

MINUTES

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

November 22, 2016

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

- MEMBERS PRESENT: Mr. Craig Takamine, Chairperson
Mr. Russell Arikawa, Vice-Chairperson
Mr. Bryant Balog (arrived 12:10 p.m.)
Ms. Brenda Iokepa-Moses
Ms. Susan Lee Loy
Mr. Jay Uyeda
Mr. Keith K. Okamoto, Manager-Chief Engineer, Department of Water Supply (ex-officio member)
- ABSENT: Mr. Leningrad Elarionoff, Water Board Member
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
- Department of Water Supply Staff
Mr. Kawika Uyehara, Deputy
Ms. Janet Snyder, Information and Education Specialist
Mr. Kurt Inaba, Engineering Division Head
Mr. Richard Sumada, Waterworks Controller
Mr. Daryl Ikeda, Chief of Operations
Mr. Clyde Young, Operations Division
Mr. Eric Takamoto, Operations Division
Ms. Judy Hayducsko, Energy Management Specialists
Mr. Robert Ravenscraft, Operations Division, Kona
Mr. Clifford Victorine, Office of the Corporation Counsel
Mr. Aaron Ikeda

- 1) CALL TO ORDER – Chairperson Takamine called the meeting to order at 10:10 a.m.
- 2) STATEMENTS FROM THE PUBLIC

Mr. Aaron Ikeda testified regarding his claim against the Water Board. The following testimony is verbatim.

MR. IKEDA: “I would like just to say that, you know, we have our water problem...we had a water problem. We tried to fix it, and I guess the thing now is that it was decided months ago that we would have a berm, the Department of Water Board (sic) is making a berm to put over...to avoid where the water was going underneath the road, uh, underneath my house... And we tried to go that way, but the Water Board said no, it's just been a response for *that* part. But the thing was that we were trying to get it away from the house...houses... And we had to build that thing to keep it away from the houses, because the thing the insurance guy said: “That water running in the house is surface water.” And surface water...we

cannot get insurance on the houses, you know. So that was the biggest concern...to push it away. And ever though we stopped this...they stopped the water...in a big, heavy rain, the water still comes underneath, because we felt that a channel came through, because it was months that the water was running underneath the road. So we're still having that problem...but only when it rains now, not 24/7, every day of the week. So anyway, we just want you to consider that second portion, where we had to try and divert the water away from the houses, and right now, that's the (inaudible) culvert coming underneath the road...in what is a flood zone. And we had a really big rain one time, and the rain just came through...we had a big puddle right by the house...like a lake. You know...so we knew it was going that way, so that's why I went to push it over, and tried to make a dry well to make it (soft?) so the water goes down. And we don't know if that works yet, 'cos we're waiting for another big rain to come in, to see if that works. And we've dug several holes; it's all solid rock. So we finally found a spot right next to a culvert that we could try to shove it in, but we don't know if it'll hold it at that point. We're just waiting... So anyway, that's all I have to say."

Chairperson Takamine thanked Mr. Ikeda for his testimony. On a different subject, the Chairperson called for a moment of silence to honor the passing of the late State Representative Clift Tsuji, who he said was a staunch advocate of farmers and agriculture.

Chairperson Takamine recognized outgoing Water Board Member, Ms. Lee Loy, whose last Board meeting was today. Ms. Lee Loy was recently elected to the County Council. He noted that Ms. Lee Loy had worked particularly hard on amendments to the DWS Rules, policies and procedures, and she will be greatly missed. The Chairperson expressed confidence that Ms. Lee Loy would do a great job on the Council, and said that all of the Board is very excited for her.

- 3) APPROVAL OF MINUTES – ACTION: Mr. Uyeda moved to approve the Minutes of the October 25, 2016 Water Board Meeting; seconded by Mr. Arikawa and carried unanimously by voice vote.
- 4) APPROVAL OF ADDENDUM AND/OR SUPPLEMENTAL AGENDA – None
- 5) NORTH KOHALA:

A. **RESOLUTION NO. 2016-05, PROVIDING FOR THE ACQUISITION OF PRIVATE PROPERTY AND AN EASEMENT SITUATED IN MAKAPALA, THE DISTRICT OF NORTH KOHALA, TMK (3) 5-2-005:023, FOR WELL SITE IMPROVEMENTS:**

Resolution 2016-05 provides for the acquisition of 1,050 sq. ft. of private property and a 600 square foot easement, identified as a portion of Tax Map Key (3) 5-2-005:023. DWS plans water system improvements on the said property including, but not limited to, the development, operation and maintenance of an existing undeveloped well which will serve as a backup source to the existing Makapala Production Well.

DWS paid to construct the undeveloped well with the cooperation of the U.S. Geological Survey (USGS) and a previous landowner during the late 1980's. The well site and easement were recently appraised for a combined value of \$875.00 as of March 8, 2016.

The Manager-Chief Engineer recommended that the Water Board adopt Resolution No. 2016-05, subject to the approval of Corporation Counsel.

Chairperson Takamine said that the Department had requested that this Item be deferred.

MOTION: Mr. Arikawa moved to defer; seconded by Ms. Lee Loy.

The Manager-Chief Engineer said this Item *could* go forward today, but it required six Board members to be present, so it could be handled later in the meeting when the sixth Board member arrived. He clarified that Item 5(B), RIGHT OF ENTRY FOR THE HALA'ULA WELL AND

TANK SITE IN THE DISTRICT OF NORTH KOHALA, TMK (3) 5-3-004:001, needed to be deferred.

Ms. Self said that the Board should table Item 5(A), and move to withdraw the deferral.

ACTION: Mr. Arikawa moved to withdraw his Motion to defer Item 5(A); seconded by Ms. Lee Loy, and carried unanimously by voice vote.

B. RIGHT OF ENTRY FOR THE HALA‘ULA WELL AND TANK SITE IN THE DISTRICT OF NORTH KOHALA, TMK (3) 5-3-004:001:

The Department of Water Supply is working to acquire a portion of TMK (3) 5-3-004:001 for a well and tank site. In order to begin the design work prior to completion of the acquisition, DWS intends to execute a Right of Entry Agreement with the land owner.

The Manager-Chief Engineer recommended that the Water Board approve the subject Right of Entry Agreement for the Hala‘ula Well and Tank Site in the District of North Kohala, TMK (3) 5-3-004:001, subject to review and approval of Corporation Counsel, and that the Manager-Chief Engineer or the Deputy be authorized to sign the documents.

MOTION: Mr. Arikawa moved to defer; seconded by Mr. Uyeda.

Ms. Self asked whether the Board wanted to defer to the December meeting.

Mr. Arikawa said he would clarify his Motion.

ACTION: Mr. Arikawa moved to defer to the December meeting; seconded by Mr. Uyeda, and carried unanimously by voice vote.

6) NORTH KONA:

A. JOB NO. 2016-1056, WAI‘AHA DEEPWELL REPAIR:

This project consists of paying for all labor, materials, tools and equipment necessary for the replacement of the existing deep well submersible pump and motor, power cable, column pipe, column couplings and all appurtenant materials, such as cable guards, strapping, etc; chlorination and testing of the well and pumping assembly; in accordance with the specifications.

Bids for this project were opened on November 10, 2016, at 1:30 p.m., and the following are the bid results:

Bidder	Bid Amount	Adjusted Bid Amount (for purposes of bid award)*
Beylik Drilling & Pump Service, Inc.	\$786,165.00	\$746,856.75
Derrick’s Well Drilling and Pump Services, LLC	\$650,000.00	N/A
Water Resources International, Inc.	Non-Responsive	N/A

*Bids were adjusted (for the purpose of award) to provide credits for participation in the State Apprenticeship Program, in accordance with Hawai‘i Administrative Rules.

Project Costs:

1) Low Bidder (Derrick’s Well Drilling and Pump Services, LLC.)	\$ 650,000.00
2) Contingencies (10.0%)	<u>65,000.00</u>
Total Cost:	<u>\$ 715,000.00</u>

Funding for this project will be from DWS's CIP Budget under Deepwell Pump Replacement. The contractor will have 210 calendar days to complete this project. The Engineering estimate for this project was \$605,000.00.

The Manager-Chief Engineer recommended that the Board award the contract for JOB NO. 2016-1056, WAI'AHA DEEPWELL REPAIR, to the lowest responsible bidder, Derrick's Well Drilling and Pump Services, LLC., for their bid amount of \$650,000.00, plus \$65,000.00 for contingencies, for a total contract amount of \$715,000.00. 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: Ms. Iokepa-Moses moved to approve; seconded by Ms. Lee Loy.

Mr. Uyeda asked how deep this well is, and asked why the bid price was substantially higher than other well repair projects that have come before the Board.

Mr. Takamoto said that the main cost increase on this bid could be attributed to the fact that DWS included electrical inspection work, to give the Department some degree of security that the contractor will honor warranties, having reviewed all of the electrical work on this project. He said that the depth of the well was 1,500 feet.

The Manager-Chief Engineer said the scope involves a push-pull of the pump and motor. He noted that in some well repair jobs in the past, things got cloudy regarding what constitutes "warranty work." Sometimes there were questions as to what piece of equipment was at fault, etc. DWS is now looking to include that kind of electrical inspection work in the project scope. The aim is to have all parties be aware ahead of time regarding something like a pre-existing condition; it will be clear, before DWS pulls the pump and motor out of the ground and ships them off for repairs, whether a piece of equipment topside was actually at fault. DWS staff do their best to evaluate the system up top, but issues involving electrical controls and components are not readily apparent by merely looking at the equipment.

Mr. Arikawa asked whether this well was off-line.

Mr. Takamoto confirmed that it was off-line; DWS decided to take it off-line to prevent it from breaking down. This well could be brought back on to act as a back-up in case another well goes down, he said.

Mr. Arikawa asked if there was a back-up for this well, once the repairs on it begin.

The Manager-Chief Engineer said that there are actually 12 sources in the area, and DWS staff are getting very adept at making water move from one place to another. He expressed confidence that once this well is rendered unusable during the repairs, DWS will manage to get other wells to work for the system. Failing that, DWS will come to the Board for an emergency procurement to do a repair job on another well, he said

Mr. Arikawa said that the 210 calendar days is a long time for the well to be down.

Chairperson Takamine noted that most electrical inspection work would be pretty standard now.

The Manager-Chief Engineer said that the Department is evaluating how it does things. Including electrical inspection work is one of the things that DWS is putting into the scope for the contractor. At the same time, DWS is looking to hire its own independent consultant to do the electrical inspection work, he said, noting that if the contractor hires such a person, that person will be working for the *contractor*. Conflicts of interest could arise, he said. DWS is looking at doing it both ways,

i.e., putting it into the contractor's scope or hiring an independent consultant. Because on this particular repair project, **time is of the essence**, DWS has put the electrical inspection work in the scope of the contractor. On another repair project, DWS might take the other approach, he said.

Chairperson Takamine said that was good.

Mr. Arikawa asked whether this current project entailed a complete replacement of the submersible pump; he asked if this would be a brand-new pump.

Mr. Takamoto confirmed that it would be brand-new.

Mr. Arikawa said that in that case, the repairs would not take as extraordinarily long to complete – less than well repair jobs in the past.

The Manager-Chief Engineer asked Mr. Takamoto to explain how the duration of the contract would typically account for these 210 calendar days.

Mr. Takamoto said in this case, there would be the electrical inspection work; DWS would be directing the contractor to get all of their materials ready up front first, before they even consider taking down this site. By so doing, DWS will be working to minimize the length of time that this facility will be off-line. DWS is working to get this repair done as quickly as possible; the contractor will be doing both the electrical work and the well repair work concurrently, to minimize the actual repair time.

ACTION: Motion carried unanimously by voice vote.

B. JOB NO. 2013-989, KAHALU'U SHAFT INCLINED LIFT REPLACEMENT:

This project consists of the removal and replacement of an existing inclined lift system and control with a new traction drive inclined lift system and wireless control, and all related materials, equipments, and accessories to be removed and installed for the new system as indicated on the project plan and specifications.

Bids for this project were opened on November 10, 2016, at 2:00 p.m., and the following are the bid results:

Bidder	Bid Amount
Jas. W. Glover, Ltd.	\$2,438,000.00

The Engineering estimate for this project was \$900,000.00.

The Manager-Chief Engineer recommended that the Board not award the bid for JOB NO. 2013-989, KAHALU'U SHAFT INCLINED LIFT REPLACEMENT, due to the high cost of the bid. Staff will re-evaluate the scope of work and will procure the necessary services according to procurement rules.

MOTION: Ms. Lee Loy moved to approve; seconded by Mr. Arikawa.

The Manager-Chief Engineer said that the bid came in significantly above the estimate, so the Department decided to take a step back to try to adjust the project scope, or adjust the bid documents regarding the qualifications of the contractor, in hopes of getting a more reasonable amount. DWS needs the work to be done, he said. The inclined lift is operational, so DWS has the time to re-evaluate and re-advertise for bids.

Mr. Arikawa asked how old this inclined lift system is; he asked if it was ever repaired, replaced, or was the original system.

Mr. Takamoto said it was the original equipment.

The Manager-Chief Engineer said it dated back to the late 1970s.

Mr. Arikawa asked if Glover was the original contractor.

The Manager-Chief Engineer explained that this system was built by the now-defunct State Division of Water and Land Development. The State developed the source, and turned it over to DWS, so the original contract was the State's contract.

ACTION: Motion carried unanimously by voice vote.

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

(For Water Meter Purposes)

Grantor: The Residences of Laulea Limited Partnership

Tax Map Key: (3) 6-8-022: 024

2. GRANT OF EASEMENT AND BILL OF SALE

Subdivision No.2014-001324

Zoning: RS-10

No. of Lots: 21

Grantor/Seller: RJL, LLC

Tax Map Key: (3) 2-7-040: 009 portion

Facilities Charge: \$111,190.00 Date Paid: 6/23/2016

Final Inspection Date: 6/18/2016

Water System Cost: \$111,197.00

3. GRANT OF EASEMENT AND BILL OF SALE

Subdivision No.: SUB-07-000637

Zoning: A-5a

No. of Lots: 22

Grantor/Seller: Ki'ilae Farms Owners Association, Inc.

Tax Map Key: (3) 8-5-007: 040 and 041 (Road Lots 73 and 74)

Facilities Charge: \$132,000.00 (for 24 services) Date Paid: 6/28/2007

Final Inspection Date: 8/16/2016

Water System Cost: \$235,410.00

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 the Vice-Chairperson be authorized to sign the documents.

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

B. EXECUTIVE SESSION: CLAIM AGAINST THE COUNTY OF HAWAI‘I, DEPARTMENT OF WATER SUPPLY/Ikeda, Aaron & Carol, Claim No. 16-0040:

(This Item was handled later in the meeting.)

C. UPDATE RE: NATIONAL PARKS SERVICE’S PETITION TO DESIGNATE KEAUHOU AQUIFER AS A GROUND WATER MANAGEMENT AREA:

The Manager-Chief Engineer noted that the Board received in their packets a four-page document entitled “Possible Milestones for Non-Designation Recommendation for the Keauhou Aquifer System Area.” This document is the latest that DWS has gotten from the State Commission on Water Resource Management (CWRM). He noted that he and Mr. Inaba had attended the CWRM meeting last Tuesday, where the Department’s consultant presented the Water Use and Development Plan – Phase 2. This was basically just a briefing for the Commission. He noted that the day before the meeting, CWRM staffer Mr. Roy Hardy provided the four-page “Milestones” document. DWS has had about a week to digest it, the Manager-Chief Engineer said. This appears to be CWRM’s attempt at mediation, in order to avoid designation. There are some issues that the Board might want to consider, and he recommended that the Board discuss this in Executive Session.

Ms. Self said that the Executive Session required a two-thirds majority, so it would have to be held later in the meeting.

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

(This Item was handled later in the meeting.)

E. MONTHLY PROGRESS REPORT:

The Manager-Chief Engineer mentioned that DWS would be holding a public informational meeting this evening regarding the Santos Lane/Nohea Street project at the Waiākea Intermediate School library. The intent of this meeting is similar to a meeting held regarding the Pi‘ihonua-Kūkūau project, i.e., to inform the residents about the project status, the proposed project schedule, and how the project may affect the residents’ daily routine.

Ms. Iokepa-Moses asked if there is usually a large turnout for such meetings.

The Manager-Chief Engineer said that this is the second such meeting, but the first meeting, regarding the Pi‘ihonua-Kūkūau project, had more than 30 people show up. The Santos Lane/Nohea Street project is in a more concentrated area; it primarily only involves two streets, although when the contractor gets to Puainako Street, the contractor may have to restrict traffic to one lane. He asked Ms. Snyder how many flyers she handed out.

Ms. Snyder said approximately 40 flyers were distributed door-to-door.

The Manager-Chief Engineer said the Department set the meeting time at 5:30 p.m., before dinnertime, for the convenience of the residents.

Ms. Snyder said yes, in addition, the venue for the meeting is within close walking distance of the two streets.

The Manager-Chief Engineer said he would inform the Board how many people attended.

Chairperson Takamine asked about the status of the Queen Ka‘ahumanu Highway Widening project.

Mr. Inaba said that as far as DWS's waterline portion, the contractor continues to work on it. He said that he asked for a schedule for the water system that the contractor is now installing. The contractor can complete that work, do the tie-in and have the system operational even before the actual highway work is complete, he said. Mr. Inaba said that he would report back with an estimate when the contractor gets it to him. He said he thought the contractor was still lacking the final tie-in dates. The contractor can do the testing and chlorination, but they have as yet been unable to get the tie-in schedule, which will pinpoint when DWS will be able to cross the existing lanes of the highway.

Mr. Arikawa asked if the Āhualoa-Honoka'a Transmission Waterline project was completed. He asked if the contractor had submitted the final payment request.

Mr. Inaba said no, not yet. The contractor has some punch list items, possibly including pavement repair work.

Ms. Lee Loy, noting previous right-of-way glitches with the State Department of Transportation (DOT), asked whether DWS had managed to iron out the Use & Occupancy Agreement regarding the Āhualoa project.

Mr. Inaba said that the Use & Occupancy Agreement has been somewhat ironed out, and DOT is in agreement with DWS that they want to work on a *master* Use & Occupancy Agreement. For the Āhualoa project, there is a current template, which DOT said they are okay to follow. One of the issues that DWS has in getting projects through is the State's conditional approval letter, which has language that conflicts with the language in the Use & Occupancy Agreement. DWS objected to the language in the conditional approval letter, and DOT said they were going with the Use & Occupancy Agreement language. DWS ended up lining out the language that conflicted in the conditional letter, Mr. Inaba said. DWS will execute the Use & Occupancy Agreement, which will override the conditional approval letter.

The Manager-Chief Engineer said that the short answer to Ms. Lee Loy's question is that the kinks have not really been ironed out yet.

Mr. Inaba said that it is still in process.

The Manager-Chief Engineer said that DWS does have an executed Use & Occupancy agreement for the Āhualoa-Honoka'a Transmission Waterline, which DWS *thought* would be the template for future such agreements. DWS was hopeful that things had been ironed out, but things are not consistent when dealing with the State; there are different engineers involved, as well as different Attorneys-General assigned to projects. As Mr. Inaba said, the conditional approval letter that the State typically sends is full of language that DWS cannot sign off on, such as holding the State harmless for anything and everything in a State highway. The State requires DWS to sign that conditional approval letter, before the State starts the process on the actual Use & Occupancy Agreement. The Manager-Chief Engineer said it is a work-in-progress. DWS is trying to handle it at a staff level, among Mr. Inaba, the consultants and the State Right-of-Way Branch.

Ms. Lee Loy asked if that master Use & Occupancy Agreement is the best solution for DWS.

The Manager-Chief Engineer said that DWS thought it might be, but Honolulu Board of Water Supply (BWS) has been working on such a master Use & Occupancy Agreement for years – so far, to no avail. DWS cannot wait for that to happen; it needs to get its projects done, so the Department is handling things case-by-case. DWS checks in with Honolulu from time to time on how things are going, but it has been taking years.

Ms. Lee Loy asked if there is anything that the Board can help to facilitate things.

The Manager-Chief Engineer said that if the Department thinks of something, they will let the Board know.

Ms. Self noted that under Statute, the State cannot indemnify the County for anything, unless it is agreed to by the Governor.

The Manager-Chief Engineer said it *can* be done.

Ms. Self agreed, but the deputy AG does not want to sign off on it. She thought the way to go might be to get the Governor to sign some sort of document that would cover all other things involving indemnity; she said she did not know if the State would go for that or not.

The Manager-Chief Engineer said that he participates in quarterly teleconferences with the other water departments; he said he would check with Honolulu the next time to see where things stand on a master Use & Occupancy Agreement.

Chairperson Takamine wondered if the Big Island should take the lead on this, instead of waiting for Honolulu to sort it out.

Mr. Inaba said that Oahu had actually eliminated a portion of their contracts that tapped across State Highways, due to this thorny Right-of-Way issue that DWS also faces.

Mr. Uyeda said he was sure that DWS is not the only utility waiting for a Use & Occupancy permit. He thought it would be good to reach out to the other water departments, to show how many projects are being held up because of this – and the dollar amounts involved.

Ms. Lee Loy agreed that a white sheet showing the timelines and the costs involved would lend some weight to help get the issue resolved.

The Manager-Chief Engineer said that DWS could work on that.

Ms. Lee Loy said that it would pay off in the long run, and could result in good, tight timelines for construction. It would be for the customers' benefit, she said.

F. REVIEW OF MONTHLY FINANCIAL STATEMENTS:

The Manager-Chief Engineer said that DWS would soon be preparing the Department's Budget; the draft Budget will probably be first brought to the Board in January. As a heads-up, he said that the Department is looking to revisit water rates, in the interests of being good stewards.

G. MANAGER-CHIEF ENGINEER'S REPORT:

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

- 1) Matters of interest to the Board: Conferences – The recent HWWA/HRWA conference on Maui was a success, with great attendance from all of the state's water utilities and private water-related entities. It will be DWS's turn to hold the conference next year; DWS will partner with HRWA, which does the heavy lifting on organizing the conference, i.e., lining up the speakers, arranging the venue, etc. In February, there will be the Pacific Water Conference in Honolulu; DWS has four budgeted slots for Board members. This conference is held at the Convention Center, and DWS has blocked off hotel rooms at the Ala Moana Hotel, which is closer to the venue than the official conference hotel, the Prince. The ACE17 national conference in June will be in Philadelphia; interested Board members should contact the Secretary. There are four budgeted slots for the Board, so if there are more than four Board members who want to attend, attendance will be based upon Board seniority.

- 2) DWS Energy Report – Ms. Hayducsko said the numbers on energy savings have been reassuring, thanks largely to lower oil prices. The rates that HELCO has given DWS have been stable, although HELCO is looking for a rate increase. She noted that the energy cost is a separate calculation from the *power cost*; the energy cost changes more often than the power cost. DWS has been installing more energy-efficient pumps and motors, and is looking at reducing pumping when there is a way to maintain water quality and adequate water for customers. Ms. Hayducsko said that she is starting to see an increase in the number of gallons sold. Turning to leak detection, she reported that the magnets on some of DWS’s leak loggers attached to the water valves were failing; DWS replaced more than 300 of these magnets. To compensate for the time and money that DWS spent on the replacement work, the vendor gave the Department 50 new loggers. It turned out that the magnets had gotten the wrong coating; the new magnets have better coating, she said. On the subject of water audits, Ms. Hayducsko has been examining individual system water loss calculations; that analysis should be coming before the Board at some point. She provided a graph showing how a leak would look vis a vis DWS’s energy cost. She said that it takes a bit of time to gather the information on water sold and water produced, because the data goes through processes before it is finalized. A subject that has rarely arisen lately is DWS’s Energy Redundancy projects, i.e., the Department’s emergency preparedness. She noted that DWS was given large generators in 2006 after the Kiholo Bay Earthquake. DWS is now working to get additional emergency generators, and is formulating a plan to ensure that DWS has generators in place at its critical sites to keep the water flowing in the event of a disaster.

The Manager-Chief Engineer said that Ms. Hayducsko did a lot of work with Mr. Young and his colleagues in Operations in putting together a “grant nomination” to get the additional generators.

Ms. Hayducsko said that Maui, recently wracked by floods triggered by a hurricane, had gotten a FEMA designation to the tune of \$3.1 million in available funds; all of the islands may apply for the funds for hazard mitigation, to boost emergency preparedness. Ms. Hayducsko said she applied for \$2.8 million of those available funds, and DWS will find out in December if its application was successful. She said DWS is likely to be successful for its top two projects, and possibly for its other projects as well. The arrangement is a cost-share one, with FEMA bearing 75 percent of the costs, with 25 percent borne by DWS. She noted that that staff time and the Board’s volunteer time can count towards that 25 percent share, as “in-kind contributions.”

The Manager-Chief Engineer said that Ms. Hayducsko did a great job of putting that grant package together, and hopefully it will translate into additional emergency generators for DWS.

Ms. Hayducsko said that four generators are expected to come in next summer for DWS’s smaller wells; bids for that procurement have been put out for purchase by Civil Defense on behalf of DWS. She noted that DWS tends to put generators near hospitals, to make sure the water is flowing. Turning to Energy Capital Improvement projects that DWS has started working on, Ms. Hayducsko showed on the last page of her energy report a photo of a VFD (variable frequency drive) that DWS has just installed at Ocean View. Another photo showed an electric sine wave filter, which helps the VFD to operate, while a third photo showed a power factor capacitor that DWS is testing at the Ola‘a 3 facility. She noted that these power factor capacitors save DWS on both demand and energy costs.

Mr. Uyeda asked if the generators are on an auto-transfer switch when the power goes out.

Ms. Hayducsko said that DWS will not put them on an auto-transfer switch; if the power goes off, DWS wants to make sure that it is a double-throw manual transfer switch instead. DWS needs to make sure that the well is balanced, and that all of the alarms are taken care of, before DWS can restart the wells, she said. Those functions are put on a double-throw manual transfer switch; Ms. Hayducsko said that she had applied for \$1.3 million (of the total \$2.8 million she applied for) to install those double-throw transfer switches. DWS has been slowly installing these switches, but they are a very high priority for DWS in the future. DWS has one such switch in place at Haleki'i Well just above Kona Hospital, and it has been a success, she said.

Ms. Lee Loy asked what the evaluation factors were for determining the critical locations for the generators.

Ms. Hayducsko said that DWS looks at high consumption, which indicates that somebody needs that water. DWS also looks at what is being served at that site; hospital and triage medical centers are seen as critical locations, where the need for water in a disaster will be crucial to conducting medical operations, sanitizing, etc. DWS is also looking at Command Centers, to ensure that the people working to keep the island running have water. Civil Defense shelters, typically set up at schools and municipal gyms, are viewed as critical locations as well.

Ms. Lee Loy asked what happens to the old generators.

Ms. Hayducsko said that DWS is not getting rid of any generators at this time, and instead is adding to the Department's capacity. DWS is looking at having portable generators, possibly replacing them with stationary generators if the Department can get good deals on them, she said.

Mr. Arikawa asked if the VFD keeps the pumping rate constant at the site, so it reduces the stress on the pumps.

Ms. Hayducsko said the VFD is like a dimmer switch; one can run the pump at several different hertz settings. A VFD will allow the operator to run the pump at any portion of its pumping rate.

The Manager-Chief Engineer said that the VFD has energy efficiency capabilities; with a VFD, the pump does not need to be run at its full 700-GPM capacity. The operator can throttle it down to 400 or 500 GPMs and make it operate, depending on the demand in the system. The old-school approach would be to rotate the pumps on an as-needed basis, i.e., not using all of the pumps 100 percent of the time. However, it is better to have the pumps run more continuously, without flicking the switch on and off every time; it is better to keep the pumps on, and let them stay on, he said. The VFD poses both energy efficiency benefits as well as operational benefits, allowing staff more flexibility and fostering more durability for the pumps and motors in the long run.

Mr. Arikawa said that another plus is that the VFD work be good at each site.

The Manager-Chief Engineer said that is what DWS is thinking, too.

Ms. Hayducsko said that the Department does a Cost Benefit Evaluation when considering the replacement of soft starters with VFDs. If a motor is doing okay with the on/off mode (i.e., with a soft starter) and is only running three hours or so a day, DWS may not put a VFD on that site. If a motor is on 20 hours a day, DWS may install a VFD which would allow the

operator to throttle the motor down at off-peak times so that it is not pumping at full capacity. Those are the kinds of calculations that DWS is doing to determine cost effectiveness.

Chairperson Takamine asked if VFDs can be readjusted remotely; he asked if the operator has to actually go to the site to work a dial.

Mr. Takamoto said that there is a physical keypad to dial and adjust it; there are other options that allow for remote control, but the Department is still working on them.

Ms. Hayducsko said that DWS is looking at using timers with VFDs on Rider M wells, to reduce pumping at off-peak hours to maximize the rebates from HELCO. This would also reduce the demand charges.

Mr. Uyeda asked if the grant covered the procurement of surge protection equipment, etc.

Ms. Hayducsko said that surge protections are built into the VFDs and pump controls.

Mr. Takamoto confirmed this.

The Manager-Chief Engineer said that surge protectors/arresters are standard control equipment. Those surge suppressors can handle a glitch coming in from HELCO, but not the massive surges caused by lightning strikes, which do occur from time to time. DWS is working to enhance its staff's capability in testing its equipment to identify malfunctions, etc.

On a sad note, the Manager-Chief Engineer reported that DWS's Energy Management Specialist Ms. Hayducsko was leaving DWS soon to explore other opportunities. He said that Management was looking at what can be done with the position's classification, to make the position more attractive; he expressed hopes that it might become attractive enough that Ms. Hayducsko might consider such new opportunities at DWS. He said that she did a terrific job in her short stint as Energy Management Analyst.

- 3) Recognition of Service Retirement – Mr. Ikeda reported that Mr. James Chow Hoy, Lead Pipefitter, was retiring on November 30 after 27 years of service.

H. **MANAGER-CHIEF ENGINEER'S EVALUATION FOR CALENDAR YEAR 2016:**

Chairperson Takamine said that at the Executive Session last month, the Board was asked to fill out the evaluation forms for the Manager-Chief Engineer.

Ms. Snyder noted that one Board member had still not submitted an evaluation form.

Chairperson Takamine said that Board would hold off discussion until the Executive Session (below).

I. **EXECUTIVE SESSION: MANAGER-CHIEF ENGINEER'S EVALUATION FOR CALENDAR YEAR 2016:**

(This Item was handled later in the meeting.)

J. **CHAIRPERSON'S REPORT:**

Chairperson Takamine said that he and Mr. Arikawa met last week with the Manager-Chief Engineer and the Deputy. He said that both he and Mr. Arikawa believe the Manager-Chief Engineer and the Deputy have done an excellent job since taking their respective positions about two years ago. The Department is moving in the right direction, and has met its goals regarding the Water Use and Development Plan, he said. Management has done a good job addressing the concerns of the National Parks Service, and in working with the Commission on Water Resource Management (CWRM) for

the past year plus. Chairperson Takamine said he was impressed with Management's sense of urgency regarding issues that need to be taken care of, and he appreciated the lines of communication that have been established between the Board and Management. The Manager-Chief Engineer and the Deputy have 100 percent support from the Chairperson and Mr. Arikawa; the Chairperson felt the rest of the Board probably share these feelings. When the Chairperson and Mr. Arikawa expressed their support for the Manager-Chief Engineer, he immediately said that he could not have done it without the DWS staff.

Mr. Arikawa said he agreed with everything the Chairperson said.

Chairperson Takamine asked if, at this point, the Board should recess in anticipation of Mr. Balog's arrival.

Both the Manager-Chief Engineer and Ms. Lee Loy said they had just gotten a text from Mr. Balog.

Ms. Lee Loy said the text she got said he would arrive after 12:00 noon. On a different subject, Ms. Lee Loy asked the Chairperson if he could approach the Big Island Legislative Caucus for support of a master Use & Occupancy agreement when he goes to Honolulu during the Legislative session.

Chairperson Takamine said yes, that was a good idea. Turning back to the meeting Agenda, he asked whether the Board should defer the still-pending Items until next month.

The Manager-Chief Engineer asked if all of those Items would need to have an official Motion to defer.

Chairperson Takamine asked if the Board should recess for lunch, and resume the meeting, or defer the remaining Items to next month.

Ms. Lee Loy asked if there were any Items that were time-sensitive which should be decided at this meeting.

The Manager-Chief Engineer said the most time-sensitive one would be the claim, i.e., Item 7(B), to be fair to the customer. He asked Ms. Lee Loy if Mr. Balog guaranteed that he could make it to the meeting.

Chairperson Takamine asked the Board if everyone could break for lunch, and wait for Mr. Balog's arrival.

(All of the Board members said they could stay on, although Ms. Lee Loy said she needed to leave by 1:30 p.m.)

Ms. Iokepa-Moses asked if Mr. Balog committed to coming to the meeting.

Ms. Lee Loy said that she would call him; Mr. Balog indicated to her that he could make it around 12:15 p.m.

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

(Recess began at 11:15 a.m., Mr. Balog arrived at 12:10 p.m., and the meeting resumed at 12:21 p.m.)

5) NORTH KOHALA:

C. **RESOLUTION NO. 2016-05, PROVIDING FOR THE ACQUISITION OF PRIVATE PROPERTY AND AN EASEMENT SITUATED IN MAKAPALA, THE DISTRICT OF NORTH KOHALA, TMK (3) 5-2-005:023, FOR WELL SITE IMPROVEMENTS:**

(This Item was tabled earlier in the meeting until a quorum was present.)

MOTION: Mr. Arikawa moved to approve the Resolution; seconded by Mr. Uyeda.

The Manager-Chief Engineer said that this Resolution was before the Board, against the unlikely event that DWS needed to proceed with eminent domain proceedings. DWS is trying to reach an agreeable sale with the owner of this property, which is a small parcel adjacent to DWS's Makapala site. DWS had an understanding with the previous owner, so DWS is just trying to memorialize the sale of the property now, for the appraised value of \$875.00.

ACTION: A roll call vote was taken: Ms. Lee Loy (Aye); Mr. Uyeda (Aye); Mr. Arikawa (Aye); Chairperson Takamine (Aye); Ms. Iokepa-Moses (Aye) and Mr. Balog (Aye). Motion carried with Six (6) Ayes, and two (2) Excused: Mr. Elarionoff and Ms. Wilson.

7) MISCELLANEOUS:

B. **EXECUTIVE SESSION: CLAIM AGAINST THE COUNTY OF HAWAII, DEPARTMENT OF WATER SUPPLY/Ikeda, Aaron & Carol, Claim No. 16-0040:**

(This Item was tabled earlier in the meeting until a quorum was present.)

Deputy Corporation Counsel Amy Self requested an attorney-client confidential discussion to consult with the Water Board regarding a settlement offer for a claim filed on May 18, 2016, due to a water leak.

The Water Board convened an executive meeting regarding the above matter, pursuant to Hawaii Revised Statutes ("HRS"), Section 92-5(a)(4), for the purpose of consulting with its attorney on questions and issues pertaining to the Water Board's powers, duties, privileges, immunities, and liabilities. A 2/3 vote pursuant to HRS, Section 92-4, was necessary to hold this executive meeting.

MOTION: Ms. Lee Loy moved to go into Executive Session; seconded by Ms. Iokepa-Moses.

The Manager-Chief Engineer asked if the Board would allow Kona District Supervisor Bob Ravenscraft to attend the Executive Session; Mr. Ravenscraft had conducted the investigation into the claim.

Ms. Self asked if Mr. Clifford Victorine, the investigator from the Office of the Corporation Counsel, could also attend.

(The Board assented to their attendance at the Executive Session.)

ACTION: Motion to go into Executive Session carried unanimously by voice vote.

(Executive Session began at 12:23 p.m., and ended at 12:40 p.m.)

ACTION: Ms. Iokepa-Moses moved to approve the Recommendations regarding the claim by Mr. Aaron Ikeda; seconded by Ms. Lee Loy, and carried unanimously by voice vote.

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

(This Item had been tabled earlier in the meeting until a quorum was present.)

The Water Board convened an executive meeting, closed to the public, pursuant to Hawai'i Revised Statutes, Sections 92-4, 92-5(a)(2), to discuss mediation as directed by the Commission on Water Resource Management regarding the National Park Service's petition to designate Keauhou Aquifer as a Ground Water Management Area, and for the purpose of consulting with the Water Board's attorney on questions and issues pertaining to the Water Board's powers, duties, privileges, immunities and liabilities.

ACTION: Ms. Lee Loy moved to go into Executive Session; seconded by Ms. Iokepa-Moses, and carried unanimously by voice vote.

(Executive Session began at 12:41 p.m., and ended at 1:10 p.m.)

ACTION: Mr. Balog moved to raise the cap of the retainer for DWS's special counsel by an additional \$25,000.00; seconded by Ms. Iokepa-Moses, and carried unanimously by voice vote.

I. EXECUTIVE SESSION: MANAGER-CHIEF ENGINEER'S EVALUATION FOR CALENDAR YEAR 2016:

(This Item was tabled earlier in the meeting until a quorum was present.)

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

(Executive Session began at 1:14 p.m., and ended at 1:29 p.m.)

ACTION: Ms. Lee Loy moved to increase the salary of both the Manager-Chief Engineer and the Deputy by 10 percent; seconded by Ms. Iokepa-Moses, and carried unanimously by voice vote.

8) **ANNOUNCEMENTS:**

1. **Next Regular Meeting:**

The next meeting of the Water Board is scheduled for December 20, 2016, 10:00 a.m., at the Department of Water Supply, Hilo Operations Center Conference Room, 889 Leilani Street, Hilo, Hawai'i

2. **Following Meeting:** The following meeting is scheduled for January 24, 2017, 10:00 a.m., at the Department of Water Supply, Hilo Operations Center Conference Room, 889 Leilani Street, Hilo, Hawai'i.

9) **ADJOURNMENT**

ACTION: Mr. Arikawa moved to adjourn; seconded by Mr. Uyeda, and carried unanimously by voice vote. Meeting adjourned at 1:30 p.m.

(For Secretary) Information and Education Specialist