

State of Florida



Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD
TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M-

DATE: February 28, 2018

TO: Carlotta S. Stauffer, Commission Clerk, Office of Commission Clerk

FROM: Sonica C. Bruce, Economic Analyst, Division of Economics *SCB*

RE: Docket No. 20170223-SU - Application for establishment of wastewater allowance for funds prudently invested (AFPI) charges in Highlands, Lake, Marion, Pasco, and Pinellas Counties, by Utilities, Inc. of Florida

Please place the attached document in the above-referenced docket. The document reflects the allowance for funds prudently invested calculations for LUSI wastewater based on the non used and useful costs associated with the wastewater treatment plant pursuant to Order No. PSC-2017-0361-FOF-WS and accrued beginning January 1, 2016.

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2018 FEB 28 PM 3:21
COMMISSION
CLERK

Allowance for Funds Prudently Invested
Calculation of Carrying Costs for Each ERC

Information Needed

1.	Cost of Qualifying Assets	\$	1,949,211
2.	Capacity of Qualifying Assets		411,788 GPD
3.	Number of Future Customers		1,471 ERC
4.	Annual Depreciation Expense	\$	134,553
5.	Rate of Return		7.09%
6.	Weighted Cost of Equity		4.36%
7.	Federal Income Tax Rate		21.00%
8.	State Income Tax Rate		5.50%
9.	Annual Property Tax	\$	1,742
10.	Other Costs	\$	0
11.	Depreciation Rate of Assets		6.90%
12.	Test Year		2016

**Allowance for Funds Prudently Invested
Calculation of Carrying Costs for Each ERC:**

Cost of Qualifying Assets:	\$	1,949,211	Annual Depreciation Expense:	\$	134,553
Divided By Future ERC:		1,471	Future ERC's:		1,471
		<u> </u>			<u> </u>
Cost/ERC:	\$	1,325.39	Annual Depr. Cost per ERC:	\$	<u>91.49</u>
Multiply By Rate of Return:		7.09%			
		<u> </u>			
Annual Return Per ERC:	\$	<u>93.99</u>	Annual Property Tax Expense:	\$	1,742
			Future ERC's:		1,471
Annual Reduction in Return:	\$	<u>6.49</u>			<u> </u>
(Annual Depreciation Expense			Annual Prop. Tax per ERC:	\$	<u>1.18</u>
per ERC Times Rate of Return)					
Federal Tax Rate:		21.00%	Weighted Cost of Equity:		4.36%
Effective State Tax Rate:		4.35%	Divided by Rate of Return:		7.09%
		<u> </u>			<u> </u>
Total Tax Rate:		<u>25.35%</u>	% of Equity in Return:		<u>61.48%</u>
Effective Tax on Return:		<u>15.58%</u>	Other Costs:	\$	0
(Equity % Times Tax Rate)			Future ERC's:		1,471
					<u> </u>
Provision For Tax:		<u>20.87%</u>	Cost per ERC:	\$	<u>0.00</u>
(Tax on Return/(1-Total Tax Rate))					

Allowance for Funds Prudently Invested
Calculation of Carrying Cost Per ERC Per Year:

	2016	2017	2018	2019	2020
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Unfunded Other Costs:	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
Unfunded Annual Depreciation:	91.49	91.49	91.49	91.49	91.49
Unfunded Property Tax:	1.18	1.18	1.18	1.18	1.18
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Subtotal Unfunded Annual Expense:	\$ 92.68	\$ 92.68	\$ 92.68	\$ 92.68	\$ 92.68
Unfunded Expenses Prior Year:	0.00	92.68	185.35	278.03	370.70
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Total Unfunded Expenses:	\$ <u>92.68</u>	\$ <u>185.35</u>	\$ <u>278.03</u>	\$ <u>370.70</u>	\$ <u>463.38</u>
Return on Expenses Current Year:	6.57	6.57	6.57	6.57	6.57
Return on Expenses Prior Year:	0.00	6.57	13.14	19.72	26.29
Return on Plant Current Year:	93.99	87.50	81.01	74.52	68.03
Earnings Prior Year:	0.00	93.99	194.73	302.69	418.39
Compound Earnings from Prior Year:	0.00	6.67	13.81	21.46	29.67
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Total Compounded Earnings:	\$ 93.99	\$ 194.73	302.69	418.39	542.38
Earnings Expansion Factor for Tax:	1.21	1.21	1.21	1.21	1.21
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Revenue Required to Fund Earnings:	\$ 113.61	\$ 235.38	\$ 365.87	\$ 505.73	\$ 655.59
Revenue Required to Fund Expenses:	92.68	185.35	278.03	370.70	463.38
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Subtotal:	\$ 206.29	\$ 420.73	\$ 643.90	\$ 876.43	\$ 1,118.97
Divided by Factor for Regulatory Assessment Fee	0.955	0.955	0.955	0.955	0.955
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ERC Carrying Cost for 1 Year:	\$ <u>216.01</u>	\$ <u>440.55</u>	\$ <u>674.24</u>	\$ <u>917.73</u>	\$ <u>1,171.70</u>

UTILITIES, INC. OF FLORIDA -LUSI
DOCKET NO. 20170223-SU

SCHEDULE 1-D

Allowance for Funds Prudently Invested
Calculation of Carrying Cost Per ERC Per Month:

	2016	2017	2018	2019	2020	2021
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January	18.00	234.72	460.02	694.53	938.89	1,171.70
February	36.00	253.43	479.50	714.82	960.06	1,171.70
March	54.00	272.14	498.97	735.11	981.22	1,171.70
April	72.00	290.86	518.45	755.40	1,002.39	1,171.70
May	90.00	309.57	537.92	775.69	1,023.55	1,171.70
June	108.00	328.28	557.40	795.99	1,044.71	1,171.70
July	126.01	346.99	576.87	816.28	1,065.88	1,171.70
August	144.01	365.70	596.34	836.57	1,087.04	1,171.70
September	162.01	384.42	615.82	856.86	1,108.20	1,171.70
October	180.01	403.13	635.29	877.15	1,129.37	1,171.70
November	198.01	421.84	654.77	897.44	1,150.53	1,171.70
December	216.01	440.55	674.24	917.73	1,171.70	1,171.70