MINUTES

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

May 28, 2019

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

MEMBERS PRESENT: Mr. William Boswell, Jr., Chairperson

Mr. Bryant Balog Mr. David De Luz, Jr. Mr. Nestorio Domingo Mr. Leningrad Elarionoff

Ms. Julie Hugo Mr. Zendo Kern Mr. Kenneth Sugai

Mr. Keith K. Okamoto, Manager-Chief Engineer, Department of Water

Supply (ex-officio member)

ABSENT: Mr. Eric Scicchitano, Vice-Chairperson

Director, Planning Department (ex-officio member)

Director, Department of Public Works (ex-officio member)

OTHERS PRESENT: Ms. Diana Mellon-Lacey, Deputy Corporation Counsel

Patricia Champagne, Principal, Konawaena Elementary School

Cheryl Tam, Konawaena Elementary School

Christian Sawyer Zavodny (Kindergarten, Konawaena Elementary School)

and family

Leicy Acia (Kindergarten, Konawaena Elementary School) and family Kanoa Shinn (Fifth Grade, Konawaena Elementary School) and family Abigail Cantor (First grade, Kahakai Elementary School) and family

Ryder Pedro (Fourth Grade, Kahakai Elementary School) Colleen Wallace, Art Director, Kahakai Elementary School

Kauahi Alapa'i-Boyd (Fourth Grade, Ke Kula 'O Nāwahīokalani'ōpu'u Iki Lab

Public Charter School) and Father, Blair Boyd

Kualii Rice (Teacher, representing Jayce Walters, Holualoa School)

Department of Water Supply Staff

Mr. Kawika Uyehara, Deputy

Mr. Warren Ching, Energy Management Analyst Mr. Kurt Inaba, Engineering Division Head Mr. Richard Sumada, Waterworks Controller Mr. Clyde Young, Operations Division Mr. Eric Takamoto, Operations Division

1) CALL TO ORDER – Chairperson Boswell called the meeting to order at 10:00 a.m.

2) STATEMENTS FROM THE PUBLIC - None

3) APPROVAL OF MINUTES

<u>ACTION</u>: Mr. Elarionoff moved for approval of the Minutes of the April 23, 2019, Water Board Meeting; seconded by Mr. Domingo and carried unanimously by voice vote.

4) APPROVAL OF ADDENDUM AND/OR SUPPLEMENTAL AGENDA - none

ACTION TO TAKE AGENDA ITEM UP EARLY

Chairperson Boswell entertained a Motion to move Agenda Item 8) Miscellaneous, (H) Manager-Chief Engineer's Report, #3, 2019 Water Conservation Poster Contest, up on the agenda.

ACTION: Mr. Sugai so moved; seconded by Mr. Kern and carried unanimously by voice vote.

Item 8) MISCELLANEOUS, (H) Manager-Chief Engineer's Report, # 3 - 2019 Water Conservation Poster Contest

Before turning it over to the Deputy, the Manager-Chief Engineer acknowledged the students, their parents, and the teachers for their participation in this inaugural poster contest. He thanked them for putting this into their curriculum and recognizing that it is important enough for their students and their parents to know about.

The Deputy announced that this was the first poster contest and is in line with one of the Department's focus areas on water resource sustainability. One of the strategies in that focus is to educate and provide outreach in water conservation. The concept is if we all can conserve water and use it efficiently, hopefully it will help conserve our resource and make it more sustainable into the future. He thanked the teachers, the schools, and the parents for helping encourage the kindergarteners to fifth graders to enter the contest. There were about 200 entries island-wide. There were three judges, Richard Mortimer, local artist in Hilo; Michael Marshall, Professor of Art at UH Hilo; and Shari Uyeno, one of the Department's Civil Engineers. The motto of the contest was "Ka Wai A Kāne - Water, Our Most Precious Resource." The concept of that was taken by the students and put into art. After this presentation, the posters will be left with the Mayor's Office in Kona to have them hung up at the West Hawai'i Civic Center and also the images of the posters will be on the Department's website later today.

Names were announced and presentations made:

Kindergarten 1st Place Winner - Christian Sawyer Zavodny from Konawaena Elementary School

Kindergarten 2nd Place Winner - Leicy Acia from Konawaena Elementary School

First Grade 1st Place Winner - Abigail Cantor from Kahakai Elementary School

First Grade 2nd Place Winner - Cedar Terpening from Waimea Country School (unable to attend)

Second Grade 1st Place Winner - Jazz Renauer from Kanu o ka 'Āina New Century Public Charter School (unable to attend)

Second Grade 2nd Place Winner - Aaliyah Lagaret, Kanu o ka 'Āina New Century Public Charter School (unable to attend)

Third Grade 1st Place Winner - Jace Walters from Hōlualoa Elementary School (unable to attend)
Third Grade 2nd Place Winner - Samantha Eicher from Hōlualoa Elementary School (unable to attend)
Fourth Grade 1st Place Winner - Kauahi Alapa'i-Boyd from Ke Kula 'O Nāwahīokalani'ōpu'u Iki School

Fourth Grade 2nd Place Winner - Rider Pedro from Kahakai Elementary School (Teacher: Ms. Colleen Wallace accepting)

Fifth Grade 1st Place Winner - Kanoa Shinn from Konawaena Elementary School Fifth Grade 2nd Place Winner - Karlie Kahalioumi from Konawaena Elementary School (Principal, Patricia Champagne accepted on her behalf.)

The Deputy thanked the students for entering, the parents and teachers for supporting the effort, and the Department's effort to promote conservation. He asked for a short recess for photos to be taken.

ACTION: Mr. Kern moved to recess; seconded by Ms. Hugo and carried unanimously by voice vote.

RECESS: 10:08 a.m. to 10:18 a.m.

5) <u>POWER COST CHARGE</u>:

Departmental power costs from all power sources increased since the last Power Cost Charge rate was determined. The Department proposes to increase the Power Cost Charge from \$1.89 to \$1.96 per thousand gallons as a result of this increase. Power cost charges over the past two years were as follows:

Effective	<u>PCC</u>
February 1, 2019	\$1.89
August 1, 2018	\$1.94
April 1, 2018	\$1.88
December 1, 2017	\$1.62
August 1, 2017	\$1.73

A Public Hearing will have been held prior to this Board meeting to accept public testimony on this change.

The Manager-Chief Engineer recommended that the Board approve the increase of the Power Cost Charge from \$1.89 to \$1.96, effective June 1, 2019.

<u>ACTION</u>: Mr. Sugai moved for approval of the recommendation; seconded by Mr. Kern. There being no discussion, Motion was carried unanimously by voice vote.

6) SOUTH HILO:

A. MAINTENANCE BID NO. 2019-06, REPAIR AND MAINTENANCE OF AIR CONDITIONING SYSTEM, WAIĀKEA OFFICE PLAZA, DEPARTMENT OF WATER SUPPLY:

Bids were opened on May 16, 2019, at 2:30 p.m., and the following are the bid results:

Bidder	Monthly Maintenance	Total w/estimated repair
	Amount	cost
Oahu Air Conditioning Service, Inc.	\$1,102.21	\$4,216.21

Maintenance Cost will be to June 30, 2020, with an option to extend for three additional 12-month periods, until June 2023:

Oahu Air Conditioning Service, Inc. \$4,216.21/mo. = \$50,594.52

Hourly Labor Rates for repair:

Regular Journeyman	\$108.00/hr.
Regular Helper	\$65.00/hr.
Emergency Journeyman	\$108.00/hr.
Emergency Helper	\$65.00/hr.
Emergency O.T. Journeyman	\$162.00/hr.
Emergency O.T. Helper	\$97.50/hr.

Option Contract Year Monthly Maintenance Cost

July 1, 2020 – June 30, 2021:	\$1,157.32/mo.
July 1, 2021 – June 30, 2022:	\$1,215.19/mo.
July 1, 2022 – June 30, 2023:	\$1,265.95/mo.

The Manager-Chief Engineer recommended that the Water Board award the contract for MAINTENANCE BID NO. 2019-06, REPAIR AND MAINTENANCE OF AIR CONDITIONING SYSTEM, WAIĀKEA OFFICE PLAZA, DEPARTMENT OF WATER SUPPLY, to the lowest responsible bidder, Oahu Air Conditioning Service, Inc., for \$50,594.52 and the associated labor costs for repairs as necessary during the maintenance period. It is further recommended that either the Chairperson or Vice-Chairperson be authorized to sign the contract subject to review as to form and legality by Corporation Counsel.

MOTION: Mr. Sugai moved for approval of the recommendation; seconded by Mr. De Luz.

Manager-Chief Engineer stated that this is for the main office air conditioning system. The total amount is comprised of two amounts--the monthly maintenance, which is a set amount, and the estimated repair cost. It does not necessarily mean that is what the cost will be throughout the year. It was something needed to base the award on if there was more than one bidder; but in this case, there was only one bidder. The hourly labor rates will be carried for the subsequent years, but the monthly maintenance cost will escalate. He noted that Mr. Inaba could answer questions regarding this agenda item.

Mr. Elarionoff asked if it would be cheaper for the Department to have its own air conditioning personnel.

Mr. Inaba replied that the Department does as much as it can. There is monthly maintenance done on the equipment, and for a lot of the components that the \$1,102.21 covers, one of the Department's engineers tries to troubleshoot before calling them for the repair. For the maintenance portion, there is some expertise involved.

Mr. Kern asked if it was common to only receive one bid.

Mr. Inaba replied that the last time the bid was put out, it had to go through alternative procurement because there were no bidders. This bid was evaluated and is comparable to a previous contract, although it is a different vendor.

Chairperson Boswell commented that the costs seem in line with monthly maintenance, and it would not be known what will break along the way, thus the reason for the repair amount.

Mr. De Luz asked for clarification if the \$4,216.21 monthly includes the maintenance cost or if it meant another \$13,000.00 would be added to the total monthly maintenance, the \$50,594.52 amount.

Mr. Inaba replied that it is included. Annually, both the Department and the Contractor would have to agree to extending the contract. If the Department is not happy with their service, it has the right to opt out, and the Contractor also has that option.

ACTION: Motion was carried unanimously by voice vote.

7) SOUTH KOHALA:

A. REQUEST FOR RIGHT-OF-ENTRY FOR ENVIRONMENTAL ASSESSMENT AND RESPONSE OF FORMERLY USED DEFENSE SITE (FUDS) WAIKOLOA MANEUVER AREA, TAX MAP KEYS (3) 6-2-001:090 AND (3) 6-2-013:020

The Department of the Army has requested a right-of-entry onto the Department's reservoir sites serving the Mauna Kea Uplands Subdivision to investigate and clear unexploded ordnance (UXO) that may remain on the subject properties. To reduce the risk of exposure, the Corps is in an ongoing effort to investigate and dispose of remaining UXO. Coordination of the entry to our sites will be with the District Supervisor.

The Manager-Chief Engineer recommended that the Water Board approve the Right-of-Entry request and authorize the Board Chairperson or Vice-Chairperson to execute the document.

MOTION: Mr. De Luz moved for approval of the recommendation; seconded by Mr. Kern.

Mr. De Luz asked if there may be unexploded ordinances on the Department's site.

Mr. Inaba replied they will need to walk the site, hand in hand, combing the area, to check for unexploded ordinances.

Mr. De Luz suggested that it be verified if an environmental assessment was needed and all necessary permits are in hand just as a precaution because it is incumbent on the land owner.

Ms. Mellon-Lacey stated that her understanding of this was that the Department had a previous agreement and this is actually extending the time because they need more time. Her understanding was that everything was in place, but she would double check.

Mr. Elarionoff stated that what they are doing is a good thing.

ACTION: Motion was carried unanimously by voice vote.

B. JOB NO. 2017-1075, PARKER #2 DEEPWELL REPAIR – REQUEST FOR TIME EXTENSION:

The contractor, Derrick's Well Drilling & Pump Services, LLC, is requesting a contract time extension of 119 working days. The contractor experienced delays caused by the pump manufacturer and issues securing a test facility. These delays were beyond the control of the contractor.

Note: There are no additional costs associated with this time extension.

1st time extension – 119 working days (177 calendar days)

The Manager-Chief Engineer recommended that the Board approve a contract time extension of 119 working days to Derrick's Well Drilling & Pump Services, LLC, for JOB NO. 2017-1075, PARKER

#2 DEEPWELL REPAIR. If approved, the contract completion date will be revised from July 3, 2018, to December 26, 2018.

MOTION: Mr. Sugai moved for approval of the recommendation; seconded by Mr. Balog.

The Manager-Chief Engineer noted that just last month, it was promised that this would not become a habit; but with this project, there were numerous factors, and there may be one other project with a similar outcome. The Department does not like to come to the Board after the fact and well after the completion date in this case. The contractor apparently had challenges with this project in trying to do the string test which is where they match the pump and motor together and pump it at the design head. For the Kona wells, the Department may be encountering that challenge on each one, so that requirement may be removed from future bids. During this bid, the question could be asked, why did they not say during the bid process that it could not be done. Apparently, during the bid process, the contractor thought it could be done; but when it came down to it, they contacted five testing facilities and all five could not do the work that was requested. This occurred for several months. The other delays happened to be a result of the first submittal from the supplier not meeting the efficiency requirements. That submittal was rejected. As discussed in the past, the local contractors find it challenging in having the suppliers meet the contracted schedule. Staff also questioned some gaps in the first time extension that needed to be worked out with the contractor. The Department did not want to assess the contractor liquidated damages based on that insufficient time extension request and then come back and have to refund liquidated damages. Staff worked with the contractor to get all of their documentation lined up during the past year.

Mr. De Luz asked if the Department could do some kind of exception report to help the Board better understand the projects that are not going along per contract. He noted that probably 90% of the Department's contracts go like clockwork, but there are a handful of projects that may have delays or other issues and need to be followed more closely. It is just a suggestion, but it may help make it easier for the Board. Example, there may be an issue at hand that comes between Board meetings and may necessitate an administrative decision, but the Board can catch up with it the following month. Staff would have a storyline at the time it is happening.

The Manager-Chief Engineer stated that this was part of an internal discussion on how projects could be managed differently. As Mr. De Luz mentioned, most things are done administratively; but when there is an impact to one of the three elements of a contract (time, cost, or scope) that cannot be covered in the contingency that is initially approved by the Board, it needs to come back for Board approval.

Mr. Domingo asked why there was a need for the string test.

Mr. Young explained that a string test is where we test the motor lead, the motor, and the pump together. Historically, only the pump was tested. The reason for the string test is to find out the capabilities of the existing equipment because that is how it will be assembled. The string test is ideal; but unfortunately, it seems like the larger horsepower pumps and motors, as in this case (500 horsepower, 15 feet long, total dynamic head - 1,250 psi (pounds per square inch), to get a manufacturer to test it, they have to test at a high pressure and high electrical load. It has been difficult, at best. The Department has been moving away from it and may only do the pump test and test it in the field.

Mr. Kern asked if the testing happens at the manufacturer's location or if it is supposed to happen once everything arrives on island.

Mr. Young replied that sometimes it is done at the manufacturer's location and sometimes they ship it out to a testing facility, depending on the manufacturer.

Mr. Kern thought it was odd that they could not test it when they are the ones that make it.

Mr. Young stated that it is odd that they committed to doing it, and then afterwards say they cannot.

The Manager-Chief Engineer added that there are no test facilities in this State.

Mr. Kern asked if they had committed to doing it, as the manufacturer, should they not provide an extended warranty or some type of liability on their side if they cannot do it after all.

Mr. Young replied they basically said they could not do the string test, and they only gave the standard one-year warranty.

The Manager-Chief Engineer added that there are challenges, being in Hawai'i. The contractors are local and it appears sometimes that these major pump and motor manufacturers seem to have no consequence if they choose to do business with local contractors or not. It seems that this posture has impacted the local contractors to the point where they really have no recourse. They get the brush off, which is unfortunate. The Department has tried using different manufacturers, but the capacities and quality of the equipment make it a narrow playing field. Hopefully with lowering the horsepower and GPM (gallons per minute) requirements, it will help broaden that field and invite more competition.

Mr. Elarionoff suggested that the Department do some type of public relations program to help with the public's perception of the Department of Water Supply, which is often criticized for being incompetent, along with a negative County-wide perception.

The Manager-Chief Engineer stated it is the nature of government. The Department instills in its staff to be proud of the job they do, because if you look at what this Department provides for the cost it is provided for, it is the best deal in town compared to gas prices, electrical, cable, and cell phone bills.

Mr. Elarionoff stated that was true, but this information does not get put across to the public.

The Manager-Chief Engineer agreed. He noted that the Department is working on hiring an Information and Education Specialist.

Mr. De Luz mentioned that the Fire Department also has similar issues with procurement of its specialty equipment. There are only two approved vendors in the State for some of their larger pieces of equipment, which generally cost twenty to thirty percent more, but they have no choice but to go through the procurement process. What they have done, to some extent, is certain vendors have established a type of preferred pricing. He wondered if it might be worthwhile sitting down with the other water utilities in the State and having an informal exchange on what manufacturers are being used and collectively see if procurement could have some kind of establishment as far as a level playing field. His suggestion was for more of the large items like pumps and motors.

The Manager-Chief Engineer stated that could definitely be worked on with the other water departments here.

ACTION: Motion was carried unanimously by voice vote.

8) MISCELLANEOUS:

A. DEDICATION OF WATER SYSTEM:

The Department received the following document for action by the Water Board. The water system has been constructed in accordance with the Department's standards and is in acceptable condition for dedication.

1. BILL OF SALE

Seller: Hu Honua Bioenergy, LLC (dba Honua Ola Bioenergy)

Tax Map Key: (3) 2-8-007: 100

Facilities Charge: \$5,500.00; Date Paid: 5/8/2019

Final Inspection Date: 4/26/2019 Water System Cost: To be announced

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

MOTION: Mr. Sugai moved for approval of the recommendation; seconded by Mr. De Luz.

The Manager-Chief Engineer noted that the water system cost is \$15,250.00. This is for 75 feet of 6-inch line and a service lateral. The reason for the Bill of Sale is the extension of the waterline.

Mr. Inaba added that they had to cross an intersection with the 6-inch line for a service lateral for their substation.

ACTION: Motion carried unanimously by voice vote.

B. MATERIAL BID NO. 2019-01, FURNISHING AND DELIVERING PIPES, FITTINGS, WATER METERS, FIRE HYDRANTS, BRASS GOODS, VALVES, ELECTRICAL SUPPLIES, ELECTRICAL EQUIPMENT, SCADA, WATER QUALITY EQUIPMENT, CHLORINATORS, MOTORS, AND MISCELLANEOUS ITEMS FOR THE DEPARTMENT OF WATER SUPPLY STOCK:

Bids were opened on May 9, 2019, at 1:30 p.m., and following are the bid results:

The contract period for all Parts is one year, from July 1, 2019, to June 30, 2020. All Parts are established price agreements for materials on an "As-Needed Basis."

The Manager-Chief Engineer recommended that the Board award the contract to the following bidders for MATERIAL BID NO. 2019-01, FURNISHING AND DELIVERING PIPES, FITTINGS, WATER METERS, FIRE HYDRANTS, BRASS GOODS, VALVES, ELECTRICAL SUPPLIES, ELECTRICAL EQUIPMENT, SCADA, WATER QUALITY EQUIPMENT, CHLORINATORS, MOTORS AND MISCELLANEOUS ITEMS FOR THE DEPARTMENT OF WATER SUPPLY STOCK, on an as-needed basis, as listed below, and that either the Chairperson of 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. The contract period shall be from July 1, 2019, to June 30, 2020.

PART NO.	DESCRIPTION	BIDDER	AMOUNT
1	DUCTILE IRON PIPE, PUSH-ON TYPE JOINT	Pacific Pipe Co., Inc.	\$54,790.00
2	DUCTILE IRON FITTINGS	Pacific Pipe Co., Inc.	\$67,958.85
3	DUCTILE IRON SOLID BODY SLEEVES	Pacific Pipe Co., Inc.	\$57,467.70
4	FLANGE GASKETS	Pacific Pipe Co., Inc.	\$19,204.56
5	NUTS, BOLTS, AND THREADED RODS	Fastenal Company	\$39,360.08
6	COPPER TUBING	Pacific Pipe Co., Inc.	\$78,888.55
7	GALVANIZED PIPES T&C (THREADED & COUPLED)	Ferguson Enterprises, Inc.	\$21,581.65
9	METER BOXES	Ferguson Enterprises, Inc.	\$48,388.00
10	METER COVERS	Pacific Pipe Co., Inc.	\$22,520.00
11	AUTOMATIC METER READING UNIT	Ferguson Enterprises, Inc.	\$91,680.00
12	5/8" WATER METERS	Badger Meter, Inc. dba National Meter & Automation	\$46,800.00
13	NEPTUNE T-10 SERIES METER PARTS	Ferguson Enterprises, Inc.	\$91,830.00
14	BADGER RECORDALL SERIES METER PARTS	Badger Meter, Inc. dba National Meter & Automation	\$4,604.00
15	1"- 2" WATER METERS	Badger Meter, Inc. dba National Meter & Automation	\$8,964.50
16	COMPOUND WATER METERS	Ferguson Enterprises, Inc.	\$12,789.00
17	DETECTOR CHECK METERS	Pacific Pipe Co., Inc.	\$9,585.66
18	FIRE SERVICE METERS	Pacific Pipe Co., Inc.	\$33,321.72
19	FIRE HYDRANTS	A.P. Water Supply, Inc. dba HIW Hawaii	\$103,446.00
20	MUELLER FIRE HYDRANT PARTS	A.P. Water Supply, Inc. dba HIW Hawaii	\$5,341.20
21	MUELLER FIRE HYDRANT EXTENSION KITS	A.P. Water Supply, Inc. dba HIW Hawaii	\$5,351.00
22	BALL METER VALVES	A.P. Water Supply, Inc. dba HIW Hawaii	\$54,592.50
23	BALL VALVE, PACK JOINT X METER COUPLING / FIP (Female Iron Pipe)	Ferguson Enterprises, Inc.	\$38,437.85
24	COMPRESSION JOINT COUPLING	Pacific Pipe Co., Inc.	\$9,990.00
25	METER FLANGE COUPLING	Ferguson Enterprises, Inc.	\$4,231.75
26	PACK JOINT COUPLING	Ferguson Enterprises, Inc.	\$41,351.20
27	CORPORATION AND CURB STOPS – BALL TYPE	Ferguson Enterprises, Inc.	\$97,213.10
28	PRESSURE REGULATORS	Pacific Pipe Co., Inc.	\$1,515.00
30	INVERTED MARKING PAINT	Safety Systems & Signs Hawaii, Inc.	\$9,000.00

PART NO.	DESCRIPTION	BIDDER	AMOUNT	
31	AIR RELIEF VALVES Pacific Pipe Co., Inc.		\$26,730.00	
32	SLOW CLOSING AIR/VACUUM VALVES	Pacific Pipe Co., Inc.	\$124,568.10	
33	SILENT CHECK VALVES	Pacific Pipe Co., Inc.	\$107,936.70	
34	DUCKBILL CHECK VALVES	Pacific Pipe Co., Inc.	\$87,612.46	
35	GATE VALVES – 3" AND LARGER, 125# CLASS	A.P. Water Supply, Inc. dba HIW Hawaii	\$39,921.00	
36	GATE VALVES – 3" AND LARGER, 250# CLASS	A.P. Water Supply, Inc. dba HIW Hawaii	\$70,476.00	
37	AUTOMATIC CONTROL VALVES	A.P. Water Supply, Inc. dba HIW Hawaii	\$1,448,980.41	
39	RESERVOIR LEVEL INDICATOR	TK Process Hawaii, LLC	\$5,833.32	
40	HATCH FRAMES AND COVERS	Pacific Pipe Co., Inc.	\$28,766.00	
41	EMERGENCY EYEWASH/SHOWER STATIONS	Safety Systems & Signs Hawaii, Inc.	\$132,705.10	
42	TOXIC GAS MONITORS	Fastenal Company	\$619,368.98	
43	SIGNAL LIGHTING	Wesco Distribution, Inc.	\$83,647.00	
44	ARC FLASH PPE – DAILY WEAR	Fastenal Company	\$2,405.46	
45	ARC FLASH PPE - SUPPLEMENTAL	Fastenal Company	\$17,695.91	
46	ELECTRICAL GLOVES	Graybar Electric Company, Inc.	\$1,190.00	
47	DIGITAL MULTIMETER & TESTING	Graybar Electric Company, Inc.	\$4,170.00	
48	ELECTRICAL SAFETY EQUIPMENT	Graybar Electric Company, Inc.	\$3,197.80	
49	ELECTRICAL EQUIPMENT TESTING SERVICES	TK Process Hawaii, LLC	\$3,857.84	
50	ELECTRICAL TAPE	Graybar Electric Company, Inc.	\$11,631.00	
51	ELECTRICAL SPLICING AND TERMINATION	Graybar Electric Company, Inc.	\$7,267.00	
52	ELECTRICAL CONNECTORS & TERMINATIONS	Graybar Electric Company, Inc.	\$6,674.60	
53	INDUSTRIAL MOTOR LEAD CABLE	Graybar Electric Company, Inc.	\$114,175.00	
54	INDUSTRIAL CONTROL WIRING	Graybar Electric Company, Inc.	\$7,245.00	
56	HEAVY-DUTY SAFETY SWITCH			
57	SOLID STATE REDUCED VOLTAGE SOFT STARTER	TK Process Hawaii, LLC \$15.		
58	MAGNETIC CONTACTORS	TK Process Hawaii, LLC \$45,71		
59	MEDIUM-VOLTAGE REDUCED VOLTAGE SOFT STARTER	TK Process Hawaii, LLC	\$28,836.49	

PART NO.	DESCRIPTION	BIDDER	AMOUNT
60	VARIABLE FREQUENCY DRIVES TK Process Hawaii, LLC		\$1,877,404.48
61	POWER QUALITY EQUIPMENT	TK Process Hawaii, LLC	\$319,073.35
62	PAD-MOUNTED STEP-UP TRANSFORMER	Wesco Distribution, Inc.	\$436,708.09
63	SURGE PROTECTION DEVICES	TK Process Hawaii, LLC	\$53,388.31
64	POWER MONITORING EQUIPMENT	OneSource Distributors, LLC	\$74,712.86
65	INDUSTRIAL ELECTRONIC COMPONENTS	OneSource Distributors, LLC	\$4,003.63
66	PRE-FABRICATED SCADA SOLUTIONS	Control Systems West, Inc.	\$1,645,377.37
67	AUTOMATION AND CONTROL COMPONENTS	Fluid Technologies, Inc.	\$48,364.00
68	AUTOMATION SOFTWARE	Fluid Technologies, Inc.	\$122,278.00
69	PROGRAMMING SERVICES	Sean Pierre Yarbenet	\$720.00
71	COMMUNICATION HARDWARE	TK Process Hawaii, LLC	\$15,055.85
72	LICENSED RADIO EQUIPMENT	TK Process Hawaii, LLC	\$19,145.16
73	UNLICENSED RADIO EQUIPMENT	TK Process Hawaii, LLC	\$3,272.84
74	WELL PRESSURE TRANSDUCER	TK Process Hawaii, LLC	\$33,079.24
75	PRESSURE TRANSDUCER – RESERVOIR LEVEL	HD Supply Facilities Maintenance dba USABlueBook	\$2,108.16
76	PRESSURE TRANSMITTER	TK Process Hawaii, LLC	\$2,191.75
77	FLOW SWITCH	TK Process Hawaii, LLC	\$1,369.70
80	ZERO-CLEARANCE ELECTROMAGNETIC FLOW METERS	TK Process Hawaii, LLC	\$581,557.10
81	BATTERY ELECTROMAGNETIC FLOW METERS	Pacific Pipe Co., Inc.	\$301,340.42
83	WATER QUALITY EQUIPMENT	HD Supply Facilities Maintenance dba USABlueBook	\$71,733.90
84	REAGENTS AND STANDARDS	HD Supply Facilities	
85	MULTISTAGE BOOSTER PUMPS	Engineered Systems, Inc.	\$408,557.49
86	CHEMICAL FEEDER PUMP	HD Supply Facilities Maintenance dba USABlueBook	\$7,677.84
88	CHLORINE GAS FEEDER	OneSource Distributors, LLC	\$20,921.21
90	MECHANICAL SEALS	Engineered Systems, Inc. \$164,4	
91	MOTORS	TK Process Hawaii, LLC \$1,277,677	

PART NO.	DESCRIPTION	BIDDER	AMOUNT
93	LEAK NOISE DATA LOGGERS	TK Process Hawaii, LLC	\$37,354.34
94	REMOTE PRESSURE MONITORING SYSTEM	A.P. Water Supply, Inc. dba HIW Hawaii	\$4,344.00
95	LIGHT EMITTING DIODE LUMINARIES	Graybar Electric Company, Inc.	\$3,604.65

For the following Sections: Section 8 – High Density Polyethylene (HDPE) Pipe; Section 29 – Hose Bibbs; Section 38 – Rotary Pump Control Valves and Actuation; Section 55 – Junction Boxes & Enclosures; Section 70 – Uninterruptible Power Supply (UPS); Section 78 – Legacy Electromagnetic Flow Meter Parts; Section 79 – Universal Electromagnetic Flow Meters; Section 82 – Reagentless Chlorine Residual Analyzer; Section 87 – Digital Chlorine Cylinder Scale; Section 89 – Tablet Chlorinator & Parts; Section 92 – Legacy Leak Noise Data Logger Parts; and Section 96 – Industrial Lubricants, no bids were received.

For the Sections where no bids were received, staff shall obtain quotations in the best interests of the Department.

MOTION: Mr. Balog moved for approval of the recommendation; seconded by Mr. Kern.

The Manager-Chief Engineer stated that every year, the Department puts out a material bid for the components it will use throughout the year, although the exact quantity would not be known. This allows the Department to purchase at a set price that was done competitively where we do not have to do a three-quote process every time a particular item is needed. The Department tries to operate within the procurement system but still maintain a higher level of efficiency. For each different vendor being awarded a part or parts, it is a separate contract. Although there are 95 parts, the line items were numerous.

In response to Mr. Domingo's question of where there are any warranties, especially for the million-dollar equipment, the Manager-Chief Engineer replied they come with the standard material warranties

ACTION: Motion was carried unanimously by voice vote.

C. MATERIAL BID NO. 2019-03, FURNISH BASE COURSE, SAND, COLD MIX, HOT MIX, AND NO. 3F ROCK TO THE DEPARTMENT OF WATER SUPPLY:

Bids were opened on May 16, 2019, at 1:30 p.m.; and following are the bid results:

		Yamada & Sons, Inc.	WHC LTD dba West Hawaiʻi Concrete	Grace Pacific LLC	Jas. W. Glover, Ltd.	Puna Rock Company Limited
	DISTRICT I:					
1A.	3/4-Inch Base Course (Cost per ton)	\$21.65	No Bid	No Bid	\$18.75	\$16.20
1B.	1½-Inch Base Course (Cost per ton)	\$21.00	No Bid	No Bid	\$17.71	\$15.15
1C.	No. 3F Rock (Cost per ton)	\$27.95	No Bid	No Bid	\$30.21	\$18.00

		Yamada & Sons, Inc.	WHC LTD dba West Hawaiʻi Concrete	Grace Pacific LLC	Jas. W. Glover, Ltd.	Puna Rock Company Limited
1D.	#4 Sand (Cost per ton)	\$53.80	No Bid	No Bid	\$40.62	\$39.40
1E.	Mortar Sand - ASTM C144 (Cost per ton)	No Bid	No Bid	No Bid	\$64.58	No Bid
1F.	Cold Mix- ASTM D4215-87 (Cost per ton)	\$165.25	No Bid	No Bid	\$152.60	No Bid
1G.	Blended Material 60% #4 Sand and 40% No. 3F Rock (Cost per ton)	\$57.45	No Bid	No Bid	\$57.04	\$22.45
1H.	Hot Mix – County Mix IV (Cost per ton)	\$132.80	No Bid	No Bid	\$142.00	No Bid
	DISTRICT II:					
2A.	3/4-Inch Base Course (Cost per ton)	No Bid	\$16.25	No Bid	No Bid	No Bid
2B.	1½-Inch Base Course (Cost per ton)	No Bid	\$14.72	No Bid	No Bid	No Bid
2C.	No. 3F Rock (Cost per ton)	No Bid	\$25.13	No Bid	No Bid	No Bid
2D.	#4 Sand (Cost per ton)	No Bid	\$28.39	No Bid	No Bid	No Bid
2E.	Mortar Sand - ASTM C144 (Cost per ton)	No Bid	\$48.49	No Bid	No Bid	No Bid
2F.	Cold Mix- ASTM D4215-87 (Cost per ton)	No Bid	No Bid	No Bid	No Bid	No Bid
	DISTRICT III:					
3A.	3/4-Inch Base Course (Cost per ton)	No Bid	\$23.24	No Bid	No Bid	No Bid
3B.	1½-Inch Base Course (Cost per ton)	No Bid	\$21.43	No Bid	No Bid	No Bid
3C.	No. 3F Rock (Cost per ton)	No Bid	\$35.89	No Bid	No Bid	No Bid
3D.	#4 Sand (Cost per ton)	No Bid	\$40.72	No Bid	No Bid	No Bid
3E.	Mortar Sand - ASTM C144 (Cost per ton)	No Bid	\$64.50	No Bid	No Bid	No Bid
3F.	Cold Mix–ASTM D4215-87 (Cost per ton)	No Bid	No Bid	\$153.30	No Bid	No Bid
3G.	Hot Mix - County Mix IV (Cost per ton)	No Bid	No Bid	\$159.10	No Bid	No Bid

The Manager-Chief Engineer recommended that the Board award the contract for MATERIAL BID NO. 2019-03, FURNISH BASE COURSE, SAND, COLD MIX, HOT MIX, AND NO. 3F ROCK TO THE DEPARTMENT OF WATER SUPPLY, by Parts to the following for the amounts shown above, and that either the Chairperson or the Vice-Chairperson be authorized to sign the contracts, subject to review as to form and legality of the contracts by Corporation Counsel. The contract period shall be from July 1, 2019, to June 30, 2020.

District I - Parts 1A, 1B, 1C, 1D, and 1G to Puna Rock Company, Limited Parts 1E and 1F to Jas. W. Glover, Ltd.
Part 1H to Yamada and Sons, Inc.

District II - Parts 2A, 2B, 2C, 2D, and 2E to WHC, Ltd., dba West Hawai'i Concrete

District III - Parts 3A, 3B, 3C, 3D, and 3E to WHC, Ltd., dba West Hawai'i Concrete Parts 3F and 3G to Grace Pacific, LLC

For Part 2F, which did not receive any bids, staff shall obtain quotations in the best interests of the Department.

MOTION: Mr. Sugai moved for approval of the recommendation; seconded by Mr. Domingo.

The Manager-Chief Engineer noted, for the Board's information, that District I is the Hilo Baseyard which also services Ka'ū; District II is the South Kohala Baseyard which covers from Laupāhoehoe area, Hāmākua, North Kohala, down to the Kawaihae; and District III is North and South Kona.

Mr. Sugai asked if the Department had dealt with Puna Rock Company before. They did not sound familiar.

Chairperson Boswell recalled they had bid last year on the Sand, and they have the upset price for District I.

Mr. De Luz spoke about the challenge of anything dealing with transportation costs and the unpredictability of fuel and asked if the loads are picked up by the Department or if they are delivered to the baseyards. There is such a divergence by districts that the Department may want to stockpile the material if its vehicles are adequate to pick it up. He noted there was no bid on cold mix for District II; and if there is no additional cost for the Department picking it up at West Hawaii Concrete's facility, that might help alleviate some costs.

The Manager-Chief Engineer stated that, normally, if the contract includes delivery, it will be to the Department's baseyards; not to job sites.

Mr. De Luz suggested it may be worth taking a look at the difference between the low and high bids to see if the material is picked up or if it is delivered and if that extra cost is in transportation. It may be more pragmatic to have them deliver the material. He mentioned the County not having to pay the fuel tax.

Chairperson Boswell asked if it was correct that in the Department's operations, it has a relatively small fleet of dump trucks and, therefore, keeps a small amount of aggregates at its baseyards but not large amounts of material waiting there for upcoming large projects.

Mr. Young replied that was the case, usually. There is no way to know what time of day or night the material may be needed, but it needs to be on hand.

The Manager-Chief Engineer added that the jobs the Department does in house are typically small in scale.

Chairperson Boswell stated that if it were a contractor's job, they would have the larger equipment to carry the material. To him, some of this pricing that he is familiar with seemed to be a delivered price. (Mr. De Luz stated that was his gut feeling too.)

The Manager-Chief Engineer stated that it also depends on where the plant is versus the baseyard location. For example, Part 3A versus Part 2A costs more because the District III baseyard is on Keauhou side.

ACTION: Motion was carried unanimously by voice vote.

D. WATER HAULING BID NO. 2019-04, PRICE AGREEMENT TO PROVIDE WATER HAULING SERVICES TO VARIOUS LOCATIONS ISLANDWIDE (ON AN AS-NEEDED BASIS) FOR THE DEPARTMENT OF WATER SUPPLY:

Bids were opened on May 16, 2019, at 2:00 p.m., and following are the bid results:

1. Carnor Sumida dba ACR Water Hauling

4,000-, and 5,000-gallon water trucks (price for all districts):
Regular Hours \$103.28/hr.
Overtime Hours \$117.48/hr.

The Manager-Chief Engineer recommended that the Board approve the price agreement for WATER HAULING BID NO. 2019-04, PRICE AGREEMENT TO PROVIDE WATER HAULING SERVICES TO VARIOUS LOCATIONS ISLANDWIDE (ON AN AS-NEEDED BASIS) FOR THE DEPARTMENT OF WATER SUPPLY to Carnor Sumida dba ACR Water Hauling, at the prices listed 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. The price agreement shall be from July 1, 2019, to June 30, 2021.

MOTION: Mr. Balog moved for approval of the recommendation; seconded by Mr. Sugai.

Chairperson Boswell noted only one competitor for this one.

The Manager-Chief Engineer stated that in the past, there were two bidders. Kea'au Service would put in a bid primarily for District I. He was not sure why they chose not to bid this particular one.

Mr. Young stated that Carnor Sumida has been very competitive and they have not increased their price over the past year.

Mr. Sugai asked if the rate was only per hour and not miles travelled.

The Manager-Chief Engineer stated that it was per hour and includes not driving the truck. For example, during the eruption last year, as part of the Department's commitment to the community, it stationed a tanker truck near Vacationland because the system was cut off. That was paid for 24 hours a day because they could not leave their truck unattended. The driver stayed with the truck. Things like that are rare, but it is on an hourly basis.

Chairperson Boswell asked if it is a motor vehicle and not a water wagon.

The Manager-Chief Engineer replied it is the actual 4,000- to 5,000-gallon tanker trucks.

Mr. De Luz asked if they have to follow the PUC (Public Utilities Commission) rate; they are regulated by the PUC.

Mr. Balog stated that they do, technically speaking, on an hourly basis. They are regulated by the PUC, as Mr. De Luz thought. He has seen, in other experiences, competitive bids that were not specified by PUC rate where they say they are bidding per thousand gallons, but generally, on an hourly rate, they would be regulated by the PUC.

Mr. De Luz stated that the reason he mentioned it was that if they are regulated by the PUC, even the standby charges are regulated.

Mr. Balog agreed.

Mr. De Luz suggested that the Department make sure that whatever they do on their end is their problem, as far as compliance with the PUC.

The Manager-Chief Engineer noted that will be check on. It should be in the in the contract documents.

Mr. De Luz also mentioned that they would need to have their certificates of compliance in before the contract is issued.

The Manager-Chief Engineer stated that was correct.

Mr. Domingo asked if there was no existing contractor for this bid. It is not a renewal like the air conditioning contract was.

The Manager Chief Engineer stated that for this one, the choice was to advertise every year because the bid is quite simple. For others like the air conditioning maintenance, the Department asks for a fiscal year term, plus the option to extend on an annual basis.

Mr. Balog asked if the Department checked to see if the vendor is running certified potable water tanks for their trucks.

The Deputy stated that he believed they have one dedicated water hauling truck; and each time they are called to haul water, they come to the Department's Hilo Baseyard/Microlab facility where the lab personnel take a sample for water quality beforehand.

ACTION: Motion was carried unanimously by voice vote.

E. REQUEST FOR PROPOSALS NO. 2019-02, PROVIDE A DEBT COLLECTION AGENCY FOR THE DEPARTMENT OF WATER SUPPLY, COUNTY OF HAWAI'I:

This item was deferred at the April 23, 2019, Water Board Meeting.

Request for Proposals (RFP) No. 2019-02 was issued in February 2019 to select a collection agency to pursue collection of past due amounts owed the Department. Sealed proposals were due no later than 2:00 p.m. on March 22, 2019.

One proposal was received from Aargon Agency, Inc. (Aargon). Based on an evaluation of background, methodology, qualifications, references, and terms, Aargon was determined to meet the Department's needs.

The Manager-Chief Engineer recommended that the Board award RFP No. 2019-02, PROVIDE A DEBT COLLECTION AGENCY for the Department of Water Supply, County of Hawai'i, to Aargon Agency, Inc., and 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. De Luz moved for approval of the recommendation; seconded by Mr. Domingo.

The Manager-Chief Engineer noted that this item was deferred last month due to an irregularity in the bidding requirements. This contract is to supplement the Department's collections efforts. He added that Mr. Sumada was available for questions.

Mr. Sugai asked if it was typical where they get half of the amount collected or whether the percentage was different.

Mr. Sumada replied that the vendor's proposal was that they retain 20% of what is collected.

Chairperson Boswell asked what the anticipated volume would be that needs this collection service.

Mr. Sumada replied that it is not that great a volume. The Department refers closed accounts to the outside agency. Open accounts are worked by the Department's Credit and Collection Clerk on staff. In 2018, the Department sent 338 accounts out to collection that totaled about \$129,000.00. In response to Mr. Sugai's question of what amount was collected from that, Mr. Sumada stated it was about \$15,000.00.

The Manager-Chief Engineer added that in the past, to try and lessen this burden, the credit deposit was raised from \$50.00 to \$150.00 because a lot of times, a renter would skip out and not pay the last bill. Since it was raised, it has helped.

Mr. Domingo asked if that was very common, or what the statistics were on these accounts.

The Manager-Chief Engineer stated that out of a total of about 42,000 accounts, 330 accounts is relatively small--less than 1%.

Mr. Sumada stated that they are not the home owners, but more of the renters that leave town and do not come back. It is a small percent of the customers.

ACTION: Motion carried unanimously by voice vote.

F. MONTHLY PROGRESS REPORT:

Mr. Inaba pointed out a correction. Under South Hilo, for the Ka'ie'ie Mauka Facility Improvements, the end date should be 2019.

Also of note, under North Kohala, the Hala'ula Well Development, Phase 2, project, the Department will be holding the community meeting in early July of this year.

The Deputy added that the Department is working on setting up the date with the Kamehameha Park facility. Once it is finalized, the Board will be informed first and thereafter, normal communication to the public will go out. It will probably be an evening meeting.

Mr. Balog asked about the Queen Kaahumanu Highway Widening – Kealakehe to Keahole 16-Inch Waterline Installation project. He noticed this report has not changed in a while, but he knew the project is done.

Mr. Inaba explained that it is a State project where this Department participated with CIP funds, which is why it is on this list. He was not sure as far as actual close-out of the project because it is a State project.

Chairperson Boswell stated that it will close out in November of this year. It will be officially done then. The contractor is carrying their warranty period through at this time. (Mr. Inaba noted that the Department would be waiting for close out documents.)

Mr. Inaba mentioned the Wai'aha Water System Improvements – Transmission project. The Department received word from the contractor, Isemoto Contracting Co., Ltd., that they will begin trenching probably in the first week of June. The schedule is good as school will be out for the summer.

The Manager-Chief Engineer added that a community meeting was held prior to this project; however, if the Board hears of any concerns, to please share them with the Department to take care of. He was sure traffic will be at the forefront of the concerns. It does help that school will be out.

Chairperson Boswell asked about the North Kona Mid-Level Deep Well Development – Phase 1 project.

Mr. Inaba stated that the owner has just returned from vacation and would be working with the Department to arrange a meeting, hopefully sometime this week.

Mr. Balog asked if there was an update since last month regarding the Kahalu'u Shaft Inclined Lift Replacement.

Mr. Inaba replied there was nothing to report, other than that the contractor was instructed to make sure the manufacturer is being held to their schedule. An update last week indicated they are on schedule. When more information is received, it will be brought to the Board, showing the components of the project.

Mr. Domingo asked when the Board might see results of the Arc Flash Study, Phase 1.

Mr. Inaba replied that the Department is waiting for one of the wells to be completed (Hualālai Well) as the contractor was asked for their assistance to evaluate the performance of it after the implementation of the various suggestions by the Permitted Interaction Group. Hualālai Well should be completed in August or September, and the Board can expect a presentation from the contractor thereafter. The Arc Flash study portion was to do all of the safety coordination with our Operations Division for critical sites.

G. REVIEW OF MONTHLY FINANCIAL STATEMENTS:

Mr. De Luz noted that, technically, the Department has three self-fund liabilities, the Employees' Retirement System (ERS), the Employees' Union Trust Fund (EUTF), and Workers Compensation. The ERS and EUTF have their calculations coming from the State, but he wondered how the Worker's Compensation was calculated; it is managed by the County.

Mr. Sumada replied that the obligation is "pay as you go."

Mr. De Luz asked about where a deficit would come from, whether it be from a surplus balance on the cash account, and if it was something that could be disclosed. When he sees a net change in position on the Income Statement or the Balance Sheet, he wondered how it is handled in the cash account. Technically, because of the ERS and the EUTF, which total about \$2 million that the Department has to contribute, it would have to come from surplus cash because there is not enough in the Operating Budget. He understood that this particular way of representing it is not typical of a financial

statement, but it is giving the Board a snapshot of current year versus previous year and then a current month versus previous month. In reality, when you anticipate managing the budget, you have to manage your cash position and how it funds the CIP. His concern, or he would like to see, the variance by way of a chart if it is easier, showing the cash position. He wanted to see what the variance would be and at what level does the Department attempt to manage as a baseline. In other words, if it dips below that, does the Department look at its two ways to get money--selling more water or increasing the cost of that service. He had a strong intuition that the ERS and the EUTF are going to start eating into that comfortable cash position, which is okay, but if there is a trend, perhaps future projects may have to be looked at for funding, whether it be funds from the State or elsewhere. He recalled the number on the audit report was \$200 million in cash.

Mr. Sumada asked for clarification if Mr. De Luz wanted to see the change in cash.

Mr. De Luz replied that was correct; just like how it was done for the net position beginning and net position ending on the net income. His main concern was what that level is, based on experience and trend, that is needed to maintain operations. He felt that the way it is trending, it is going to eat into that because on interest income, the problem is that on the other side, we pay more for our long-term debt even though we are getting more interest on our insurance, that is going to catch up too. He asked the Manager-Chief Engineer about the water sales increasing, even though there are wells out of commission. Once they come back online, water sales should increase after the water restriction is lifted.

The Manager-Chief Engineer replied that there is only a water conservation in place right now, and people do not really cut back when that is in effect.

Mr. De Luz asked if that meant that when the wells come online, it would be giving more for resiliency rather than what people consume having a direct correlation on consumption.

The Manager-Chief Engineer replied that was correct--capacity rather than actual use.

Chairperson Boswell added that they are not dependent on one well in a subdivision. They are interconnected.

Mr. De Luz stated that it goes into the next issue of planning and hopefully adds capacity to add more users down the line

The Manager-Chief Engineer replied that was correct.

H. MANAGER-CHIEF ENGINEER'S REPORT:

The Manager-Chief Engineer provided updates on the following:

1. North Kona Wells - the Deputy reported that there are now five wells down and nine operational. The staff in Kona have made adjustments to the system and service to customers is being maintained. The fifth well that went down a little over a ago was Hōlualoa Well, which is a submersible well, about 1,200 feet deep. It is a basal source as opposed to one of the perched, trapped high-level sources. A motor issue is suspected so it is going to have to be extracted and repaired. The last time it was repaired was 2015. Bid opening is targeted for early July with award at the July 23 Water Board meeting. The other four wells that are down are: Hualālai, Palani, Wai'aha, and Makalei. For Hualālai, the power cable was the long lead item. Manufacturing is being done and it is expected by the end of June. Once it is on island, the contractor can work on installation. For Palani, the completion is the end August 2019. For

Wai'aha Well, there is still a litigative hold on the project so not much can be said about the repair of the well. For Makalei Well, this is the well that was developed by a private developer and dedicated to the Department. Engineering staff is working with the developer looking at the capacity (GPM) of the well; downsizing that capacity; and thereby downsizing the horsepower requirement for the motor. It is a 700 gpm well, and at that pump rate, there were water quality issues with higher chlorides. Part of the water agreement with the developer was once it started affecting the water quality, the Department had the right to require them to downsize. The Department is looking at downsizing the motor to half the capacity, so about 350 gpm. The developer is working with their consultant to put in a VFD (variable frequency drive) which will basically allow the Department's staff to adjust the speed of the motor to adjust the capacity.

Chairperson Boswell asked if that meant putting a smaller motor in and implementing all of the methods discussed during the Permitted Interaction Group.

The Deputy replied that was correct. The Department will rush the developer as much as it can; but right now, it is looking like the first quarter of 2020 for completion because they have to redesign and go out for prices and then the manufacturing starts. Hopefully a smaller capacity pump and motor will be more available.

The Manager-Chief Engineer mentioned that because it is a water agreement, it will affect the contract between the Board/Department and the developer. Downsizing the well will result in less water units for their development; therefore, the terms of the contract will be affected. It will require an updated or supplemental agreement.

Chairperson Boswell mentioned that the original water agreement recognized the potential for this and it is built into the water agreement.

Mr. Inaba stated that was correct, including the reduction of units.

Mr. Domingo stated that he was surprised about this fifth well being down, and it was the first time hearing of it.

The Deputy stated that the Department wrestles with public communication and not wanting to create a panic if there is no reason. If the field crew can manage the systems to provide service, then we let the system and our guys take care of it. If there is a concern that people are not going to have water, then we would definitely put a communication out. But the Board can be notified for its own information.

Chairperson Boswell agreed with what the Deputy was saying. It is the Department's job to provide water to all of its customers, and this well is not affecting their ability to do that.

2. Department of Water Supply Energy Report - Mr. Ching reviewed his energy report and welcomed suggestions on what the Board would like to see on future reports. Starting with the total power cost, it was broken it down by quarters. For the first quarter 2019, the total Power Cost Charge (PCC) was up 3.7% from the same quarter last year. Compared to the previous quarter, it was down 6%. On Page 2, he highlighted what Hawai'i Electric Light Company, Inc. (HELCO) is doing and how it affects the Department. Right now, we have about 157 HELCO accounts broken down into three different schedules. The average energy rate for the first quarter over those three schedules was down 2.9% from the same quarter last year and down 10.5% from the previous quarter (4th quarter 2018). The demand rate, which makes up about 15% of our total power cost, is up about 20% from the same quarter last year; and that is

primarily due to HELCO's PUC-approved base rate change which occurred in October 2018. From the previous quarter, power did not change. This rate typically does not fluctuate as much as the energy rate so he did not foresee this changing too much going forward. Page 3 shows the history of the PCC. As of today, it is still \$1.89; but starting June 1, it will go up to \$1.96.

Mr. De Luz stated that although HELCO is about 90% of the total energy cost and the Department is always striving for alternate energy resources, perhaps the report could include a composite of what makes up the \$1.96 power cost charge--HELCO, wind power, etc. It also goes to public perception. One of the challenges with the Power Purchase Agreement (PPA) is, to some degree, indexed, so it is not necessarily a 20-year flat rate. Most consumers' thinking is that is something they do on their house where, essentially, you have a fixed cost and that is pretty much what your energy cost will be. But commercial PPA's tend to be different. Either they have some kind of inflationary index or something to that effect. He added that his biggest beef with HELCO is their demand charge. As much as you need to manage all the other aspects, you get very little ability to manage the demand charge unless you actually start looking at your energy hogs on some of the meters and doing some type of hybrid alternative energy to feed into them. The context within our energy plan is when we do have the rate increase amount, there should be a short explanation on what the Department is doing to minimize or mitigate spikes in demand in energy cost in the future. The average consumer will only look at how much per kilowatt hour it is. To him, one of the things he is very disappointed in is the PUC and their not making it more mandatory for the utility to work with other utilities on the challenge of having an antiquated distribution system which adds to their high cost of demand to provide the resiliency side of the electricity. He realized that the DWS has been working with Hawai'i Energy, but the PUC should take more action to force the utility to evaluate their grid, either in a substation, or some other measure. It is discouraging to him and he can see another hit on that one coming up.

Mr. Ching stated that demand is a tough one because most of our wells either run at 100% or zero, and we get hit for the 100%. In certain situations, when wells go down, HELCO does not carry the demand charge through the repair of the well.

Mr. De Luz stated that the problem is that when the well is brought back online, they are going to take the highest 30-day period.

The Manager-Chief Engineer stated that we try to work with them to find ways or programs to take advantage of, such as the Rider M program.

Mr. De Luz stated that the other side to this is what the Department is studying, which is storage. If the Department could show if the demand charge could be levelled out through having extra storage capacity. And if the Department were to go into the bond market, that difference could be pledged on the savings. It would not necessarily mean having to give a discount, but more of bridging for the future. All of the decisions being made today are looking at 10 to 15 years out for CIP projects, other than pipeline replacements. Storage is one of the things that needs to be looked at.

The Manager-Chief Engineer mentioned that besides water consumption, the energy component is being factored into those storage decisions.

Mr. De Luz mentioned it would also be for emergencies.

The Manager-Chief Engineer stated that in the past, the Department fell short on how to use storage to improve its energy savings. If that extra storage could help with some increased Rider M programs it would help alleviate some of that increase.

Mr. De Luz stated that what might need to be looked at is the rate structure, meaning do we need to look at cost savings, reinvestment, so in other words, you would be getting your cost down to 24 cents per kilowatt hour, but your rate is 29 cents. Maybe that should be reinvested in energy efficiency projects like some municipalities do.

Mr. Ching stated that if the Department does a large storage project, there will need to be some communication with HELCO to come to an agreement on the Rider M contract. Rider M is where HELCO says if you curtail your load, they will give a credit back of either 40% or 75%. Right now, they have a time of use rate which is during the day. They want you to run during the day to take advantage of the photovoltaic power from the grid because they are having trouble finding somewhere to put that power during the day. But from 3:00 p.m. to the next morning, if you operate during that time, you pay a greater rate. For example, a normal rate may be 30 cents; but if you operate in the time they want, they will give a 26-cent rate. If you operate outside of that time, it may be more like 33 cents.

The Manager-Chief Engineer noted that this is where increased storage might give us that ability to tap into some of those different rate schedules.

Mr. Ching provided an update on the one of the Department's alternate energy projects – the solar photovoltaic (PV) project. The project was awarded at the last Water Board meeting and entails PV panels on the roofs of the main office and the five baseyards. Negotiations are ongoing with Greenpath for entering into a Power Purchase Agreement (PPA) which will be for a 20-year period. The next milestone will be execution of a PPA.

Mr. De Luz shared his experience with his company's PPA with Sun Edison and cautioned the Department to ensure that Corporation Counsel has a close look at the assignment clause and the performance clause in the contract between this Department and Greenpath. There should be tight language in the performance contract, whether it is an operational issue, and it does not matter if there is only one facility having issues. Essentially, it is under one contract. He recommended that there be some type of performance bond in place.

The Manager-Chief Engineer noted that it will be worked on administratively with Corporation Counsel, and the PPA for this project will ultimately come before the Board for approval.

Mr. Kern asked if these systems are grid or battery back-up.

Mr. Ching replied they will all be tied into the grid except for the main office because of its size. The HELCO program in place is called "Customer Grid Supply Plus," where you can feed into HELCO's grid, and they will accept some energy at a reduced credit. We are going to try to do that just as a back up but we are also going to have batteries at four of the locations: the Hilo Baseyard, the Microlab, Waimea Baseyard, and Kona Baseyard. These systems will offset 80% to 90% of the load. The main office will be around a 40% offset. There will be no batteries in that system, but it will probably work out because all of the energy would be used up onsite because of office hours.

Mr. Kern asked if it would not have made sense for the Department to own its own system instead of having a PPA.

Mr. Ching replied that the major benefit of doing a PPA is the provider, Greenpath, will be able to take advantage of tax credits, Federal - 30% and State - 35%. DWS cannot take advantage of those credits. Greenpath could pass on some of the savings to us through the rate.

Mr. Kern asked how the cost differential would look.

Mr. Ching replied that from some of the preliminary numbers for owning its own system, the Department has to comply with Davis Bacon wages; therefore, the cost of owning it is not as small as a private company. The initial estimate was about \$2.5 million to own it outright and the payback on that was not really there because it did not include batteries at the time. Under the assumption that half of our bill was offset by the system, the payback on it was 20 years. With a PPA, you start seeing some savings from day one since the PPA rate is less than the HELCO rate; and how it was worded in the RFP was if they do recommend us doing an initial investment, the payback on that initial investment needs to be less than eight years. With this project, their design is based on that criteria as far as payback period.

Mr. Kern asked if investment meant a larger down payment.

Mr. Ching replied that was correct. It is, in essence, paying for a facility upgrade that is required by the project. That way we are not paying for energy we have not used yet. In this case, they will do the roofing upgrades which will pretty much be covered by our investment. That will reduce our rate and stabilize it a little, not having to add that cost into the rate over the 20-year period.

Mr. Kern asked if the roof repair was something that needed to be done anyway.

The Manager-Chief Engineer replied that was correct. The benefit is we are fronting that money, but it is not like a down payment but more like an Operations and Maintenance improvement that can be used even if the PV was not there.

Mr. Domingo mentioned the Office/Baseyard Lighting Renovation project and that Mr. Ching ought to be commended for saving the Department that much money in the payback time of nine months. He noted if you look at the graph, there are initial savings and it keeps going down after that. That is wonderful. He asked about Figure 3 on Page 2. It seems like a statistically stable rate from 2016 to third quarter 2018, and then you see a big bump on the demand rate history. He asked what might be the cause of that.

Mr. Ching replied that it shows the demand rate history. That was going back to the HELCO base rate change which was implemented in October 2018. They had not changed the base rate for a while up to that point. The energy cost adjustment goes up and down, but the base rate remains the same. It did change the demand charge rate.

Mr. Domingo asked if the rate increase had anything to do with Puna Geothermal going down.

Mr. Ching replied that from what he understood, it was not connected. They had not had a base rate change since 2012, and the increase had been planned before Puna Geothermal went down.

Mr. De Luz asked if the Department had looked into any of its key facilities being emergency facilities in the event of a power outage such as its baseyards. If so, it may need to do some upgrades to the electrical system, such as dedicated circuits for emergency equipment or lighting.

It may make sense to design for emergency power up front and upgrade because of battery storage. It might be worth looking into.

Mr. Ching stated that Greenpath was asked about what their intentions were as far as using that as back-up power. As it is designed now, if it does not sense HELCO power coming in, it is not going to provide power from the panels to the building. He thought the Kona and Waimea baseyards may have that capability, but you would have to physically enable it when there is an outage. It is not like an automatic transfer.

3. 2019 Water Conservation Poster Contest - taken up earlier.

I. CHAIRPERSON'S REPORT:

Chairperson Boswell congratulated the Department on a good job with the water conservation involvement with the children and the schools. It is good to see that.

The Manager-Chief Engineer stated that it is planned to be an annual thing.

Mr. De Luz mentioned possibly having the winning entries converted into a calendar.

The Deputy also mentioned that the winning entries will be posted online.

9) ANNOUNCEMENTS:

1. Next Regular Meeting:

The next meeting of the Water Board will be June 25, 2019, 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 of the Water Board will be July 23, 2019, 10:00 a.m., at the Department of Water Supply, Hilo Operations Center Conference Room; 889 Leilani Street, Hilo, Hawai'i.

The Manager-Chief Engineer mentioned that Mr. Zendo Kern is the recent addition to the Water Board. That makes two former Council Members on the Board right now.

10) ADJOURNMENT

<u>ACTION</u> : Mr. Sugai moved to adjourn the meeting; seconded by Mr. Kern and carried unanimously voice vote. (Meeting adjourned at 12:05 p.m.)				
Recording Secretary	(APPROVED BY WATER BOARD 6/25/19)			