



## MINUTES

### CALL TO ORDER (A)

Chairman Asdourian called the meeting to order at 4:01 PM.

### PLEDGE OF ALLEGIANCE (B)

Mr. Ryan Dempsey led the Pledge of Allegiance.

### ROLL CALL (C)

Present were Chairman David Asdourian and Commissioners Susan Heim, Robert Majeska and Stephen Gibbs. Commissioner Andrew Tobin was not present. Also present were General Manager, Peter Rosasco, General Counsel, Nicholas Mulick, acting District Clerk, Ines Perez, and District Managers.

### AGENDA ADDITIONS, CORRECTIONS, OR DELETIONS (D)

- Mr. Rosasco requested deletion of Item N-1 and the addition of a discussion on November and December meeting dates under General Manager's Report as Item G-3.

### Approval of Agenda (D-1)

**Motion:** Commissioner Heim made a motion to approve the agenda as amended, and Commissioner Gibbs seconded the motion. The motion passed without objection.

### PUBLIC COMMENT (E)

No speakers.

### APPROVAL OF MINUTES OF PREVIOUS MEETINGS (F)

*Minutes of September 18, 2018 (F-1)*

**Motion:** Commissioner Majeska made a motion to approve the minutes of September 18, 2018, and Commissioner Heim seconded the motion. The motion passed without objection.

*Minutes of October 2, 2018 (F-2)*

**Motion:** Commissioner Majeska made a motion to approve the minutes of October 2, 2018, and Commissioner Gibbs seconded the motion. The motion passed without objection.

**GENERAL MANAGER’S REPORT (G)**

*Update from Cynergy Consulting (G-1)*

Mr. Rosasco announced that Ms. Cynthia Henderson and Ms. Lauren Henderson of Cynergy Consulting were unable to attend the Board Meeting due the effects of Hurricane Michael. A letter was provided as an update in their absence.

*FDEP Solar Loan Program Demonstration Project (G-2)*

Mr. Ed Castle, District Engineer, provided an update on the benefits of a low interest FDEP loan program for solar projects. Chairman Asdourian directed staff to continue researching the program and report back to the Board at a later date.

*Board Meeting Dates for November and December (G-3)*

*Mr. Rosasco submitted proposed meeting dates for the Board's consideration.*

**Motion: Commissioner Heim made a motion to cancel the November 13, 2018 board meeting, and Commissioner Gibbs seconded the motion.**

**Vote on Motion**

- Commissioner Heim - Aye**
- Commissioner Gibbs - Aye**
- Commissioner Majeska - Aye**
- Chairman Asdourian - Aye**
- Motion Passed: 4 to 0**

**BUDGET AND FINANCE REPORT (H)**

*Health Insurance Renewal for 2019 (H-1)*

Ms. Kim Carpenter, Human Resources Manager, announced that the 2019 health insurance rates, as provided by Florida League of Cities, increased by 2.9%. Florida League of Cities previously suggested the District estimate an 8% increase for budgeting purposes. Staff recommended continuation of current insurance coverage with Florida League of Cities.

**Motion: Commissioner Heim made a motion to approve Staff’s recommendation, and Commissioner Gibbs seconded the motion.**

**Vote on Motion**

- Commissioner Heim - Aye**
- Commissioner Gibbs - Aye**
- Commissioner Majeska - Aye**
- Chairman Asdourian - Aye**
- Motion Passed: 4 to 0**

**ADMIN AND CUSTOMER SERVICE REPORT (I)**

No report.

**OPERATIONS REPORT (J)**

*Synagro Request for Cost per Ton Increase (J-1)*

Mr. Castle requested approval of a six-month extension of the existing contract with Synagro for dewatering, hauling, and disposal of biosolids, including a price increase from \$865.00 to \$885.77 per ton. Staff recommends approval of the six-month extension, and price increase. During the six-month extension period, Staff will solicit bids for the services currently provided by Synagro.

**Motion:** Commissioner Gibbs made a motion to approve Staff's recommendation, and Commissioner Heim seconded the motion.

**Vote on Motion**

Commissioner Gibbs - Aye  
Commissioner Heim - Aye  
Commissioner Majeska - Aye  
Chairman Asdourian - Aye  
Motion Passed: 4 to 0

**CONSTRUCTION REPORT (K)**

No report.

**ENGINEER'S REPORT (L)**

*Update on Monroe Park Sewer Project (L-1)*

Mr. Castle informed the Board that the Florida Keys Aqueduct Authority (FKAA) intends to move forward with a Modified Ludzak Ettinger (MLE) design treatment system and low-pressure collection system. FKAA continues to work with the Environmental Protection Agency (EPA) to secure a grant to defray the cost of constructing the systems.

**LEGAL REPORT (M)**

No report.

**COMMISSIONER'S ITEMS (N)**

*The Problem with Ambiguous Contracts (Commissioner Tobin) (N-1)*

Mr. Rosasco requested deletion of this Item on behalf of Commissioner Tobin.

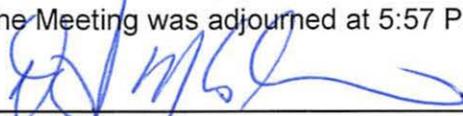
**ROUNDTABLE DISCUSSION (O)**

*Unfinished Business (O-1)*

None.

**ADJOURNMENT (P)**

The Meeting was adjourned at 5:57 PM.

  
\_\_\_\_\_  
David Asdourian, Chairman

  
\_\_\_\_\_  
Diane Bockelman, Clerk  
Seal



October 16, 2018

Commissioners:

We are deeply saddened that we could not join you for this meeting today. This hurricane is reallocating everyone's resources, especially planes and pilots that are now delivering supplies to needed areas.

We planned to discuss elections coming in November. This is an interesting year for the State of Florida. We always say that "this election is the most important". This year is no different.

The Governor and Cabinet are all in tight races. For the Governor's race, Ron DeSantis and Andrew Gillum are in a very close race. The polls have been all over the place. It is most important that we look at trends rather than each poll. DeSantis was ahead in July but has not been ahead since. But Gillum's biggest lead of a reportedly 9 points was not reliable according to pollsters. There were too many assumptions that have never been close to accurate in a mid-term election, including a democratic turnout much higher than republican. In looking at the numbers as of Sunday, republican turnout is 151,810, versus democrat at 122,243 and independents at 61,915. However, in looking at averages by the polls and trends, Gillum appears to have a razor lead and the race is expected to be a nail biter. The press is strongly on Gillum's side and he must have a huge democratic turnout to win. This one is a "toss up" for sure.

For the Attorney General's race, the polls show Ashley Moody well ahead of Sean Shaw. We are very familiar with Ashley Moody and are very impressed with her experience. She also has the endorsement of a majority of the Sheriffs in the State. Again, if democrats have a huge, unprecedented turnout on November 6th, this race will be tighter than predicted but a double digit lead is difficult to overcome.

For the Agriculture Commissioner race, it is hard to predict. We had heard that Nikki Fried was polling well, but then a very respected press person advises Matt Caldwell is predicted to take this race. Again, turnout is a key factor. Representative Caldwell is a hard working, truthful, dedicated House member and has been a key supporter of the Keys.

For the Chief Financial Officer, Jeremy Ring is trailing Jimmy Patronis, the incumbent. We believe Patronis has the resources and reputation to win this race. We have worked with him for years and he has one of the most hardworking, servant's heart that we have met.

For the US Senate race, this is perhaps the closest challenger Senator Bill Nelson has experienced in his 42 years of running for office. Governor Rick Scott is predicted as having a lead, based on the trends. Hurricane Michael is expected to give him another bump but, again, turnout is a key.

Additionally, we were planning to discuss next session. In talking with leadership, we anticipate the biggest issues will be Hurricane Michael funding issues and building code updates. It has been a long time since Hurricane Andrew made its substantive impact on changes to the building code. The only homes left standing in Mexico Beach were those built very recently. They sustained damage from water but are still standing. Several counties did not have a single shelter to sustain a storm above category 1 or 2. Additionally, how to strengthen the electric grid has been an issue each session. Representative Jeanette Nunez chaired the Select Committee on Hurricane Response and Preparedness and now is DeSantis' running mate as Lt. Governor. She would work to carry out many of the recommendations in the next session if elected.

For us, Representative Raschein will continue to request funding for the Stewardship Act. She is not aware of any discussions to change the terms of our Interlocal Agreement. We continue to make improvements based on the federal/state funding and reduce debt. This is very much appreciated at the State level. Senator Flores will continue to remain a strong advocate also!

Lauren and I have been traveling the state since the adjournment of session. We have been visiting all parts of the state walking for candidates and raising funds for leadership. It has been a tremendous experience and the legislators are very appreciative of the sweat equity being put in to their campaigns. Let's just say knocking on hundreds of doors a day in 95 plus degree temperatures has been a challenge!

We will continue to work with the Department of Environmental Protection on the State Revolving Loan Program and additional funding opportunities.

Let us know if you have any questions regarding other state programs. We would love to hear your feedback on how the State is doing with recovery after Irma and whether housing is coming back and needed infrastructure.

Session dates are:

March 5, 2019, Regular Session Convenes and ends May 3, 2019.

Interim Committee weeks are:

Week of December 11, 2018\*

Week of January 7, 2019

Week of January 22, 2019\*

Week of February 4, 2019

Week of February 11, 2019

Week of February 19, 2019\*

Due to Monday holidays, week with \* start on Tuesdays

Thank you for the opportunity to work together and we look forward to another successful session.

Lauren and Cynthia Henderson



## MEMORANDUM

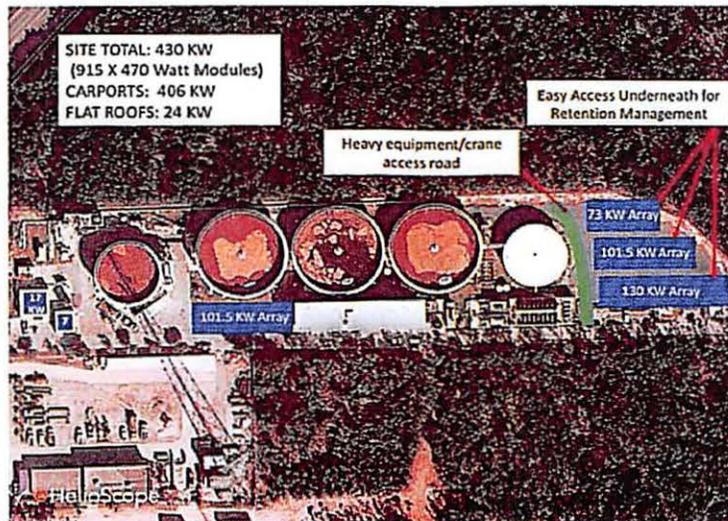
**To:** KLWTD Board  
**From:** Ed Castle, PE  
**Date:** October 15, 2018  
**Re:** FDEP Loan Program for Solar Power Projects

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Tim Banks of FDEP informed Peter Rosasco of a new low-interest loan program intended to promote use of solar arrays to generate electricity. Loans for implementation of solar electric projects may be provided. In order to qualify for a loan, a planning document must be prepared and submitted along with the loan request. The planning document must evaluate alternatives and demonstrate the economic and environmental benefits of the proposed project.

WEC was asked to provide an initial analysis of capital costs and potential savings for an expanded solar arrays project. The areas in which solar arrays may be installed include additional rooftops and open areas at the WWTP and the roof and parking area at the Administration Building.

At the WWTP, solar arrays could be installed as shown in the drawing below.



The two rooftops for the Vacuum Station E buildings could have arrays installed. The parking area to the west of the Operations Building could have a car-port style solar array installed, and

three car-port style arrays could be installed in the large retention area. Although shorter mounting systems are typically used for ground-mounted solar arrays, the retention area bottom will require periodic maintenance, including removal and replacement of rock, so a car-port style mounting system that allows access for maintenance is preferred.

Solar arrays at the Administration Building can also be considered. The drawing below shows a proposed layout of solar arrays for the Administration Building.



Solar panels can be mounted on the rooftop. The drawing shows only two rows of rooftop mounted panels. A third row could be added if the trees to the east of the building could be trimmed back and topped. A car-port style array could be mounted above the front parking area as shown. During peak output periods, the solar arrays shown would generate more electricity that needed for the building. A battery storage system would be proposed for this location so the excess electricity generated at peak output periods could be stored and used during off-peak production periods.

We have received construction cost estimates for the arrays depicted above. The estimate for the WWTP arrays is \$1,437,016. The estimate for the Administration Building arrays is \$505,904, included a battery storage system.

The expected useful life of solar panels is in excess of 40 years. Using a useful life of 40 years and amortizing the capital costs over 20 years (the term of the FDEP loan) at the current interest rate of 0.94% shows that the average annual net savings would be \$108,701 over the 40-year period for a total net savings of approximately \$4.35 million. Details of these cost calculations are provided in the attached table.

## ANALYSIS OF SOLAR PAYBACK OF FDEP LOAN

Fiscal Year	WWTP Solar Arrays Project Loan Payments for \$1,437,016 at 0.94% Interest (20 Years)	Admin Building Solar Arrays Project Loan Payments for \$505,904 at 0.95% interest (20 Years)	Combined Solar Arrays Production kWhr/Year	Cost of Electricity, \$/kWhr (historical average annual increase of 2.068%)	Annual O&M Costs (KLWTD staff, 8 man-hours per quarter)	Gross Annual Savings in Electricity	Net Annual Savings in Electricity
2020	\$72,273.96	\$25,444.21	974,094	\$0.11	\$1,440.00	\$107,150.34	\$7,992.17
2021	\$78,844.32	\$27,757.32	974,094	\$0.11	\$1,469.78	\$109,366.21	\$1,294.79
2022	\$78,844.32	\$27,757.32	974,094	\$0.11	\$1,500.17	\$111,627.90	\$3,526.09
2023	\$78,844.32	\$27,757.32	974,094	\$0.12	\$1,531.20	\$113,936.37	\$5,803.53
2024	\$78,844.32	\$27,757.32	974,094	\$0.12	\$1,562.86	\$116,292.57	\$8,128.07
2025	\$78,844.32	\$27,757.32	974,094	\$0.12	\$1,595.18	\$118,697.50	\$10,500.68
2026	\$78,844.32	\$27,757.32	974,094	\$0.12	\$1,628.17	\$121,152.17	\$12,922.35
2027	\$78,844.32	\$27,757.32	974,094	\$0.13	\$1,661.84	\$123,657.59	\$15,394.11
2028	\$78,844.32	\$27,757.32	974,094	\$0.13	\$1,696.21	\$126,214.83	\$17,916.98
2029	\$78,844.32	\$27,757.32	974,094	\$0.13	\$1,731.29	\$128,824.95	\$20,492.03
2030	\$78,844.32	\$27,757.32	974,094	\$0.13	\$1,767.09	\$131,489.05	\$23,120.33
2031	\$78,844.32	\$27,757.32	974,094	\$0.14	\$1,803.63	\$134,208.25	\$25,802.98
2032	\$78,844.32	\$27,757.32	974,094	\$0.14	\$1,840.93	\$136,983.67	\$28,541.10
2033	\$78,844.32	\$27,757.32	974,094	\$0.14	\$1,879.00	\$139,816.50	\$31,335.85
2034	\$78,844.32	\$27,757.32	974,094	\$0.15	\$1,917.86	\$142,707.90	\$34,188.40
2035	\$78,844.32	\$27,757.32	974,094	\$0.15	\$1,957.52	\$145,659.10	\$37,099.94
2036	\$78,844.32	\$27,757.32	974,094	\$0.15	\$1,998.00	\$148,671.33	\$40,071.69
2037	\$78,844.32	\$27,757.32	974,094	\$0.16	\$2,039.32	\$151,745.86	\$43,104.89
2038	\$78,844.32	\$27,757.32	974,094	\$0.16	\$2,081.50	\$154,883.96	\$46,200.82
2039	\$78,844.32	\$27,757.32	974,094	\$0.16	\$2,124.54	\$158,086.96	\$49,360.78
2040	\$6,570.64	\$2,312.34	974,094	\$0.17	\$2,168.48	\$161,356.20	\$150,304.74
2041	\$0	\$0	974,094	\$0.17	\$2,213.32	\$164,693.04	\$162,479.72
2042	\$0	\$0	974,094	\$0.17	\$2,259.09	\$168,098.90	\$165,839.81
2043	\$0	\$0	974,094	\$0.18	\$2,305.81	\$171,575.18	\$169,269.37
2044	\$0	\$0	974,094	\$0.18	\$2,353.49	\$175,123.36	\$172,769.86
2045	\$0	\$0	974,094	\$0.18	\$2,402.16	\$178,744.91	\$176,342.74
2046	\$0	\$0	974,094	\$0.19	\$2,451.84	\$182,441.35	\$179,989.51
2047	\$0	\$0	974,094	\$0.19	\$2,502.54	\$186,214.24	\$183,711.69
2048	\$0	\$0	974,094	\$0.20	\$2,554.30	\$190,065.15	\$187,510.85
2049	\$0	\$0	974,094	\$0.20	\$2,607.12	\$193,995.70	\$191,388.58
2050	\$0	\$0	974,094	\$0.20	\$2,661.04	\$198,007.53	\$195,346.49
2051	\$0	\$0	974,094	\$0.21	\$2,716.07	\$202,102.32	\$199,386.26
2052	\$0	\$0	974,094	\$0.21	\$2,772.23	\$206,281.80	\$203,509.57
2053	\$0	\$0	974,094	\$0.22	\$2,829.56	\$210,547.71	\$207,718.14
2054	\$0	\$0	974,094	\$0.22	\$2,888.08	\$214,901.83	\$212,013.76
2055	\$0	\$0	974,094	\$0.23	\$2,947.80	\$219,346.00	\$216,398.20
2056	\$0	\$0	974,094	\$0.23	\$3,008.77	\$223,882.08	\$220,873.31
2057	\$0	\$0	974,094	\$0.23	\$3,070.99	\$228,511.96	\$225,440.97
2058	\$0	\$0	974,094	\$0.24	\$3,134.49	\$233,237.59	\$230,103.09
2059	\$0	\$0	974,094	\$0.24	\$3,199.32	\$238,060.94	\$234,861.63
<b>Total</b>	<b>\$1,576,887</b>	<b>\$555,146</b>	<b>38,963,760</b>		<b>\$88,273</b>	<b>\$6,568,361</b>	<b>\$4,348,056</b>
<b>Annual Avg.</b>			<b>974,094</b>	<b>\$0.17</b>	<b>\$2,207</b>	<b>\$164,209</b>	<b>\$108,701</b>

**Handout: Monroe Park Update**

**From:** Joshua Peele <[jpeelee@fkaa.com](mailto:jpeelee@fkaa.com)>  
**Subject:** RE: Monroe Park Update  
**Date:** October 15, 2018 at 4:29:06 PM EDT  
**To:** Ed Castle <[edrcastle@me.com](mailto:edrcastle@me.com)>  
**Cc:** Kent Nelson <[knelson@fkaa.com](mailto:knelson@fkaa.com)>, Jolynn Reynolds <[joreynolds@fkaa.com](mailto:joreynolds@fkaa.com)>

Good Afternoon Ed,

After review of the preliminary study, the FCAA intends to move forward with design of a Modified Ludzak Ettinger (MLE) treatment system and low-pressure collection system. FCAA continues to work with EPA grant managers to modify the grant accordingly. The most recent request to EPA was on October 3, 2018.

Sincerely,

Joshua W. Peele  
Engineering Projects Administrator  
Florida Keys Aqueduct Authority  
(305) 809-2739 fax  
(305) 809-2636 office