

**MINUTES**

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

September 26, 2017

West Hawai'i Civic Center, Building G, 74-5044 Ane Keohokalole Highway, Kailua-Kona, Hawai'i

MEMBERS PRESENT: Mr. Craig Takamine, Chairperson  
Mr. Russell Arikawa, Vice-Chairperson  
Mr. William Boswell, Jr.  
Mr. Nestorio Domingo  
Mr. Leningrad Elarionoff  
Ms. Brenda Iokepa-Moses  
Mr. Eric Scicchitano  
Mr. Keith K. Okamoto, Manager-Chief Engineer, Department of Water Supply (ex-officio member)

ABSENT: Mr. Bryant Balog  
Ms. Kanoe Wilson  
Director, Planning Department (ex-officio member)  
Director, Department of Public Works (ex-officio member)

OTHERS PRESENT: Ms. Jessica Yeh, Deputy Corporation Counsel  
Mr. Jeff Zimpfer, National Park Service  
Mr. Fred Camero  
Mr. William Moore  
Mr. Riley Smith  
Mr. Frank Torres  
Mr. & Mrs. Oen  
Mr. Dennis Bensen  
Ms. Nancy Bryan  
Ms. Sally Stoltz  
Mr. John Stoltz  
Mr. Norman Bezona  
Mr. Duane Nitta  
Mr. Dean Ouer  
Ms. Karen Eoff (10:10 a.m.)  
Mr. Mike Drutar (10:25 a.m.)  
Mr. Joe Birds (10:30 a.m.)  
Ms. Cherie Griffore  
Mr. Alfredo Gormezano (10:35 a.m.)

Department of Water Supply Staff

Mr. Kawika Uyehara, Deputy  
Ms. Kaiulani Matsumoto, Administration Division  
Mr. Kurt Inaba, Engineering Division Head  
Mr. Richard Sumada, Waterworks Controller

Mr. Daryl Ikeda, Operations Division  
Mr. Clyde Young, Operations Division  
Mr. Eric Takamoto, Operations Division  
Mr. Warren Ching, Operations Division (10:58 a.m.)

- 1) CALL TO ORDER – 10:03 a.m.
- 2) STATEMENTS FROM THE PUBLIC (*verbatim*)
  1. Mr. Frank Torres

F. Torres: Good morning everyone. Thank you for your patience. I'm a new arrival; retired medicine man from Kaiser. This is my first Water Board meeting so I apologize initially for any redundancy in any of the statements that I am saying; but basically, from my field, if there's ever anybody in need, we're trained to go out and help so I always think that if another part of our island got in trouble, that us folks in Kona, especially Lokahi Makai, would run to the assistance of the others. So with that in mind, I'm asking for assistance from other parts of the island in our hour of need in this water situation; and the assistance is basically just kind of requesting what we would call equal representation in my eighth grade civics class, okay. So I'm requesting that Mr. Nestorio Domingo be permitted to join the interaction group just so we can get representation from Kona side because there's a distinct feeling in Kona that we would like to be represented on the board that makes decisions about how water is used and how water is distributed and that's basically all I'm asking for so...I'm not here to accuse anyone. I'm just here to get someone from my city, my neighborhood, to have a seat at the table just so they can make our opinions and our wishes and our hopes and desires kind of known to you so you can understand and to also try to keep this spirit that brought me here and my family to this island and probably everybody else in here at this meeting that whenever someone's in trouble, you just pick up and you go help. So I'm kind of asking for the people with no water problems or lesser water problems to essentially pick up and help us and see how we can work together and solve this situation in the most expedient and actually permanent way. I was born and raised in California, and we are pretty good at getting divisive and fighting over every little thing; and one of the reasons I like being here is that there's a certain feeling of ohana and I hope it can permeate to this matter and hopefully get things moving and kind of take care of this as soon as possible. Thank you very much.

Chairperson Takamine: Thank you Mr. Torres.

- 3) APPROVAL OF MINUTES

MOTION: Ms. Iokepa-Moses moved to approve the Minutes of the August 22, 2017, Water Board Meeting and the September 13, 2017, Special Water Board Meeting; seconded by Mr. Arikawa.

Mr. Elarionoff called attention to the Minutes of the August 22, 2017, meeting, Page 5, last paragraph, "Manager-Chief Engineer replied that the Department would check with the County's Human Resources Department on their method of calculating and report it back to the Board." And then on Page 8, second to the last paragraph, "Mr. Young replied one of the things that needs to be done..." and then part way down the paragraph it says "...the Department will have that information within another week and a half." He would like attention brought to that and the Board would be expecting that.

Chairperson Takamine so noted. He called for a vote on the Motion.

ACTION: Motion was carried unanimously by voice vote.

4) APPROVAL OF ADDENDUM AND/OR SUPPLEMENTAL – None

5) SOUTH HILO:

**A. JOB NO. 1994-590, PIIHONUA-KUKUAU RESERVOIR AND TRANSMISSION IMPROVEMENTS:**

The project transmission waterline route requires the following easements for utilities and access:

Easement 1 & Easement 1-A on TMK No. (3) 2-5-006:151, (1.2575 Acres & 326 sq. ft.)

Easement 3 on TMK No. (3) 2-5-006:149, (14,503 sq. ft.)

Easement 186-A on TMK No. (3) 2-4-075:049, (2,230 sq. ft.)

Easement 187-A on TMK No. (3) 2-4-075:050, (141 sq. ft.)

New Easement on TMK No. (3) 2-4-075:017, (220 sq. ft.)

Currently these areas are being accessed using executed Construction Right of Entry Agreements to allow construction to proceed during the easement acquisition process. In September 2016, Hussey Appraisal Group Hawai'i, Inc., was hired to appraise the easement values. In February 2017, Hussey Appraisal Group Hawai'i provided Appraisal Reports valuating the easements as follows:

Easement 1 & Easement 1-A: \$5,000.00

Easement 3: \$10,000.00

Easement 186-A: \$20,000.00

Easement 187-A: \$250.00

New Easement: \$260.00

Staff has reviewed the appraisal reports and finds that the appraisal amounts are reasonable.

The Manager-Chief Engineer recommended that the Board approve acquisition of the listed easements for the appraisal amounts totaling \$35,510.00, for JOB NO. 1994-590, PIIHONUA-KUKUAU RESERVOIR AND TRANSMISSION IMPROVEMENTS and that either the Chairperson or Vice-Chairperson be authorized to execute the easement documents, subject to review as to form and legality by the Corporation Counsel.

MOTION: Mr. Arikawa moved for approval of the recommendation; seconded by Ms. Iokepa-Moses.

The Manager-Chief Engineer explained that this is to acquire easements as part of this project. Basically, it started off with a construction right-of-entry in case of any changes during construction. Now that it has progressed far enough where the pipelines and infrastructure have been installed, the Department can go ahead and formally execute the described easements on the Agenda today.

Mr. Inaba showed the project on a map and explained that these are waterline easements the Department is acquiring from the landowners. They are all private property except for one which was through the State of Hawai'i, Department of Land and Natural Resources.

In response to Mr. Elarionoff's question of why one easement was only \$250.00, Mr. Inaba replied it is a very small corner of one lot that will be used to stabilize the embankment. The most affected lot will be Lot 186A, and that is based on the appraisal.

ACTION: Motion was carried unanimously by voice vote.

6) MISCELLANEOUS:

A. DEDICATIONS:

The Department 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**

Subdivision No. 96-000039  
Grantors/Sellers: Brandie L. Oye and Alton M. Oye  
Affects Tax Map Key: (3) 6-6-004: 003  
Lālāmilo, South Kohala, Island of Hawai'i, Hawai'i  
Facilities Charge: \$16,500.00 Date Paid: 3/10/2017  
Final Inspection Date: *TBA*  
Water System Cost: \$ *TBA*

**2. BILL OF SALE**

Subdivision No. 16-001618  
Seller: Makana 1055, LLC  
Affects Tax Map Key: (3) 2-4-009: 048 (portion)  
Waiākea, South Hilo, Island of Hawai'i, Hawai'i  
Facilities Charge: \$12,190.00 Date Paid: 3/28/2017  
Final Inspection Date: 3/07/2017  
Water System Cost: \$26,000.00

**3. GRANT OF EASEMENT AND BILL OF SALE**

Grantors: John Chuichi Taira and Tsuruko Taira  
Affects Tax Map Key: (3) 2-4-009: 048 (portion)  
Waiākea, South Hilo, Island of Hawai'i, Hawai'i

**4. BILL OF SALE**

Subdivision No. 16-001606  
Seller: Honoka'a Plantation Cottages LLC  
Affects Tax Map Key: (3) 4-5-010: 134  
Honoka'a, Hāmākua, Island of Hawai'i, Hawai'i  
Facilities Charge: \$39,690.00 Date Paid: *TBA*  
Final Inspection Date: *TBA*  
Water System Cost: \$ *TBA*

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.

MOTION: Ms. Iokepa-Moses moved for approval of the recommendation; seconded by Mr. Arikawa.

The Manager-Chief Engineer noted that Item #1, Grant of Easement and Bill of Sale, Grantors/Sellers: Brandie L. Oye and Alton M. Oye, would need to be deferred.

Mr. Inaba reported that for Item #4, the Facilities Charge Date Paid is September 19, 2017; Final Inspection Date is September 19, 2017; and the Water System Cost is \$196,384.00.

AMENDMENT TO MOTION: Ms. Iokepa-Moses moved to amend the Motion to accept all but Item #1; seconded by Mr. Arikawa.

Mr. Domingo commented on what was discussed at a previous meeting, and that was the word “acceptable.” He stated his preference would be “satisfactory,” as that word implies that this is for the Board to decide and has to be “satisfactory” to the Department’s needs. Instead of “acceptable,” he thinks “satisfactory” should be in place of that word.

Chairperson Takamine appreciated the comments and this could be refined moving forward.

Mr. Elarionoff commented that he had no problem with that word. He had preferred the word “exceptional”; but with the Department’s standards being looked at and if the standards are raised and thought to be satisfactory, then the word would be “acceptable” based on what the standard is.

Chairperson Takamine thanked Mr. Elarionoff for his comments.

ACTION: Motion to accept Items 2 through 4 was carried unanimously by voice vote.

**B. DWS JOB NO. 2017-1061, POWER SYSTEM STUDIES AMENDMENT TO CONTRACT:**

The Department is proposing to amend the contract for Job No. 2017-1061, Power System Studies, to include the Keahuolū Well Site to the original scope and to expand the original scope of work from the power system studies to a more in-depth power quality analysis and validation of existing equipment and settings at four (4) well sites (Keahuolū (QLT), Honokōhau, Hualālai, and Keōpū). As the Department is looking to identify the causes of recent well (motor and/or pump) failures, this study will look at the electrical components from the power source to the motor control center, including the power quality from the motor control center.

Staff has reviewed the proposal of \$209,612.00 to perform the additional work as well as to add the Keahuolū Well site to the power system study and finds it acceptable. The original contract cost was \$600,000.00 and if approved, the new contract will be for \$809,612.00.

The Manager-Chief Engineer recommended that the Board approve an additional \$209,612.00 for Job No. 2017-1061, Power System Studies and authorize either the Chairperson or the Vice-Chairperson to execute the Change Order subject to the review and approval of the Corporation Counsel.

MOTION: Mr. Arikawa moved for approval of the recommendation; seconded by Ms. Iokepa-Moses.

Mr. Boswell asked what the Department has received out of the first \$600,000.00 and what the completion dates were.

Mr. Inaba replied it is a study of 30 to 40 well sites, including site visits; electrical testing, i.e., and an electrical safety program for the Department’s employees at the well sites. It will provide an evaluation of the sites to determine the personal type of equipment required; at what point within the motor control center building certain PPE’s (personal protective equipment) are needed; and to test some of the breakers in the building. The completion date for both phases is July 31, 2018.

Mr. Boswell asked if the deliverable would not be until July of next year or would the contractor be able to report on its findings beforehand if anything was found (example: breakers or an unsafe situation) so that the Department would be able to change it. He also asked if the review of incoming power is new to the second phase of work.

Mr. Inaba replied yes, and that it was not part of the original scope.

The Manager-Chief Engineer added that it is only for the four sites.

Mr. Boswell asked if the information gathered from this study could be fed into other studies or if it would just be static.

The Manager-Chief Engineer replied that this a supplement that will help identify if there are shortcomings in the control settings and power quality evaluation. He believed that whatever recommendations are to be itemized and detailed in a report can be utilized in other well sites. Basically, they are going to look at these four sites for incoming power quality through the equipment, all the way to when it is going downhole, to see if the equipment is adequate, and if the settings are correct, etc.

In response to Mr. Boswell's question if their recommendations will be electrical in nature or mechanical as well, the Manager-Chief Engineer replied electrical.

Mr. Domingo thought this was a good thing. So far, the focus has been on mechanical systems, but this is to look at the entire system—electrical, mechanical, and everything else in between.

The Manager-Chief Engineer stated that this study would be on all topside equipment. The topside power quality going down the hole, affecting the motor, is the suspicion.

Mr. Boswell commented that it would not be able to be monitored, then, once it is down the hole.

The Manager-Chief Engineer replied that would not be the case. The Department is going to add things, if part of the suggestion is to install, example, a temperature sensor downhole. However, not all applications will allow for a temperature sensor, or any sensor.

Mr. Boswell went back to his question--there are only four sites being looked at but the overall concern is thirteen wells in the high-level aquifer.

The Manager-Chief Engineer replied that the overall concern is 67 wells islandwide; but right now, because of the situation in Kona, it was decided it would be prudent to add this Phase II to the contract so as not to wait, but at least take a look at the four in Kona that are worth looking at. It will tell enough that can be used in other applications. The ones in Kona are quite unique because of the depth and because of limitations with the casing size compared to what the motor diameters are. There are some where the motor diameter is 16 inches going down an 18-inch hole. Not all applications will be able to use the same recommendations. The Department expects to see some recommendations that can be used, not only in Kona, but islandwide as well.

Ms. Ioepa-Moses felt that it is important to let the company know that time is of the essence because of the emergency situation the Department is in with Kona and needs feedback on their findings immediately. Before July would be great.

The Manager-Chief Engineer was confident that if they found anything noteworthy, they would not wait until July to make their findings known.

Mr. Boswell asked if the Board could get a summary update at the October Water Board meeting. He would like to see at what point they are. He did not feel comfortable giving them more money and not receiving anything.

The Manager-Chief Engineer replied that a summary of what is done so far would be provided to the Board; however, it will not include any of the Phase II work.

Mr. Domingo was concerned about this \$600,000.00, and he would assume, with that, the Department should be able to identify any deficiencies out there and make corrective actions, as necessary.

The Manager-Chief Engineer explained that they are third-party consultants that have a specialty in motor control centers (MCC). They are going out with DWS staff; therefore, if there are any safety concerns, DWS staff would be there to discuss it with them on the spot. They are not going to wait for a report to address anything that has to do with safety.

Mr. Domingo asked if there would be another contract for making recommendations.

The Manager-Chief Engineer replied not necessarily. Initially, the main focus was to review, because part of the code for electrical safety when dealing with medium voltage is ARC Flash Hazard Analysis. Each location is different, depending on how the MCC center is set up. That is the reason why there is no report product as of yet but there are a lot of site visits being done. However, he was sure a summary could be obtained on where they stand in general by next month.

Mr. Boswell asked if he could see the original RFP or the original proposal as he was sure it would be very detailed.

The Manager-Chief Engineer replied that will be included so the Board can see what the scope was for the original contract.

Mr. Elarionoff asked for an explanation on where the agenda recommendation indicated, "The Department is proposing to amend the contract for Job No. 2017-1061, Power System Studies, to include the Keahuolū Well Site to the original scope and to expand the original scope of work..."

The Manager-Chief Engineer explained that the original scope of work was to evaluate 30-plus sites for the power safety evaluation assessment. That scope is now changing to include additional work on more of a power quality assessment.

Mr. Elarionoff stated that he had a hard time understanding how you can look at power quality, and look at it going backwards, or trying to look at the power quality that happened five to six months ago, unless you have a monitoring system.

The Manager-Chief Engineer agreed, you cannot look back; but the Department does have power monitors that have history recorded, so there is some historical data already. Part of this scope will also be to acquire additional data throughout a period of time.

Mr. Inaba added that they will have much finer detail of the power coming in. They have a specialized power monitor that can tell in more detail the frequency rate and measure the power coming in. They will need to rotate that equipment to the four sites.

Mr. Elarionoff asked if the power company would have that information or if it stops at the transformer.

The Manager-Chief Engineer replied that they do not have monitoring equipment on the Department's side; but if requested, they can put power monitoring equipment on their side of the system, which they have done in several locations. They fall within their tariff as far as the fluctuations in power across three legs; but the Department's equipment downhole may need even cleaner power than what the utility can provide. It would be then up to the Department to install equipment on its facilities to clean up the utility power such that it is good enough to protect the motor down the hole.

Mr. Boswell asked if this study would give data and a recommendation to make those engineering changes.

The Manager-Chief Engineer replied that is the expectation.

Mr. Elarionoff asked if power stability is part of the power quality, meaning intermittent power outages.

The Manager-Chief Engineer replied the monitoring equipment should reveal that. It will show if there have been drops in power however long they set up the monitoring equipment for. It is one of those things where you need to find that balance. They are not going to leave the equipment there for a year and wait a year to proceed with the study. There will probably be a point in time where they set up the monitoring equipment to check how the incoming power is, compare that to the Department's settings on the topside equipment, and see if there are things that need adjusting or additional equipment needed.

Mr. Elarionoff did not think any chances should be taken when all of this is over and just say it is okay and let it be at that.

Mr. Boswell stated that it seemed concerning that it is nine months out; and if only these four wells are being done, why not include the other wells in that group at the same time.

The Manager-Chief Engineer stated that the Department is also trying to be prudent about what it spends. This is costing the Department \$209,000.00.

Mr. Boswell was afraid it was not enough. If there were more sites and all of the information was needed concurrently, why not make an overall evaluation at one time. He asked if someone from Brown and Caldwell could possibly come in and speak with the Board.

The Manager-Chief Engineer explained it could; however, it would delay this effort by another month.

Mr. Boswell stated he was willing to meet with them next week.

The Manager-Chief Engineer replied that this is a Board decision.

Ms. Iokepa-Moses suggested approving this and it could always be added to.

The Manager-Chief Engineer stated that would be his recommendation.

In response to Mr. Elarionoff's question if one month was not worth the risk, the Manager-Chief Engineer replied it was for the Board to decide.

Mr. Boswell stated that it seemed like the July deliverable is not acceptable.

The Manager-Chief Engineer explained that the Department is not waiting for this study and has been making changes to its operations already if felt they are necessary. This is basically for an in-depth analysis, and that is why it is costing \$209,000.00.

Mr. Boswell stated he was not aware of that. He thought the Permitted Interaction Group would stand good to have all of the Department’s information to date.

Chairperson Takamine asked for a vote on this, given the time sensitivity, and that he was for approval. In the meantime, if there is an opportunity to interact with Brown and Caldwell, the Department could try and make that happen.

ACTION: Motion was carried unanimously by voice vote.

**C. MATERIAL BID NO. 2017-10, FURNISHING AND DELIVERING SPARE DEEPWELL PUMP AND MOTOR SETS FOR KEAHUOLŪ DEEPWELL AND KE‘EI D DEEPWELL, AND SPARE PUMP FOR NĀ‘ĀLEHU DEEPWELL FOR THE DEPARTMENT OF WATER SUPPLY:**

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Bids were received and opened on September 14, 2017, at 1:30 p.m., and the following are the bid results:

<b>SECTION</b>	<b>DESCRIPTION</b>	<b>Beylik Drilling and Pump Service, Inc.</b>	<b>Derrick’s Well Drilling and Pump Services, LLC</b>
<b>1</b>	KEAHUOLŪ DEEPWELL	Non-Responsive	Non-Responsive
<b>2</b>	KE‘EI D DEEPWELL	\$144,000.00	\$145,653.98
<b>3</b>	NĀ‘ĀLEHU DEEPWELL	\$41,000.00	\$38,416.92

The estimated cost for the various pump and motor sets were as follows:

- Keahuolū Deepwell: \$200,000
- Ke‘ei D Deepwell: \$145,000
- Nā‘ālehu Deepwell: \$40,000

The Manager-Chief Engineer recommended that the Board award the contract for MATERIAL BID NO. 2017-10, FURNISHING AND DELIVERING SPARE DEEPWELL PUMP AND MOTOR SETS FOR KEAHUOLŪ DEEPWELL, AND KE‘EI D DEEPWELL AND SPARE PUMP FOR NĀ‘ĀLEHU DEEPWELL FOR THE DEPARTMENT OF WATER SUPPLY, by Sections to the following bidders for the amounts shown above, and that either the Chairperson or the Vice-Chairperson be authorized to sign the contract(s), subject to review as to form and legality of the contract(s) by Corporation Counsel.

**Section 2 – Ke‘ei D Deepwell to Beylik Drilling and Pump Service, Inc.**

**Section 3 – Nā‘ālehu Deepwell to Derrick’s Well Drilling & Pump Services, LLC.**

For Section 1 – Keahuolū Deepwell, no responsive, responsible bids were received. Staff will re-bid section by formal bid process.

MOTION: Ms. Iokepa-Moses moved for approval of the recommendation; seconded by Mr. Arikawa.

Mr. Boswell asked what the Department would be doing with these pumps and motors once received—where they would go and how they are to be stored.

Mr. Young replied they would be stored at the Department's Pana'ewa warehouse, horizontally, in the original crates.

The Manager-Chief Engineer added that, in the bid documents, there is an additional certification requirement to inspect for any deficiencies.

Mr. Boswell stated that he has become aware in the past week that some pump/motor manufacturers allow you to pre-purchase the pump and motor. They will keep them in their factory, do a bench test and run them through a battery of tests that keeps them compliant with their warranty; and the warranty would not enact until the equipment was sent out. Therefore, if a well goes down, while you are pulling it out, they mobilize. The fee in one scenario he ran was \$36.00 a day. There is quite a breakdown, all the way down to bench testing, of what they do with them; but they maintain responsibility. You cash them out, and in the beginning, you pay a fee for them to maintain it, and when they ship it to you, no matter how long, and, being cautious when he says, no matter, the warranty starts when they ship it. That would be something to discuss. Therefore, he asks the question here--the Department is going to receive these spares but does not have the facility to run them through the bench testing and things that the manufacturer would, plus the warranty stays intact until they ship it from their facility. He offered to share this information with staff.

The Manager-Chief Engineer agreed that would be the preferred route.

Mr. Arikawa clarified that Mr. Boswell has been doing a lot of background work because of the Permitted Interaction Group, and this is the information just found out; therefore, he is passing it on to the Department. This is a breakthrough and really good information.

Mr. Elarionoff asked if this spare deep well pump affects the Waimea spare pump that was taken for the Kona repair and if it will be replaced.

The Manager-Chief Engineer explained that the Waimea pump and motor were found to be defective and that resulted in the contractor being responsible to get the Department a proper spare pump and motor.

In response to Mr. Elarionoff's question of how long that would take, Mr. Young replied there is no timeframe yet; but it would probably be a few months out.

Mr. Boswell asked if the manufacturer maintained responsibility for the defect or had it not been evaluated.

Mr. Young replied that it went through a third party; therefore, the contractor is responsible for that. They are going back to the original manufacturer. It will be a direct purchase.

Mr. Domingo stated that his concern was, as discussed a long time ago, if you store heavy pumps for extended periods of time, they would warp in some way and there may also be corrosion to the motor seal. That may be an issue here.

Chairperson Takamine thought that it is a balancing act. On one hand, storage is an issue; but on the other hand, if you do not have spare pumps and motors, the community is going to be up in arms. He thought it is something you need to be really careful on how many are on back-up; but if you do not have any, then it may be trouble.

The Manager-Chief Engineer turned the discussion back to the spare pumps and motors that are being recommended today. As part of the spare pumps and motors inventory, the Department is looking at doing well asset management, which will help identify the inventory and when, based on schedule or history of well repairs, they would be needed. In an ideal situation, there is a spare, and it is used before it becomes warped. That is the direction the Department is headed in. In the meantime, the Department is proceeding with procuring spare pumps and motors via a priority system that was developed internally. That priority system is based on the area it serves, if it is critical (example: it serves a hospital); and whether there is only one well servicing the system. That would be another one to have a spare on hand for.

Mr. Domingo asked if the concerns would be mitigated.

The Manager-Chief Engineer replied no system is perfect but it is a balancing act, as Chairperson Takamine mentioned.

Ms. Iokepa-Moses realized the pumps need to be different for each site, depending on the depth and volume of the well; but among the Department's 67 wells, as the pumps are changed, if it could be more consistent whereby you can pull a well and you may not have to have a spare for each well, but you could pull one from another well such as the one were the Waimea equipment was comparable to the one in Kona.

The Manager-Chief Engineer replied that it would be part of the asset management and some of that is already being done in-house. The database went out to the Permitted Interaction Group. He added that motors are more interchangeable than pumps. A two-pole 400 horsepower motor of a certain diameter can be utilized in different applications. Moving forward, the Department will ensure that it can compare them.

Mr. Elarionoff mentioned the bid that was just approved to look at power quality, etc. He asked if power change would factor into what the Department is working on.

The Manager-Chief Engineer replied that it may impact it slightly, but the well asset management will be more primarily for equipment management; and the power quality is more about the topside components to protect what is installed. In response to the question if whether it will affect the durability, he replied that was correct, and it does have a relationship to the lifespan.

ACTION: Motion was carried unanimously by voice vote.

**D. MONTHLY PROGRESS REPORT:**

Chairperson Takamine asked about the Queen Ka'ahumanu Highway widening project. The report indicates the MOU (Memorandum of Understanding) is being routed for additional funds. He asked if that was because of the amount of time the project has spanned.

Mr. Inaba replied that it was for the escalation cost that was previously approved by the Board. The MOU has been going back and forth.

In response to Mr. Boswell's question whether it was the State's hands, he replied that the Department is attempting to bring the two parties together and discuss the differences. Corporation Counsel and the Deputy Attorney General are trying to resolve that.

Mr. Arikawa asked about the Waimea Water Treatment Plant. The report indicates construction is ongoing and the schedule was impacted because of the Waimea and Parker Ranch wells repairs. He asked how long it will take.

Mr. Uyehara replied that Parker Ranch Well is back up and running. Waimea Well still needs to be up and running. The delay was because the contractor wanted two wells running in order to take the surface water treatment plant totally offline and use the two wells to keep the system running. The contractor is working with the Department's Operations Division to shut the plant down about four hours a day in order to do some of the scope work items that required the plant to be offline. They are still working with the February 2018 completion date.

Mr. Boswell mentioned the Wai'aha #2 Development, which might become #1, and if this changes its prioritization on the CIP budget; also, if it was moving as quickly as possible.

Mr. Inaba replied that the site study is being conducted, using aerial views to try and find sites to place it. Knowing that the one well is successful, it will likely go in for a second well, put in two smaller wells rather than one large one.

Mr. Boswell asked if that meant a third hole at that site.

Mr. Inaba replied that it is actually located away from the existing Wai'aha Well. It is not going to be on that same site.

Mr. Domingo asked if the Department is still proceeding with the extraction of the Wai'aha Well and if the Department is hopeful for a good result.

The Manager-Chief Engineer replied that the project was not on this CIP listing; however, work is still to be done, and the Department is hopeful.

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

Mr. Sumada reported that he was only able to get a general description from the County Human Resources Department of how the reserve on the balance sheet for the Department was put together. The reserve for injuries is a number that is put together from 1) the number of injured employees the Department has; 2) the type of injuries; and 3) the age of the employee. The number gets changed annually. During the year, the Department pays for various medical bills and settlements that go through the office. These payments are recorded in the income statement.

In response to Mr. Elarionoff's question if the injuries they talk about are people from different parts of the island or a specific part of the island, the Manager-Chief Engineer replied it is islandwide and not all one class or area. They are typically from accidents.

Mr. Elarionoff thanked staff for the report.

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

The Manager-Chief Engineer provided an update on the following:

1. North Kona Water Restriction

As of this morning, the rig is back in Hualālai. The Department is working with the contractor to have the second rig running concurrently on the Palani Well during this week--two rigs; two crews. At this point, the schedule looks hopeful for this weekend for Hualālai and maybe a

day or two following for Palani. These are target dates based on what is known today. That could change if different information comes in tomorrow. But right now, the motor is ready to go in at Hualālai. It takes some time to set up the rig, but as soon as it is positioned, they will start work to install the motor, attach the pump, and pipe columns and power cable, etc. This is the same contractor that is on the Wai'aha job; therefore, they were asked to get these two wells up and running first and then deal with Wai'aha after that. For the Keopu and Honokōhau wells, Honokōhau is targeted for completion the end of October. Once that well is back online, the Department will lift the emergency restriction as long as the community maintains its 25% reduction. (There was applause from the audience.) When the three wells are back online, the Department would be able to relieve that 25% reduction but would still want to be mindful and therefore would probably still request the community do the best they can and, if possible, maintain a 10% steady practice. That is the schedule as of today. He added that with these two wells back online, the Department would be very comfortable and confident that the concerns on the influx of people for the Ironman event will be accommodated. He thanked the community for their efforts. For other updates on the restriction, once there is some breathing room, the contractor can focus on the Wai'aha Well and getting the pump and motor extracted.

Mr. Domingo stated that putting the pumps in the wells is the riskiest phase to bear in mind. He hoped the contractor will do some type of risk analysis and minimize or eliminate the risk.

The Manager-Chief Engineer thanked Mr. Domingo for mentioning that and assured the Board and the community that these contractors are professionals. They are not careless in what they do. It is a hazardous job and safety is a priority for them as well. They inspect the cable daily.

Mr. Elarionoff asked about the audit and the Department's response on how it will deal with it.

The Manager-Chief Engineer stated that would be placed on the October Agenda.

#### G. **CHAIRPERSON'S REPORT:**

Chairperson Takamine thanked the Board for approving the formation of the Permitted Interaction Group. He reported that they are still working on finalizing the members and will be meeting early in October. They will be looking at data collection on all of the North Kona wells; redundant wells; electrical and mechanical pump and motor monitoring; pump and motor standardization; and advanced pump and motor procurement and storage. He thanked Mr. Boswell for the research he has been doing on his own. He will have a report for the Board next month as to the findings so far.

Mr. Elarionoff asked if the Chairperson could respond to the public statement this morning to have more Kona Water Board members on the Permitted Interaction Group.

Chairperson Takamine replied that Mr. Boswell, from Kona, is on the Permitted Interaction Group; and in fairness to the other members of that group, he would like to consult with them before answering.

Mr. Elarionoff commented that the way some look at it, his district is also not represented; however, he puts trust in the others.

Chairperson Takamine stated that the comments would be taken to heart.

Mr. Boswell commented that it is the quality of the consultants and the engineers who they work with. It is not populating the group with general public. It is very technical in nature and does not have to

do with opinion. It has to do with math and science. Having a lot of people in the group is a concern because all the Board Members can do is facilitate engineers and designers that will provide their evaluations.

Mr. Elarionoff stated that he would trust the group to do what is best for the whole island.

Chairperson Takamine stated that was the group's focus.

7) ANNOUNCEMENTS:

1. **Next Meeting:**

The next meeting of the Water Board is scheduled for October 24, 2017, 10:00 a.m., at the Department of Water Supply, Operations Center Conference Room; 889 Leilani Street, Hilo, Hawai'i.

2. **Following Meeting:**

The following meeting of the Water Board is scheduled for November 28, 2017, 10:00 a.m., at the West Hawai'i Civic Center, (Building G); 74-5044 Ane Keohokalole Highway, Kailua-Kona, Hawai'i.

8) ADJOURNMENT

ACTION: Ms. Iokepa-Moses moved to adjourn the meeting; seconded by Mr. Arikawa and carried unanimously by voice vote. Meeting adjourned at 11:04 a.m.

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Recording Secretary