually do. This report is something that must be *implemented*; it is not a report that winds up on the shelf, he said. BWS needs to make sure that the ESCO's financing and the timing of the project make sense. Within the IGA itself is the Guaranteed Energy Savings (GES) component, Mr. Chun said. The IGA and GES are technically separate documents, but they are tied together very closely.

BWS's Board approved yesterday the $35 million needed to go forward for this project, and the Board also gave BWS the go-ahead to seek State Revolving Fund (SRF) loans to fund the project, Mr. Chun said.

BWS aims to have the GES contract finalized by the second quarter of 2016, at which time the construction will start. Construction is slated to be finished in 2019.

The project involves predominantly photovoltaic (PV) systems, to be installed on top of BWS's reservoirs and on the roofs of some of BWS's buildings. There will also be the replacement of well pumps, using more energy-efficient assemblies, along with energy-efficient air-conditioning, lighting, etc.

As far as greenhouse gas reductions, the project will translate **annually** into the equivalent of 2,100 cars removed from the roads.

Mr. Chun shared a number of lessons learned to date. He recommended that DWS get help, starting with a high-level champion such as the Manager-Chief Engineer; he also suggested enlisting the help of other agencies that have already done ESPCs. Mr. Chun noted that Mr. Lau at BWS called some of his fellow veterans of past ESPCs, who sent BWS a trove of Word documents such as IFPs, RFIs, etc. BWS only needed to modify the documents to fit its needs. Mr. Chun said that Ms. Carolyn Shon of DBEDT told him yesterday that she would be willing to help DWS in any way she could. Mr. Chun noted that BWS hired on contract someone who had been the project manager for an ESPC project at the Kailua Wastewater Treatment Plant. This individual has provided a wealth of knowledge and experience that have helped Mr. Chun greatly with the current project.

Mr. Chun suggested that DWS form a Subject Matter Expert team, including people who have expertise in finance, procurement, engineering and operations. DWS should also have a gung-ho, knowledgeable, day-to-day team of people who would coordinate site visits, etc.

It is of utmost importance for all of the process to be squeaky clean, fair and thorough, Mr. Chun said. The ESCP is a competition among ESCOs who are big companies looking for big bucks. That is why the ESCOs are willing to spend a lot of money up front; the ESCOs have their eyes peeled for any defect in the process that could derail things, Mr. Chun said. BWS took painstaking steps to follow all of the necessary steps and to ensure fairness. During the six weeks of site visits, everybody had the same amount of time at the site, and everybody got taken to the same sites in the same van at the same time. This painstaking care cost BWS money and time, but there were no complaints from any of the ESCOs. Other agencies had horror stories involving challenges, with one project actually being dropped due to a challenge, Mr. Chun said. He reiterated the need to be squeaky clean in all dealings.

Mr. Chun stressed the magnitude of these projects, which involve a number of sites and simultaneous construction. The project may call for hiring additional staff such as inspectors and construction managers. Because this is a design-build project, the pace of work (i.e., three years or thereabouts) may be faster than what DWS is used to. The length of the contract also calls for personnel planning, with some people retiring during the course of the project.

Keeping everyone in the loop is extremely important, Mr. Chun said. This involves having the ESCO's mechanical and electrical engineers sitting down with BWS staff, going over the details site by site.

Mr. Chun noted that this is just as much a **financing** project as it is an engineering project. The ESPC provides a process that allows BWS to show that its energy savings will be used to pay back whatever loans that BWS took to fund the project.

ESPCs are worth the effort, Mr. Chun said. The Department that engages in an ESPC looks good; it supports the State initiatives that aim to have 100 percent renewable energy by 2045.

Operationally, these projects are worth it because they provide an opportunity to upgrade equipment that is old, such as well pumps. Replacing old equipment is something that BWS would have to do anyway, and the energy savings of these projects pay for it.

BWS is funding its ESPC using SRF loans, whose one percent interest cannot be beat.

Ms. Lee Loy asked how BWS had decided to cut its energy usage by 20 percent.

Mr. Chun said that BWS looked at other entities that had done ESPCs, and a reduction of 20 percent seemed pretty reasonable, and within grasp for ESCOs to reach.

Ms. Lee Loy asked about the 20-year timeframe.

Mr. Chun said that came from the State allowance of a maximum of 20 years for a contract. There would be three years for construction, and then the remaining 17 years.

Ms. Lee Loy asked if BWS had considered staggered phasing of the project, perhaps targeting a 10 percent reduction of energy usage over 10 years. In Year 2.5 or Year 5 of those 10 years, the utility might come in with another 10 percent reduction over another 10 years.

Mr. Chun said no, BWS chose not to stagger it. BWS had the ability to do the whole project at once, and the preference was to do it all at once. As it was, BWS had scaled back the total project cost to $35 million, after the initial figure came in much higher, he added. To stagger it would double or triple the amount of work to get the project going.

Ms. Lee Loy asked if it could be broken up into shorter lengths of time.

Mr. Chun said he supposed it could, but he was not going to ask NORESCO to do that. The ESCO might not want to do a project like that, because they have to make their money back, too. Breaking it up would be a deterrent to an ESCO coming in; they have to have a big payoff to want to do it.

Mr. Elarionoff asked if the Federal government is getting involved in this project in any way.

Mr. Chun said they would be involved indirectly, through the SRF funds, which come from the U.S. Environmental Protection Agency (EPA) via the State Department of Health (DOH). BWS needs to meet federal requirements in the course of obtaining the SRF funds, he said.

Mr. Elarionoff said that the Federal government has a different kind of math, whereby four plus four is a $2 million savings. His point was that a lot of things with the Federal government do not pan out, he said. He asked if this was Mr. Chun's math or the Federal government's math.

Mr. Chun said it was BWS's math, working with NORESCO. BWS is scrutinizing the math a lot right now, which is why it is taking a little longer time for BWS to approve the IGA.

Mr. Uyeda asked whether the $35 million for the project would be paid in phases, or as a lump sum up front. He also asked what happens if the ESCO goes bankrupt during the 17 years after the construction is done.

Answering the bankruptcy question first, Mr. Chun said that part of the State Procurement Office's vetting of the ESCOs is to ensure that the company has the financial viability to stay

alive over the long haul. He acknowledged that adverse circumstances can arise. As part of the IFP, the ESCOs must submit a fairly detailed account of their financial viability. He noted that he himself knows nothing of finance, so he asked BWS's Chief Financial Officer to review the financials.

Mr. Uyeda asked if Mr. Chun could provide contact information on someone versed in finance.

Mr. Chun said he would.

Mr. Uyeda asked whether the $35 million is to be paid up front.

Mr. Chun said that in BWS's case, the ESCO will be billing BWS in invoices over the first three years, to the tune of about $35 million. BWS will start paying them immediately, and meanwhile, BWS will be asking DOH for the SRF funds to cover the invoices. Therefore, the $35 million will be paid to the ESCO in those first three years, and BWS will repay the State for it over the next 17 or so years.

Ms. Iokepa-Moses asked if the ESCO needs to be bonded, considering the extensive length of time involved.

Mr. Chun said yes, he believed they were bonded, to allay the risk to BWS.

Mr. Takamine asked about the cost savings of the 20 percent; he asked Mr. Chun to explain the math to him.

Mr. Chun said that the 20 percent that BWS initially sent out with the IFP was a 20 percent reduction in kilowatt-hours (kWhs). At that point in the process, it was not a dollar cost. However, the actual guarantee comes in dollar amounts. He said he did not have the math right in front of him at the moment. The cutbacks in the project cost that Mr. Chun mentioned earlier included some things such as programs that were part of the original 20 percent reduction in energy usage. Among the programs that were cut were HECO programs that were taken off the table for BWS, including the Feed-In Tariff. That was a huge loss for BWS, he said. The 20 percent reduction was embedded within all of those programs. He noted that BWS luckily did manage to get in on the Net Metering program.

Mr. Arikawa asked about the guaranteed savings of $3 million.

Mr. Chun said that was an average, or approximate, number.

Mr. Arikawa asked what would happen if the energy savings were not met; he asked if NORESCO would write a check for the entire $3 million, or for the difference.

Mr. Chun said they would write a check for the difference.

Mr. Arikawa asked if that guarantee was for 20 years.

Mr. Chun said it would be for the 17 years after construction is finished.

Mr. Arikawa asked how long it was between Mr. Lau giving the go-ahead on the project, and the actual selection of the ESCO.

Mr. Chun said that various processes slowed things down between Mr. Lau giving the green light in February of 2012, and the actual selection of the ESCO in February or March of 2014. It probably does not usually take that long in other cases, he said. There were a lot of factors that came into play that slowed things down, but DWS will also probably take a fair amount of time before they make their selection of ESCO, Mr. Chun said. DWS will want to get all of its paperwork right, and give the ESCOs adequate time to prepare things. It takes time to produce the reports, he noted. ESCOs do want to work fast; they want to get in so that they can make their money back as quickly as possible. The ESCOs will push DWS to meet deadlines, as NORESCO pushed BWS; BWS took time to make sure that everything was clean first, he said.

Ms. Lee Loy noted that $35 million is a great incentive for an ESCO.

Mr. Balog asked if equipment failures are a factor; he asked what happens if a pump fails after 10 years.

Mr. Chun said that the guarantee is a performance guarantee; it is not an equipment guarantee. Regardless of whether a piece of equipment fails, the ESCO must still meet that performance guarantee. The Department makes out because the Department gets that check, regardless. Therefore, the ESCO will do whatever it takes to get the Department to that performance, Mr. Chun said.

Chairperson Robinson sketched out a scenario whereby an ESCO buys the guarantee reduction in energy usage by performing the contract, and takes payment over a certain period of time. This would give the ESCO greater returns as a company; they could actually discount that, and sell it on a secondary market, he said.

Mr. Chun said he could not speak for why the ESCO does not do that; as far as the State Procurement process, this ESPC is the way it is set up. He said he does not know if ESCOs in other places in the country do things along the lines described by the Chairman.

Chairperson Robinson suggested that the Department could tell an ESCO to do the work, and the Department will pay the ESCO with the energy savings for a period of time. In that way, the Department would have no up-front costs. The Department would have cost savings that it would achieve at a later date, because its equipment is going to be upgraded. This is a form of financing, the Chairperson said. Instead of going out to borrow the $35 million, the Department would in essence encourage the ESCO to seek the financing on the secondary market. The ESCO would generate revenue that they can then discount and sell to someone, he said. The Chairperson said he was just curious if this financing arrangement had ever come up in discussion.

Mr. Chun said no, it only came up in the very earliest discussions of how the ESPC works. He acknowledged that there were various financial options available, including some options that BWS was not able to take part in. He reiterated that finance is not his area of expertise.

The Manager-Chief Engineer noted that Mr. Will Rolston, the County's Energy Coordinator, was on hand, and might be able to share some information with the Board today. Mr. Rolston has experience with Power Purchase Agreements (PPAs) and similar things, including projects such as the West Hawai'i Civic Center where today's meeting is taking place, the
Manager-Chief Engineer said.

Mr. Rolston said that what Chairperson Robinson said about other financing options was absolutely true; the ESPC could be financed entirely by energy savings. He said that ESCOs are in the business to make money; they are making a bundle here. However, that does not mean that the ESPC process is a bad process. On the contrary, it is an excellent process because the Department gets to make a decision, after the audits, on whether to go forward or not. He did want to say that there are other options, which should be compared with the ESPC process. Hawai'i Energy takes 1.5 percent out of everyone's electric bill for energy efficiencies; Hawai'i Energy can pay for some of these savings, he said. Mr. Rolston noted that DWS, which is doing the Lālāmilo Windfarm, is probably the most akamai of the water departments in the State of Hawai'i. The windfarm is better than PV, he said. He said it is better than a lot of things he has seen written in the presentation, but the ESPC process is really good. It is just that there happen to be three more options that may be better, Mr. Rolston said. He noted that the West Hawai'i Civic Center is powered 100 percent by renewable energy; he and his colleagues leaned on the developer to get the lowest price possible. The developer gave the County a 20-cent per kWh rate, with no money down, he said. That is what Mr. Rolston said he would like to discuss with the Manager-Chief Engineer, Mr. Okamoto. Mr. Rolston noted that the Department of Defense is the largest energy user on Oahu.

Mr. Chun said that BWS is probably the fifth or sixth largest energy user on Oahu.

Mr. Rolston said that on the Big Island, DWS is the market power, as the largest energy user here. DWS can tell HELCO what they want. He just wanted the Board here to consider that this is an excellent presentation, and these are excellent options; he wanted the Board to consider that there are options out there that might be even better.

The Manager-Chief Engineer said that in the interests of time, Mr. Rolston might want to come back and educate the Board on the options that are available.

The Manager-Chief Engineer said that Mr. Chun has graciously let the Board and DWS know what Honolulu BWS is doing, so that DWS can learn from their experience. He said that he was sure that, as Mr. Rolston said, that there are other options out there for DWS to consider as well.

Chairperson Robinson said that Mr. Steve Bolles, who presented to the Board in August, made it clear that DWS has to do something. He said that therefore, Mr. Rolston's participation would be very helpful.

Mr. Balog asked Mr. Chun what downsides, or cons, he had experienced on the ESPC.

Mr. Chun said that the cons are limited to the operations side; the biggest con was that it has taken so long to get this particular project to this stage. BWS was really cautious amid the fact that it was a competition for big money, so BWS was careful on every step it took. As far as the financing options, he is not in a position to discuss what options would be better. He reiterated that this is every bit a financing project as it is an engineering project.

Chairperson Robinson asked if there were any way to shorten the nine-step Basic ESPC process. He asked if it were possible to skip the RFI, and instead go right to an RFP.

Mr. Chun said that actually, there were four steps as prescribed by the State Procurement Office:

- The RFI;
- The IFP;
- The IGA; and

- The GES.

Mr. Chun said that he did not think BWS would be allowed to shorten the process here. He suggested that DWS contact the State Procurement Coordinator, Chris Kamaka, as far as whether that would be allowed. He said he would pass that contact information to the Manager-Chief Engineer.

Mr. Rolston commented that DWS would want to do the RFI, because it yields so much information. This is an excellent process, up until the point where an ESCO is given the contract. At that point, the Department has to make a decision on which option to take.

Mr. Chun said that the RFI might have been a misnomer; it does sound like it should provide a lot of information, but in Mr. Chun's experience, the RFI was more like a letter of interest. He said that he did not know why the process developed that way.

Mr. Rolston said it does not need to be like that.

Mr. Chun agreed that it does not have to be like that. The IFP part of it, during which the ESCOs did the actual proposals, was when BWS got to see what the various ESCOs were contemplating. That was very valuable; BWS got a lot of information through the IFP, he said.

Mr. Rolston gave the scenario of HELCO issuing an RFI on geothermal power; HELCO will ask vendors to give details on how they would develop geothermal. Once HELCO has that information, they will develop their RFP. Mr. Rolston said that in order to get an RFI to work, one must write it in such a way that it works. He offered to help with doing that.

Chairperson Robinson asked if that was the process that DWS followed with the Lālāmilo Windfarm project.

Mr. Rolston said yes, the project had six bidders, and Mr. Rolston was one of three evaluators. Three of the six bidders' proposals did not make sense price-wise or technology-wise. The three remaining bidders' proposals did make sense, and the evaluators unanimously chose a winning bidder.

The Manager-Chief Engineer said that that was the RFP process; DWS also had an RFI preliminary process.

Mr. Rolston said that DWS could stage an RFP like an RFI, and that is what the evaluators did in the Lālāmilo case. It can be made a two-stage process. Summing up, Mr. Rolston said that DWS could make an RFP like an RFI embedded in an RFP, if DWS does a two-stage process.

The Manager-Chief Engineer said that it kind of depends on the scope of the project; with this ESPC that DWS is contemplating, it would involve a *global* evaluation. The Lālāmilo Windfarm project involved a defined, limited scope whereby DWS was looking for a suitable turbine from among different manufacturers offering differing technology.

Mr. Rolston said that the Board should remember that DWS is the juiciest contract out there; DWS is the best prospect for these ESCOs, so the ESCOs are going to beat a path to DWS's door.

D. **UPDATE RE: NATIONAL PARKS SERVICE'S PETITION TO DESIGNATE KEAUHOU AQUIFER AS A GROUND WATER MANAGEMENT AREA:**

The Manager-Chief Engineer said he had no update. He said there were no new developments; the last thing that DWS needed to do was to submit its proposed scope for Phase 2 of the Water Use and Development Plan (WUDP). DWS did submit it, and so the ball is basically in the court of the Commission on Water Resource Management (CWRM). The proposed scope is now under review, and CWRM staff now need to schedule the item to be put before the Commissioners for final approval. Once the approval is granted, DWS can move forward with Phase 2 of the WUDP.

E. **EXECUTIVE SESSION RE: NATIONAL PARKS SERVICE'S PETITION TO DESIGNATE KEAUHOU AQUIFER AS A GROUND WATER MANAGEMENT AREA:**

(Executive Session was waived.)

F. **DISCUSSION OF AMENDING DWS RULE 3-10, REGARDING LEAK ADJUSTMENTS:**

Ms. Lee Loy said that she wanted to frame up the proposed Rule changes that the Board has before it, and then have Mr. Sumada and Ms. Self weigh in regarding the proposed changes in language. She noted that two months or so ago, Mr. Sumada had given some input to the Board as to where DWS could see the highest cost savings, or close the gap on some of the money that DWS was forgiving, through a process. The process itself was a bit confusing, and the process was not as streamlined as it could be, nor did it have very definitive language, Ms. Lee Loy said. As a result, Ms. Lee Loy took Mr. Sumada's feedback, and broke Section 3-10 into three sections. Under Section 3-10(3), the proposed change is related to leaks on a property. A customer will leave the hose running while filling the pool, and then the customer gets a large water bill. This section provides an opportunity for the customer to get a leak adjustment, or a forgiveness, of a portion of that bill, Ms. Lee Loy said. Ms. Lee Loy said she worked to create language that would limit the understanding of that leak adjustment.

The next part was related to unforeseen acts of nature; Ms. Lee Loy said she added in language that allowed for a leak adjustment caused by a natural event, putting in 80 percent of the excess water off, caused by any act of nature. She acknowledged that Mr. Sumada has a comment about that, but basically that leak adjustment is another option.

The third part was related to criminal property damage. That subsection in the Rule was left pretty much intact, but Ms. Lee Loy said she framed it so that there was a clear understanding that the customer has three options for applying for a leak adjustment. In the course of discussions, it was discovered that people try and use one leak adjustment, and then end up needing another leak adjustment. People try to swap out the lesser amount for one that was more expensive. Ms. Lee Loy said that after Section 3-10(5), she tried to close the gap on picking a leak adjustment among the three options above, and how to apply it. She noted that Ms. Self had some comments regarding this section.

Ms. Self said that her comments were just taken from the legal standpoint. For example, her question regarding Section 3-10(5) was whether the Board wanted to have *any* leak adjustment once every three years, or whether the Board wanted that section to deal specifically with criminal acts by third parties.

Ms. Lee Loy asked the Board whether they wanted to give DWS the latitude to grant *each of the three* leak adjustment options, i.e., the proverbial leaky faucet reason; the act of nature; and the criminal property damage in the same three-year period, or *only one* out of the three options.

Chairperson Robinson said that granting all three in the same three-year period would lead to too much abuse.

Ms. Lee Loy asked the Board to consider whether a customer should be given the chance to get a leak adjustment for a leaky faucet-type of scenario, as well as for an earthquake that breaks the pipes. She said that is the kind of feedback she wants from the Board.

Ms. Self said that the way the Rule is written right now, the customer gets one leak adjustment every three years, regardless of what type of leak is involved. She suggested that the Board might want to hear from DWS's accountants.

Chairperson Robinson called on Mr. Sumada to comment.

Mr. Sumada said he was not absolutely certain how many leak adjustments are allowed during the three-year period, noting that he does not deal with leak adjustments with the same frequency as Customer Service staff. He said that it appears that the three-year period is applied only to the routine domestic water leaks or breaks; the three-year period is not being applied to criminal property damage cases or to acts of nature-related leaks. He said that these three categories are all handled separately. Conceivably, a customer could get all three categories of leak adjustments in a three-year period – if all of those things occurred in the same three-year period.

The Manager-Chief Engineer said that to put that into perspective for the Board, that scenario is extremely rare. DWS scrutinizes claims for acts of nature, etc.

The Manager-Chief Engineer noted that the Department had not had time to thoroughly review and discuss Ms. Lee Loy's proposed changes. He said that he wanted very much to have the opportunity to talk to the staff a bit further regarding the proposed changes in language, etc.

Regarding criminal acts, DWS has had several such claims, but the Department always asks the customer for a police report. The Department takes the findings of the police investigation, and does its own investigation to ascertain whether or not it is a viable claim.

Chairperson Robinson asked if a criminal act would be something like a trespasser on a property who breaks a pipe or lets the water run.

The Manager-Chief Engineer confirmed that such claims have happened.

Ms. Self confirmed this as well.

Mr. Elarionoff observed that this kind of problem arises frequently in rural areas such as ranching areas, where people trespass through other people's properties, shooting pigs, etc. People's waterlines sometimes get shot, and sometimes people take other people's water if they need it, he said.

Chairperson Robinson said his greatest problem is with pigs chewing on his waterlines when the weather gets dry. Turning to the various options outlined by Ms. Lee Loy, he said he was not keen on offering too many options; he preferred to just offer the leak adjustment once every three years.

Ms. Iokepa-Moses said she disagreed, citing the fact that criminal damage does happen, as do acts of nature such as earthquakes, especially in Kaʻu. Meanwhile, people do leave the faucet on, etc.

She thought that the leak adjustment should be available just once every three years for leaving the faucet running, etc., but customers should be able to get leak adjustments for natural catastrophes and criminal damage, with proper documentation. She noted that the Ka'u District staff are very diligent in investigating leaks. She said that she would *not* be comfortable with granting only one leak adjustment in a three-year period regardless of the circumstances, because earthquakes and criminal damage do happen.

Mr. Takamine said that he was concerned about DWS giving people too many options, for fear that some people will take advantage of the system. He cited people who, with substandard waterlines running a mile long with a joint every 20 feet above ground, might take advantage.

Chairperson Robinson asked if DWS promotes the use of self-shutoff water meter valves that shut off after usage exceeds 10,000 gallons.

The Manager-Chief Engineer said that these devices were mentioned during a Contested Case that came before the Board. DWS does not promote any particular product, but the Department can direct people who ask about it to do a Google search. He noted that DWS is considering a pilot Smart Meter program, and has put out a Request for Quotes (RFQ) for 12 locations. The Smart Meters would use cell phones to monitor usage by the hour; customers would pay a monthly fee to have access to the service.

Ms. Iokepa-Moses asked that this Item be tabled until next month. She asked the Department for more information about what kinds of leak adjustments have been granted for acts of nature and criminal acts.

The Manager-Chief Engineer said that every instance is handled case-by-case. Some cases are clearer than others, but DWS can look into whether there are statistics in-house on leak adjustments related to acts of nature and criminal acts. He promised to look into whether such information was available, and would provide any such information to the Board.

Mr. Arikawa said he would like to see whether Customer Service might have such information to share with the Board.

Mr. Elarionoff said another factor contributing to water leaks is tree roots; Mr. Elarionoff said that that had happened to him.

Mr. Balog said that tree roots were a standard maintenance issue.

Ms. Lee Loy, noting the Item would be tabled, asked the Board and staff to provide their input to Mr. Sumada, Ms. Self or to Ms. Lee Loy. She suggested to Ms. Iokepa-Moses that the Board could consider changing the three-year period to a two-year period. The Board can discuss that next time; the Board has the flexibility to make such changes, she said.

Chairperson Robinson noted a recent Contested Case involving a waterline break in Kona. The appellants were offered the option of retroactively applying a leak adjustment, against a prior break that they had fixed. The appellants would have gotten the benefit of that deal, but they opted to decline. The appellants were basically testing the Rules to see if the Board could break the Rules, but the Board cannot do that, the Chairperson said. The Board has to come up with something that is fair, he added.

Ms. Lee Loy said that the Board is refining the process on the Rules, but is leaving all of the other steps in place.

Chairperson Robinson said that if a customer is not happy with the Board's decision, they can always take it to court.

Ms. Self said such an appeal would go to the Third Circuit Court.

Ms. Lee Loy said yes, it would be an agency appeal.

Ms. Self noted that Mr. Sumada and Mr. David Mellom of Customer Service had drawn her attention to another type of situation, whereby customers with obvious leaks such as a leaky toilet or sink, fail to fix the leak in a timely manner. Such customers wait until they get a really big bill, upon which they seek a leak adjustment. That is another issue that the Board should look at, and Messrs. Sumada and Mellom can provide more information on that.

Mr. Sumada confirmed that the Department would like to have a change to the Rules that limits the leak adjustment to a two-billing period timeframe, so that customers address the leaks in a timely fashion.

Chairperson Robinson said it really bothers him when people who have not taken constructive action to fix their pipes come before the Board for leak adjustments. He said that this Item is deferred to the next Board meeting.

G. **MONTHLY PROGRESS REPORT**:

Mr. Takamine asked about the Laupāhoehoe (Manowai'ōpae) 0.5 MG Reservoir and Āhualoa-Honoka'a Transmission Waterline Phase 2 projects, which DWS is looking to finish in the first quarter of next year. He asked whether the recent spate of rainy weather had delayed these projects, and asked whether the contractors were likely to come to the Board to ask for another time extension.

Mr. Inaba said that the contractor for the Laupāhoehoe project asked for a time extension; there have been a few rain-out days. DWS is in daily contact with the contractors on both of these projects.

The Manager-Chief Engineer said that under DWS's General Requirements and Covenants, rainouts are arguably the most black-and-white documentation for time extensions to contracts. With other reasons for delays, DWS puts the burden on the contractor to show DWS that the delay was on the critical path. The contractor must show DWS that the delay will really affect the contract completion date. Under the General Requirements and Covenants, rain-out days do not have to be on the critical path. If a contractor loses a day due to rain, the contractor can add a day to the completion date. The Manager-Chief Engineer said that Mr. Takamine is correct in that there has been some impact on the Laupāhoehoe project, but there is no indication of such an impact on the Āhualoa-Honoka'a project.

Mr. Inaba said that on the Āhualoa-Honoka'a project, the contractor has not been on site because they were waiting for some materials to be delivered. DWS has confirmed that the contractor is not asking for a time extension.

Chairperson Robinson asked about the Ola'a 6 Production Well and 1.0 MG Reservoir project, noting that it was three years over.

The Deputy, whose project this was, confirmed that the construction contract duration is finished already; the contractor has fulfilled his construction obligations for the project, etc. The Deputy has been in discussions with the contractor because they have not provided DWS with their as-built drawings and other final close-out documentation. These documents are required before DWS can financially close out the project, and make final payment to the contractor. The contractor needs to deliver those close-out documents, he said.

Chairperson Robinson asked if this was the same kind of situation that DWS experienced with CTS Earthmoving, the contractor for the much-delayed Palani Road Transmission Waterline project. He asked if the Ola'a project involved any personnel or similar items.

The Deputy said no. It involves the delivery of the required close-out documentation, including as-built drawings, releases from sub-contractors, and affidavits.

The Deputy said he was not sure why the contractor was not jumping on it, because DWS is ready to close the project out – as soon as those documents come in from the contractor.

Chairperson Robinson asked what the final payment was.

The Deputy said it was basically a retainage, in excess of $100,000.00, or as high as $150,000.00.

Chairperson Robinson said that DWS just has to demand that the contractor delivers the final documentation.

Ms. Iokepa-Moses suggested that the Board send the contractor a letter.

Chairperson Robinson said he would be happy for the Board to send a letter. He asked Ms. Self if she could send the contractor a letter.

Ms. Self said sure.

The Deputy said that he would make another call to the contractor, to convey to them that the Department and the Board want to get this project closed out and off its books.

The Manager-Chief Engineer said this was frustrating for Mr. Sumada and the Finance Division. This is called a Final Settlement of Contract; the contract is basically done, but DWS does not want to pay the contractor 100 percent, pending these obligations that the contractor needs to meet. He said that besides the as-built drawings, the contractor needs to provide Operations and Maintenance (O&M) manuals, tax clearances, training documentation, etc. The contract stays on the books until the documentation comes in, he said. The Manager-Chief Engineer said he was baffled as to why the contractor does not do what they need to do, in order to get their money. He asked Ms. Self if there is any way that DWS can just terminate the contract, and not pay the contractor off.

Chairperson Robinson said yes, DWS should terminate the contract and keep the money.

Ms. Iokepa-Moses expressed misgivings, asking whether DWS indeed needs those documents.

Chairperson Robinson said that DWS does need the as-built drawings.

The Manager-Chief Engineer said yes, DWS needs them, but the Department could figure out ways to get by without them. He noted that the inspector for the project has his own set of as-built drawings anyway. He said that the contractor might jump if Corporation Counsel writes to the contractor telling them to get the documents in, or else the contract will be closed and no final payment will be forthcoming.

Ms. Self said that she would meet with the Manager-Chief Engineer and the Deputy to put something together.

Turning to the Queen Kaʻahumanu Highway Widening project, Chairperson Robinson noted that the pipes are being laid out. He asked if DWS needs to pay the contractor, Goodfellow Brothers, yet.

Mr. Inaba said that DWS paid them already.

Chairperson Robinson asked if DWS paid them the full amount.

Mr. Inaba said no, the contractor has not submitted an invoice yet, but an invoice will arrive soon. A portion of that invoice will be deducted because DWS paid for the material early on, to the tune of $1.169 million.

The Manager-Chief Engineer clarified that DWS already gave the money for the project to the State, so DWS will be *signing off* on the invoice.

Chairperson Robinson noted that DWS had indeed given the State $3.444 million for the project.

The Manager-Chief Engineer said yes, the money was given to the State back in 2010.

Chairperson Robinson said he thought that DWS had only given them the $1.169 million.

The Manager-Chief Engineer said that was how much the contractor *spent*.

Chairperson Robinson asked whether the State has been holding on to DWS's $3.444 million all this time; it has been five years.

Mr. Inaba said yes, the State gave DWS credit for the supposed interest that has been earned on the money. This was only to offset the additional costs that were incurred, he said.

The Manager-Chief Engineer said that the credit did cover some of the additional costs, such as the gasket replacement and the testing of the fittings, etc.

Mr. Inaba said yes, those items were not cheap.

The Manager-Chief Engineer said that was nearly a million dollars in foregone interest on that money.

Mr. Balog asked about the Waikoloa Reservoir No. 1 Earthquake Repairs project; he noted that the project was supposed to come up to bid around the end of this year.

Mr. Inaba said yes, DWS is still shooting for that, and is meeting weekly with the consultant, as well as the Federal Emergency Management Agency (FEMA) and State Civil Defense. DWS has sent the consultant CAD drawings specifying exactly what trees need to be removed as part of a complete, specific tree removal plan. This tree removal plan is the latest requirement. The CAD drawings plot all of the trees that DWS surveyed on the property, which is in the Department of Hawaiian Home Lands' Forest Reserve.

Ms. Iokepa-Moses returned to the $3.444 million that DWS gave to the State for the Queen Ka'ahumanu Highway project, suggesting that it could be seen as a learning experience for DWS. She suggested that DWS should not have to give up the money, and instead should just have it in its own bank account ready for when the project is ready to go.

The Manager-Chief Engineer said that DWS made every effort to do it that way, but the State refused, and demanded the entire amount up front, immediately. If DWS did not give them the money, DWS would have been excluded from the project. DWS had offered to certify that they had the money available, and offered to keep the money in a separate account earmarked for the project.

Ms. Iokepa-Moses said okay, the State did not go for that. She asked if DWS gave the State a drop-dead timeframe, such as a 24-month window in which to perform, or else the money would come back to DWS.

Mr. Inaba said that there was a Memorandum of Understanding (MOU) with the State, but it did not state anything like that.

The Manager-Chief Engineer said that DWS did ask for the money back. The State said that in that case, DWS would be out of the game; DWS feared that the Department would probably have to fight for the pipe that was already purchased. DWS pursued every avenue available to hold the money to the side without actually giving the money to the State, but to no avail. However, the Department does not plan to let that happen in the future.

Ms. Lee Loy noted to Ms. Iokepa-Moses that after the State got the $3.444 million, the State came back demanding *more* money. The Board pushed back and refused; Ms. Lee Loy said she believed that this was part of what forced the State to come back and give DWS credits for the earned interest and other things.

Chairperson Robinson wondered what the Department of Transportation (DOT) does with the balance of DWS's money that it still holds; he asked if it gets swept and used in the General Fund.

Mr. Inaba said he believed that the funds are in the DOT account.

Mr. Balog said that if a project does not start, like in this case, DWS cannot have the State pull the project and keep the money.

The Manager-Chief Engineer said no, the State would have to give back the money; they cannot just keep the money. He noted that basically, it is cheaper for DWS to partner on the construction that the State is doing, rather than to go in after the fact and dig up the new highway to install DWS's pipes. That is where DWS thought that the project would work out. Nobody in 2010 expected the massive delay on this project; everybody thought that it would go forward, the Manager-Chief Engineer said. Down the line, there is no other project out there where DWS

would do something like this, aside from possibly the Puainako Street Extension, he said. In the future, DWS can use this experience to tell the State that this scenario will not happen again. If it comes to that, DWS will just do its project on its own, and dig up the State's new highway two years down the road, he said.

H. **REVIEW OF MONTHLY FINANCIAL STATEMENTS:**

Mr. Sumada reported that the auditors have almost finished their report for Fiscal Year 2015; the auditors are only waiting for another auditor's report in order to flesh out some footnotes on the Hawai'i Employee Retirement System (ERS). Once the auditors complete their report, they will come before the Board to explain their findings. Mr. Sumada noted that the only big change will be the new requirement that mandates how pension liabilities are reported.

Chairperson Robinson said he has been thinking about that since Mr. Sumada first mentioned it at a previous meeting; the Chairperson said he still could not understand how DWS must take a charge for unfunded pension liability, when DWS contributes to ERS. He noted that DWS opted to go fully-funded on the pension contributions.

Mr. Sumada said that he had asked the auditors the question that the Chairperson had posed. Their answer was that the $20 million being recorded on DWS's books is a net of the obligations, less the investments that ERS holds on DWS's behalf. Comparatively speaking, DWS is recording $20 million in pension liability; the County is recording $300 million, and statewide the pension liability is around $8 billion. It is a big number, but DWS's portion was less than one percent of the total.

Chairperson Robinson interpreted the auditors as saying that ERS does not have enough money to fund all of the pensions that are out there; therefore the ERS is going to allocate back a deficit to the different people who are contributing to ERS. Either there are more than enough contributions made initially to cover the obligations of the retirees, or ERS is not doing a terribly good job of investing those contributions, he said. That is where that deficit occurs. The allocation back to DWS is an allocation based upon the deficit at ERS, compared to what the actuarial tables would prescribe that ERS spend over time, the Chairperson said.

Mr. Sumada said that the number that is being recorded is *net* of the investments that ERS is holding. That money is used to fund people who are already retired. However, the retirements for current employees are not funded.

The Manager-Chief Engineer asked whether this was partly due to a change in the Accounting Standards.

Mr. Sumada said yes, the only reason that this disclosure is being made is because of the recently-adopted accounting pronouncement. That pronouncement said, from this point forward, all government agencies must show on their financial statements this number of unfunded liability for their retirement plans. Everybody whose retirements are handled by ERS is obliged to do this, he said. The State has the lion's share of the affected employees.

Chairperson Robinson said it is a wake-up call.

Mr. Elarionoff said he was having a hard time comprehending this whole financial picture. He asked Mr. Sumada how he viewed DWS's financial picture going forward.

Mr. Sumada said that DWS is in good financial shape, in spite of this big number hitting the Department's books. The rate structures that DWS has put in place, along with the expenses that DWS incurs, have been set up pretty well. For the most part, DWS is only spending what it generates, and the Department is not over-extended to the point that it is at risk financially. The balance sheet attests to this, Mr. Sumada said. In their previous presentation to the Board, the auditors have said that DWS has pretty solid numbers; it has been that way for a long time.

Chairperson Robinson said that most importantly, DWS as an operating company does not have an inordinate amount of outstanding receivables, in relation to the total amount of revenue that DWS generates. On a percentage basis, it is very low compared to what other operating companies may have. The Chairperson said that was thanks to consistent collection efforts.

I. **MANAGER-CHIEF ENGINEER'S REPORT:**

The Manager-Chief Engineer will provide an update or status on the following:

1) Lālāmilo Windfarm Status Update – The Manager-Chief Engineer said that there had been some concern regarding the recordable access, etc. regarding this property. DWS put the burden on the contractor to sort things out with the State. The lender on this project is working directly with the Department of Land and Natural Resources (DLNR) to resolve whatever concerns the lender had over the recordable access. The contractor actually broke ground yesterday, to begin laying the foundations for the turbines. The project is proceeding according to schedule, as far as DWS is concerned. The Manager-Chief Engineer then asked Ms. Judy Hayducsko to provide her report on Energy Initiatives. The Manager-Chief Engineer noted that last Friday, he had met with some energy accelerator people on Oahu, including Mr. Josh Stanbro, who is with the Hawai'i Community Foundation's Fresh Water Initiative. DWS wants to be involved with what they are doing, and hopefully join their Council so as to have a say in what things get implemented in the future.
2) DWS Energy Initiatives Update – Ms. Judy Hayducsko went through her four-page update sent with the Board packets, and passed around two types of data-loggers. An older, yellow data logger is what DWS has been using, which had warranty issues. A newer, blue data logger, costing $521.00 a piece, is working really well. She explained that data loggers are used to listen for leaking pipes. Pipes leak at different pitches, and at night time when customers are using less water, the leaks are more easily audible.

   Turning to the Power Cost Charge, HELCO has informed DWS recently that due to lower fuel costs, DWS's electric bills will also be lower.

   Ms. Hayducsko explained about non-revenue water, which is water for which DWS is not paid; DWS is working to reduce this category of water. DWS looks for leaks within its system, as well as meter inaccuracies. DWS also looks into whether or not the Department is flushing its water mains long enough to clean them. Returning to the data loggers, Ms. Hayducsko noted that grants from Hawai'i Energy had helped fund their purchase. The recent energy report by Mr. Bolles had recommended that DWS increase the number of data loggers; this is Phase 2 of that program.

   Mr. Balog asked where the data loggers have been installed.

   Ms. Hayducsko said that they are all around the island, and are typically installed on top of a valve. Some of the data loggers are put underground in valve vaults, very close to

pipes so that leak noise can be detected. An additional water service investigator has been hired, starting December 1.

The most recent Energy Initiatives report (known at the time as Green Initiatives), was done by then-Energy Management Specialist Julie Myhre in November 2013. A fixture in Ms. Myhre's report was an update on DWS's hydro-generators. Ms. Hayducsko noted that DWS has three hydro-generators:

- Kahaluʻu Shaft – Currently over-producing power; soon to return to normal levels.
- Kaloko – DWS is currently having problems with the wells in this system, so this hydro-generator is not operating as well as the Department would like. Typically, DWS sells most of the power produced here to HELCO.
- Waimea – The power from this hydro-generator is used internally, the unit is not currently operational.

Ms. Hayducsko said that DWS uses all the power that the Kahaluʻu Shaft hydro-generator produces to run the Shaft wells. At Waimea and Kaloko, the power is using internally, and HELCO is paying DWS at the Schedule Q rate for excess power that DWS sells to HELCO, at less than 10 cents per kWh. DWS is exploring additional hydro-generators.

Turning to the Rider M program, Ms. Hayducsko said that DWS has 9 wells on the program, which provides demand savings (in the form of rebates from HELCO) for off-peak pumping. One of those 9 wells is currently not producing power, so DWS is not getting any rebate from that well.

Mr. Balog asked why there were 11 wells in Rider M circa 2012 and 2013, while now there are only 9 wells in the program.

Ms. Hayducsko said that two wells are down for repairs right now, but DWS wants to reinstate them into Rider M. When a well is down for over a year, HELCO terminates DWS's Rider M contract for that well. Two wells were terminated recently. Some of the very large wells are still very active, so the rebates have been good; DWS is trying to optimize everything that it can, Ms. Hayducsko said.

Mr. Balog asked if any other wells were at risk of being terminated from Rider M.

Ms. Hayducsko said no, she believed that the wells that are currently active in the program are doing well.

The Manager-Chief Engineer said that one of the challenges is that DWS needs to have enough redundancy in its system, in order to be able to commit to not using these wells during peak hours. When a well goes down and DWS must resort to another well that is on Rider M, DWS must pay the penalty. Rider M incentivizes DWS to *not* pump when HELCO wants DWS not to pump, he said. When Rider M wells have to pump during peak hours, HELCO dings DWS for it on the rebates. DWS considers Rider M a good program, and would like to expand on it. This could be something that DWS could include in an Energy Savings Performance Contract (ESPC), the Manager-Chief Engineer said. Among the things that could factor in are variable frequency drives (VFDs) and increased storage that would enable DWS to utilize each Rider M contract more effectively, he said.

Ms. Hayducsko noted that the very times that DWS is required under Rider M to curtail pumping is when customer demand tends to be highest: between 5:00 p.m. and 9:00 p.m.

Chairperson Robinson said that hopefully, there will be water in storage, so that DWS will just be drawing down storage, instead of pumping water during those peak times.

Ms. Hayducsko said that DWS does that whenever it can, but there are times when DWS cannot keep up, and instead needs to go to a 2-hour curtailment of pumping. HELCO does not always agree to that shorter window, she said.

Chairperson Robinson asked about the possible purchase of HELCO by Florida-based NextEra; he noted that when a company plans to acquire an operating company, it does its due diligence to ensure that everything is as represented. He asked if NextEra had come to talk with DWS, which is the biggest user of HELCO's electricity on this island. He said that as part of the due diligence, NextEra will have talked to DWS about its plans for future energy use, etc.

The Manager-Chief Engineer said no, NextEra had not contacted DWS. The County has established its intervenor status on the proposed purchase of HELCO, and DWS has provided its comments and concerns, which hopefully will be brought to the table. Next Monday is the start of the evidentiary hearings with the intervenors. DWS had hoped that NextEra would come to talk with them. The Manager-Chief Engineer said that he has attended related events such as the one at 'Imiloa, and has participated in the HELCO Economic Forum in Waimea. DWS really wants to talk story with influential people like Mr. Dutch Kuyper of Parker Ranch, Mr. Hank Rogers of Blue Planet, and Mr. Ed Olson (a major land owner). There are a lot of things happening on this island as far as energy is concerned, and DWS continues to explore its options in this regard, the Manager-Chief Engineer said.

Ms. Hayducsko noted that her report gives information about the Lālāmilo Windfarm. She said that the Board had received the Department's Energy Policy in their packets; the Department is currently working on updating it.

Returning to the recommendations by Mr. Bolles, Ms. Hayducsko said that DWS is looking into increasing its use of spring water, instead of pumping. This is a very big island, with a lot of sources and sites; it will take some work to implement all of the recommendations in Mr. Bolles' report.

The Manager-Chief Engineer, referring to the Energy Policy handout, said that DWS had done it in 2011, so staff are taking another look at it, with an eye to updating it.

Mr. Elarionoff took issue with the wording of the Energy Policy's Vision statement; he said that it should have said: "The Department of Water Supply *remains* a recognized industry leader." This would show that DWS is still striving. The current wording makes it sound as if DWS is already an industry leader, and that is it, he said.

The Manager-Chief Engineer said that the Vision and Mission statements were established when DWS went through its Strategic Business Plan formulation back in

2004. It was vetted through the Board at the time, but it may be something that the current Board wants to revisit.

Ms. Iokepa-Moses proposed that DWS dedicate a facility or erect a plaque in honor of the recently deceased hydrologist Mr. Steve *Bowles* (as opposed to Mr. Steve Bolles of the Energy Report). She commended the late Mr. Bowles for his visionary ideas on sustainability, etc.

3) Public Information and Education Specialist Update – Ms. Aton noted the voluminous packet of news articles that she provided to the Board. She said that she is working on a video regarding Source Water Protection, with funding from DOH. Footage was taken at the Waimea facility as well as locally. The video will dovetail with the ongoing Project Wet program. Ms. Aton is also ordering activity booklets for use in classrooms and for school excursions to DWS facilities. She sent out a Conservation Notice dated November 13 to North and South Kona, targeting large water users.
Chairperson Robinson asked Ms. Aton to issue a press release about the impending decrease in the Power Cost Charge. Ms. Aton said she would do so.

J. **CHAIRPERSON'S REPORT:**

Chairperson Robinson noted that the Board will hold elections of the incoming Chairperson and Vice-Chairperson for 2016, at the December Board meeting.

8) ANNOUNCEMENTS:

1. **Next Regular Meeting:**
The next meeting of the Water Board is scheduled for 10:00 a.m. on December 15, 2015, at the Department of Water Supply, Operations Center Conference Room, 889 Leilani Street, Hilo, HI.
2. **Following Meeting:**
The following meeting of the Water Board will be held at 10:00 a.m. on January 26, 2016, at the Department of Water Supply, Operations Center Conference Room, 889 Leilani Street, Hilo, HI.

9) ADJOURNMENT

ACTION: Ms. Lee Loy moved to adjourn; seconded by Mr. Uyeda, and carried unanimously by voice vote.

The meeting adjourned at 12:17 p.m.

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Secretary

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Notice to Lobbyists: If you are a lobbyist, you must register with the Hawai'i County Clerk within five days of becoming a lobbyist. {Article 15, Section 2-91.3(b), Hawai'i County Code} A lobbyist means "any individual engaged for pay or other consideration who spends more than five hours in any month or $275 in any six-month period for the purpose of attempting to influence legislative or administrative action by communicating or urging others to communicate with public officials." {Article 15, Section 2-91.3(a)(6), Hawai'i County Code} Registration forms and expenditure report documents are available at the Office of the County Clerk-Council, Hilo, Hawai'i.