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October 13, 2016

**E-PORTAL FILING**

Ms. Carlotta Stauffer, Clerk  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, FL 32399-0850


**Re: 160199-GU: Joint Petition for Approval of GRIP Cost Recovery Factors by Florida Public Utilities Company, Florida Public Utilities Company-Fort Meade, and Florida Division of Chesapeake Utilities Corporation.**

Dear Ms. Stauffer:

Attached for filing, please find the responses to Staff's First Data request provided on behalf of Florida Public Utilities Company, Florida Public Utilities Company-Fort Meade, and Florida Division of Chesapeake Utilities Corporation.

Thank you for your assistance with this filing. As always, please don't hesitate to let me know if you have any questions whatsoever.

Kind regards,

  
Beth Keating  
Gunster, Yoakley & Stewart, P.A.  
215 South Monroe St., Suite 601  
Tallahassee, FL 32301  
(850) 521-1706

MEK  
cc://(Office of Public Counsel - Morse)

**160199-GU: Joint Petition for Approval of GRIP Cost Recovery Factors by Florida Public Utilities Company, Florida Public Utilities Company-Fort Meade, and Florida Division of Chesapeake Utilities Corporation.**

Responses to Staff's First Data Requests

The responses of Florida Public Utilities Company, Florida Public Utilities Company-Indiantown Division, Florida Public Utilities Company-Fort Meade, and the Florida Division of Chesapeake Utilities Company to Staff's First Data Requests are as follows:

1. Please state the total amount of depreciation and/or operations and maintenance saving, if any, that were included as a reduction in expenses.

**Company Response:**

The Company did not include any reduction in expenses for depreciation and/or operations and maintenance savings.

2. Please provide all the GRIP schedules in Excel with the formulas unlocked.

**Company Response:**

The Company has enclosed/attached the schedules in Excel.

3. Please update the tables 1 and 2 titled Pipe Replacement Program Progress that were included in Docket No. 150191-GU, Order No. PSC-15-0578-TRF-GU, page 9 and provide a table with similar information for FPUC-Fort Meade.

**Company Response:**

The Company has updated the requested Tables. Please see Attachment A.

4. Referring to Exhibit MC-1, please explain the difference between 1010 and 1070 Activities.

**Company Response:**

1010 and 1070 refer to the Chart of Accounts for plant as regulated by FERC (Federal Energy Regulatory Commission). 1010 relates to Gas Plant in Service or the original cost of gas plant owned and used by the utility in its gas operations. 1070 relates to Construction Work in Progress (CWIP), which is the total costs for gas plant in process of construction. Once the construction in progress is completed or deemed to be in service, the total gas plant costs are transferred from the CWIP account (1070) to Plant in Service (1010).

5. Referring to the testimony of Mr. M. Cassel on page 4 of 6, please list some areas/regions where replacement projects have taken place.

**Company Response:**

The Company has performed replacement projects in various cities/towns (City of West Palm Beach, Town of Palm Beach, City of Lake Worth, Town of North Palm Beach, City of Deland, City of Debary, City of Winter Haven, Haines City, Auburndale and Lake Wales) within Palm Beach, Volusia, and Polk Counties.

6. For FPUC: Referring to Exhibit MC-1, please explain the General Public Notice Expense & Customer Notice Expenses for April and August 2015, and for May and December 2016.

**Company Response:**

Please see Attachment B for explanations.

**GRIP SCHEDULES**

**Florida Public Utilities Company**  
Gas Reliability Infrastructure Program (GRIP)  
Calculation of Equity and Debt Returns

Schedule A-1  
Exhibit \_\_\_\_\_  
Michael Cassel (MC-1)  
Page 1 of 14

Earnings Surveillance Report - December 31, 2015

Equity Cost Rate	10.85%
Weighted Equity Cost Rate	5.02%
Revenue Expansion Factor	<u>1.6401</u>
Weighted Equity Cost Rate , times Revenue Expansion Factor	<u>8.230%</u>
Long Term Debt-CU	0.940%
Short Term Debt	0.180%
Long Term Debt-FC	0.360%
Short Term Debt-Refinanced LTD	0.000%
Customer Deposits	<u>0.100%</u>
Weighted Debt Cost Rate	<u>1.580%</u>
Overall Weighted Cost Rate	<u><u>6.60%</u></u>

**Florida Public Utilities Company**  
 Gas Reliability Infrastructure Program (GRIP)  
 Calculation of the Actual Revenue Requirements  
 Seven Months Actual January 2015 through July 2015  
 Estimated August 2015 through December 2015

Schedule B-1  
 Exhibit \_\_\_\_\_  
 Michael Cassel (MC-1)  
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Item	Beginning Balance	Actual Jan	Actual Feb	Actual Mar	Actual Apr	Actual May	Actual Jun	Actual Jul	Actual Aug	Actual Sep	Actual Oct	Actual Nov	Actual Dec	After Adj. Year End Total/Balance
<b>Qualified Investment</b>														
Qualified Investment - Mains - Current 1070 Activity		\$1,683,320	\$2,008,191	\$2,569,052	\$2,088,131	\$1,948,197	\$1,370,233	\$2,497,822	\$1,138,373	\$1,670,326	\$1,316,968	\$851,172	\$ 2,236,059	\$21,377,824
Qualified Investment - Mains - Closed 1070 Activity to Plant		(\$162,243)	(\$972,057)	(\$3,594,327)	(\$1,168,965)	(\$823,574)	(\$235,795)	(\$3,982,703)	(\$296,454)	(\$58,404)	\$104,001	(\$67,349)	\$ (9,003,454)	(\$20,261,324)
Qualified Investment - Services - Current 1070 Activity		\$526,342	\$628,856	\$454,620	\$610,359	\$405,006	\$424,630	\$1,082,197	\$375,971	\$441,007	\$349,421	\$378,484	\$ 126,630	\$5,803,522
Qualified Investment - Services - Closed 1070 Activity to Plant		(\$124,298)	(\$932,832)	(\$207,415)	(\$550,774)	(\$681,352)	(\$370,192)	(\$656,227)	(\$699,521)	(\$579,033)	(\$129,222)	(\$455,462)	\$ (417,194)	(\$5,803,522)
Qualified Investment - Mains - Current 1010 Activity		\$162,243	\$972,057	\$3,594,327	\$1,168,965	\$823,574	\$235,795	\$3,982,703	\$296,454	\$58,404	(\$104,001)	\$67,349	\$ 9,003,454	\$20,261,324
Qualified Investment - Services - Current 1010 Activity		\$124,298	\$932,832	\$207,415	\$550,774	\$681,352	\$370,192	\$656,227	\$699,521	\$579,033	\$129,222	\$455,462	\$417,194	\$5,803,522
<b>Total Qualified Investment - Mains 1070</b>	\$234,005	\$1,755,082	\$2,791,216	\$1,765,920	\$2,685,086	\$3,809,709	\$4,944,147	\$3,459,266	\$4,301,186	\$5,913,108	\$7,334,077	\$8,117,900	\$1,350,505	\$1,350,505
<b>Total Qualified Investment - Services 1070</b>	\$0	\$402,044	\$98,067	\$345,273	\$404,858	\$128,512	\$182,949	\$608,919	\$285,369	\$147,343	\$367,542	\$290,564	\$0	\$0
<b>Total Qualified Investment - Mains 1010</b>	\$24,530,415	\$24,692,658	\$25,664,715	\$29,259,042	\$30,428,007	\$31,251,581	\$31,487,377	\$35,470,080	\$35,766,533	\$35,824,937	\$35,720,936	\$35,788,285	\$44,791,739	\$44,791,739
<b>Total Qualified Investment - Services 1010</b>	\$8,609,905	\$8,734,203	\$9,667,035	\$9,874,450	\$10,425,224	\$11,106,576	\$11,476,768	\$12,132,995	\$12,832,516	\$13,411,550	\$13,540,771	\$13,996,233	\$14,413,427	\$14,413,427
<b>Total Qualified Investment</b>	\$33,374,325	\$35,583,987	\$38,221,033	\$41,244,685	\$43,943,175	\$46,296,378	\$48,091,241	\$51,671,260	\$53,185,604	\$55,296,937	\$56,963,326	\$58,192,982	\$60,555,671	\$60,555,671
Less: Accumulated Depreciation	(\$599,765)	(\$672,286)	(\$745,439)	(\$822,797)	(\$908,410)	(\$997,794)	(\$1,090,496)	(\$1,184,542)	(\$1,288,693)	(\$1,395,060)	(\$1,502,857)	(\$1,610,719)	(\$1,719,752)	(\$1,719,752)
<b>Net Book Value</b>	\$32,774,560	\$34,911,701	\$37,475,594	\$40,421,888	\$43,034,765	\$45,298,584	\$47,000,745	\$50,486,718	\$51,896,911	\$53,901,877	\$55,460,469	\$56,582,263	\$58,835,919	\$58,835,919
<b>Average Net Qualified Investment</b>	\$33,843,130	\$36,193,647	\$38,948,741	\$41,728,327	\$44,166,675	\$46,149,665	\$48,743,732	\$51,191,815	\$52,899,394	\$54,681,173	\$56,021,366	\$57,709,091		
<b>Depreciation Rates</b>														
Approved Depreciation Rate-Mains		2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%
Approved Depreciation Rate-Services		2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%
<b>Return on Average Net Qualified Investment</b>														
Equity - Cost of Capital, inclusive of Income Tax Gross-up		8.1200%	8.1200%	8.1200%	8.1200%	8.1200%	8.1200%	8.1200%	8.1200%	8.1200%	8.1200%	8.1200%	8.1200%	8.1200%
Debt - Cost of Capital		1.8300%	1.8300%	1.8300%	1.8300%	1.8300%	1.8300%	1.8300%	1.8300%	1.8300%	1.8300%	1.8300%	1.8300%	1.8300%
<b>Equity Component - inclusive of Income Tax Gross-up</b>	\$229,005	\$244,910	\$263,553	\$282,362	\$298,861	\$312,279	\$329,833	\$346,398	\$357,953	\$370,009	\$379,078	\$390,498	\$390,498	\$3,804,739
<b>Debt Component</b>	\$51,611	\$55,195	\$59,397	\$63,636	\$67,354	\$70,378	\$74,334	\$78,068	\$80,672	\$83,389	\$85,433	\$88,006	\$88,006	\$857,473
<b>Return Requirement</b>	\$280,616	\$300,105	\$322,950	\$345,998	\$366,215	\$382,657	\$404,167	\$424,466	\$438,625	\$453,398	\$464,511	\$478,504	\$478,504	\$4,662,212
<b>Investment Expenses</b>														
Depreciation Expense - Mains		\$53,149	\$53,501	\$55,607	\$63,395	\$65,927	\$67,712	\$68,223	\$76,852	\$77,494	\$77,621	\$77,395	\$77,541	\$814,417
Depreciation Expense - Services		\$19,372	\$19,652	\$21,751	\$22,218	\$23,457	\$24,990	\$25,823	\$27,299	\$28,873	\$30,176	\$30,467	\$31,492	\$305,570
Property Taxes	2.00%	\$54,624	\$54,624	\$54,624	\$54,624	\$54,624	\$54,624	\$54,624	\$54,624	\$54,624	\$54,624	\$54,624	\$54,624	\$655,488
General Public Notice Expense & Customer Notice Expense		\$3,046	\$9,892	\$8,980	\$29,155	\$0	\$6,802	\$0	\$15,067	\$1,630	\$5,985	\$3,788		\$84,344
<b>Total Expense</b>		\$130,191	\$137,669	\$140,962	\$169,392	\$144,008	\$154,128	\$148,670	\$173,842	\$162,621	\$168,406	\$166,274	\$163,657	\$1,859,819
<b>Total Revenue Requirements</b>		\$410,807	\$437,774	\$463,912	\$515,390	\$510,223	\$536,785	\$552,837	\$598,308	\$601,246	\$621,804	\$630,785	\$642,161	\$6,522,031
Embedded Revenue for Bare Steel Replacement Investment		\$62,311	\$62,311	\$62,311	\$62,311	\$62,311	\$62,311	\$62,311	\$62,311	\$62,311	\$62,311	\$62,311	\$62,312	\$747,733
<b>Net Revenue Requirements / (Surplus)</b>		\$348,496	\$375,463	\$401,601	\$453,079	\$447,912	\$474,474	\$490,526	\$535,997	\$538,935	\$559,493	\$568,474	\$579,849	\$5,774,298
<b>GRIP Surcharge Revenues Collected Month</b>		\$ 469,181	\$ 500,335	\$ 434,085	\$ 362,300	\$ 305,328	\$ 292,514	\$ 251,148	\$267,807	\$ 266,276	\$ 277,287	\$ 305,493	\$ 358,208	\$4,089,962
<b>Beginning True-Up</b>														\$ 1,281,394
(Over) and Under Recovery for the Month		\$ (120,685)	\$ (124,872)	\$ (32,484)	\$ 90,779	\$ 142,584	\$ 181,960	\$ 239,378	\$ 268,190	\$ 272,659	\$ 282,206	\$ 262,981	\$ 221,641	\$ 1,684,336
Monthly Interest (Expense)/Income		\$ 85	\$ 77	\$ 61	\$ 63	\$ 82	\$ 106	\$ 108	\$ 143	\$ 186	\$ 211	\$ 261	\$ 571	\$ 1,954
<b>Ending (Over) and Under Recovery</b>		\$ 1,281,394	\$ 1,160,794	\$ 1,035,999	\$ 1,003,576	\$ 1,094,418	\$ 1,237,084	\$ 1,419,150	\$ 1,658,636	\$ 1,926,969	\$ 2,199,814	\$ 2,482,230	\$ 2,745,472	\$ 2,967,684
<b>Beg of Month Annual Interest Rate</b>		0.08%	0.09%	0.08%	0.06%	0.08%	0.09%	0.09%	0.08%	0.10%	0.12%	0.09%	0.15%	
<b>End of Month Annual Interest Rate</b>		0.09%	0.08%	0.060%	0.08%	0.09%	0.09%	0.08%	0.10%	0.12%	0.09%	0.15%	0.34%	
<b>Average Monthly Interest Rate</b>		0.007%	0.007%	0.006%	0.006%	0.007%	0.008%	0.007%	0.008%	0.009%	0.009%	0.010%	0.020%	



**Florida Public Utilities Company**  
 Gas Reliability Infrastructure Program (GRIP)  
 Calculation of the Projected Revenue Requirements  
 January 1, 2017 through December 31, 2017

Schedule C-2  
 Exhibit \_\_\_\_\_  
 Michael Cassel (MC-1)  
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Item	Beginning Balance	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year End Total/Balance
<b>Qualified Investment</b>														
Qualified Investment - Mains - Current Year 1070 Activity		\$351,199	\$351,199	\$351,199	\$351,199	\$351,199	\$351,199	\$351,199	\$351,199	\$351,199	\$351,199	\$351,199	\$351,199	\$4,214,388
Qualified Investment - Mains - Closed 1070 Activity to Plant		(\$333,639)	(\$333,639)	(\$333,639)	(\$333,639)	(\$333,639)	(\$333,639)	(\$333,639)	(\$333,639)	(\$333,639)	(\$333,639)	(\$333,639)	(\$333,639)	(\$4,003,668)
Qualified Investment - Services - Current Year 1070 Activity		\$77,093	\$77,093	\$77,093	\$77,093	\$77,093	\$77,093	\$77,093	\$77,093	\$77,093	\$77,093	\$77,093	\$77,093	\$925,116
Qualified Investment - Services - Closed 1070 Activity to Plant		(\$77,093)	(\$77,093)	(\$77,093)	(\$77,093)	(\$77,093)	(\$77,093)	(\$77,093)	(\$77,093)	(\$77,093)	(\$77,093)	(\$77,093)	(\$77,093)	(\$925,116)
Qualified Investment - Mains - Current 1010 Activity		\$333,639	\$333,639	\$333,639	\$333,639	\$333,639	\$333,639	\$333,639	\$333,639	\$333,639	\$333,639	\$333,639	\$333,639	\$4,003,668
Qualified Investment - Services - Current 1010 Activity		\$77,093	\$77,093	\$77,093	\$77,093	\$77,093	\$77,093	\$77,093	\$77,093	\$77,093	\$77,093	\$77,093	\$77,093	\$925,116
<b>Total Qualified Investment - Mains 1070</b>	\$3,229,094	\$3,246,654	\$3,264,214	\$3,281,774	\$3,299,334	\$3,316,894	\$3,334,454	\$3,352,014	\$3,369,574	\$3,387,134	\$3,404,694	\$3,422,254	\$3,439,814	\$3,439,814
<b>Total Qualified Investment - Service 1070</b>	\$471,648	\$471,648	\$471,648	\$471,648	\$471,648	\$471,648	\$471,648	\$471,648	\$471,648	\$471,648	\$471,648	\$471,648	\$471,648	\$471,648
<b>Total Qualified Investment - Mains 1010</b>	\$57,377,744	\$57,711,383	\$58,045,022	\$58,378,661	\$58,712,300	\$59,045,939	\$59,379,578	\$59,713,217	\$60,046,856	\$60,380,495	\$60,714,134	\$61,047,773	\$61,381,412	\$61,381,412
<b>Total Qualified Investment - Service 1010</b>	\$17,421,627	\$17,498,720	\$17,575,813	\$17,652,906	\$17,729,999	\$17,807,092	\$17,884,185	\$17,961,278	\$18,038,371	\$18,115,464	\$18,192,557	\$18,269,650	\$18,346,743	\$18,346,743
<b>Total Qualified Investment</b>	\$78,500,113	\$78,928,405	\$79,356,697	\$79,784,989	\$80,213,281	\$80,641,573	\$81,069,865	\$81,498,157	\$81,926,449	\$82,354,741	\$82,783,033	\$83,211,325	\$83,639,617	\$83,639,617
Less: Accumulated Depreciation	(\$3,453,535)	(\$3,617,052)	(\$3,781,465)	(\$3,946,775)	(\$4,112,981)	(\$4,280,084)	(\$4,448,083)	(\$4,616,978)	(\$4,786,769)	(\$4,957,457)	(\$5,129,041)	(\$5,301,522)	(\$5,474,899)	(\$5,474,899)
<b>Net Book Value</b>	\$75,046,578	\$75,311,353	\$75,575,232	\$75,838,214	\$76,100,300	\$76,361,489	\$76,621,782	\$76,881,179	\$77,139,680	\$77,397,284	\$77,653,992	\$77,909,803	\$78,164,718	\$78,164,718
<b>Average Net Qualified Investment</b>	\$75,178,966	\$75,443,292	\$75,706,723	\$75,969,257	\$76,230,894	\$76,491,636	\$76,751,481	\$77,010,429	\$77,268,482	\$77,525,638	\$77,781,897	\$78,037,261		
<b>Depreciation Rates</b>														
Approved Depreciation Rate-Mains		2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%
Approved Depreciation Rate-Services		2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%
<b>Return on Average Net Qualified Investment</b>														
Equity - Cost of Capital, inclusive of Income Tax Gross-up		8.2300%	8.2300%	8.2300%	8.2300%	8.2300%	8.2300%	8.2300%	8.2300%	8.2300%	8.2300%	8.2300%	8.2300%	8.2300%
Debt - Cost of Capital		1.5800%	1.5800%	1.5800%	1.5800%	1.5800%	1.5800%	1.5800%	1.5800%	1.5800%	1.5800%	1.5800%	1.5800%	1.5800%
<b>Equity Component - inclusive of Income Tax Gross-up</b>	\$515,602	\$517,415	\$519,222	\$521,022	\$522,817	\$524,605	\$526,387	\$528,163	\$529,933	\$531,697	\$533,454	\$535,206	\$536,955	\$6,305,524
<b>Debt Component</b>	\$98,986	\$99,334	\$99,681	\$100,026	\$100,371	\$100,714	\$101,056	\$101,397	\$101,737	\$102,075	\$102,413	\$102,749	\$103,086	\$1,210,538
<b>Return Requirement</b>	\$614,588	\$616,749	\$618,902	\$621,049	\$623,188	\$625,319	\$627,443	\$629,560	\$631,670	\$633,772	\$635,867	\$637,955	\$639,955	\$7,516,062
<b>Investment Expenses</b>														
Depreciation Expense - Mains		\$124,318	\$125,041	\$125,764	\$126,487	\$127,210	\$127,933	\$128,656	\$129,379	\$130,102	\$130,824	\$131,547	\$132,270	\$1,539,532
Depreciation Expense - Services		\$39,199	\$39,372	\$39,546	\$39,719	\$39,892	\$40,066	\$40,239	\$40,413	\$40,586	\$40,760	\$40,933	\$41,107	\$481,832
Property Taxes		\$125,078	\$125,078	\$125,078	\$125,078	\$125,078	\$125,078	\$125,078	\$125,078	\$125,078	\$125,078	\$125,078	\$125,078	\$1,500,932
General Public Notice Expense & Customer Notice Expense		\$4,333	\$4,333	\$4,333	\$4,333	\$4,333	\$4,333	\$4,333	\$4,333	\$4,333	\$4,333	\$4,333	\$4,333	\$52,000
<b>Total Expense</b>	\$292,928	\$293,824	\$294,720	\$295,617	\$296,513	\$297,409	\$298,306	\$299,202	\$299,202	\$300,098	\$300,995	\$301,891	\$302,792	\$3,574,296
<b>Total Revenue Requirements</b>	\$907,516	\$910,573	\$913,623	\$916,665	\$919,701	\$922,729	\$925,749	\$928,762	\$931,768	\$934,767	\$937,758	\$940,746	\$943,727	\$11,090,357
<b>Annual Revenue Requirement for Bare Steel Replacement Investment</b>	\$62,310	\$62,310	\$62,310	\$62,310	\$62,310	\$62,310	\$62,310	\$62,310	\$62,310	\$62,310	\$62,310	\$62,310	\$62,310	\$747,727
<b>Net Annual Revenue Requirements</b>	\$845,206	\$848,263	\$851,313	\$854,355	\$857,391	\$860,419	\$863,439	\$866,452	\$869,458	\$872,457	\$875,448	\$878,429	\$881,418	\$10,342,630



**Florida Public Utilities Company**  
 Gas Reliability Infrastructure Program (GRIP)  
 Projection of Qualified Mains & Services Revenue Requirements  
 Surcharge Calculation - January 1, 2017 through December 31, 2017  
 Per Therm Rate

Schedule D-1  
 Exhibit \_\_\_\_\_  
 Michael Cassel (MC-1)  
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1. 1/1/17-12/31/17 Qualified Mains & Services Replacement Revenue Requirements			\$10,342,630
Mains	74%	\$7,653,547	
Services	26%	<u>\$2,689,084</u>	
Net		<u>\$10,342,631</u>	
2. TRUE-UP from Prior Period (Over)/Under Recovery Estimated thru 12/2016			\$ 3,887,361
3. 2017 Qualified Mains & Services Replacement Revenue Requirements			\$14,229,992
Mains	74%	\$10,530,194	
Services	26%	<u>\$3,699,798</u>	
Net		<u>\$14,229,992</u>	

RATE SCHEDULE	2017 THERMS	SERVICES COS %	MAINS COS %	SERVICES REV REQ	MAINS REV REQ	GRIP REV REQ	DOLLARS PER THERM	TAX FACTOR	GRIP FACTORS PER THERM	TYPICAL ANNUAL THERMS	ANNUAL COST	AVERAGE MONTHLY COST
RESIDENTIAL	13,104,301	58.00%	22.00%	\$2,145,883	\$2,316,643	\$4,462,526	\$0.34054	1.00503	\$0.34225	250	\$85.56	\$7.13
COMMERCIAL SMALL (General Service & GS Transportation & NGVS & NGVTS)	12,827,793	17.00%	23.00%	\$628,966	\$2,421,945	\$3,050,910	\$0.23784	1.00503	\$0.23903	2,500	\$597.58	\$49.80
COMM. LRG VOLUME (Large Vol & LV Transportation)	45,693,710	25.00%	46.00%	\$924,950	\$4,843,889	\$5,768,839	\$0.12625	1.00503	\$0.12689	25,000	\$3,172.13	\$264.34
INTERRUPTIBLE SERVICE (Int Service & IS Transportation)	7,387,547	0.00%	8.00%	\$0	\$842,416	\$842,416	\$0.11403	1.00503	\$0.11461	50,000	\$5,730.27	\$477.52
GENERAL LIGHTING SERVICE	211,870	0.00%	1.00%	\$0	\$105,302	\$105,302	\$0.49701	1.00503	\$0.49951	500	\$249.76	\$20.81
 TOTAL	 <u>79,225,221</u>	 100.00%	 100.00%	 \$3,699,798	 \$10,530,194	 \$14,229,992						

# Florida Division of Chesapeake Utilities Corporation

Gas Reliability Infrastructure Program (GRIP)

Calculation of Equity and Debt Returns

Schedule A-1

Exhibit \_\_\_\_\_

Michael Cassel (MC-1)

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Earnings Surveillance Report - December 31, 2015

Equity Cost Rate	10.80%
Weighted Equity Cost Rate	4.82%
Revenue Expansion Factor	1.6403
Weighted Equity Cost Rate , times Revenue Expansion Factor	<u>7.906%</u>
Long Term Debt-CU	0.970%
Short Term Debt	0.170%
Short Term Debt-Refinanced LTD	0.000%
Customer Deposits	0.040%
Tax Credits-Weighted Cost	0.000%
Weighted Debt Cost Rate	<u>1.180%</u>
Overall Weighted Cost Rate	<u><u>6.00%</u></u>

**Florida Division of Chesapeake Utilities Corporation**

Gas Reliability Infrastructure Program (GRIP)  
 Calculation of the Actual Revenue Requirements  
 Seven Months Actual January 2015 through July 2015  
 Estimated August 2015 through December 2015

Schedule B-1  
 Exhibit  
 Michael Cassel (MC-1)  
 Page 7 of 14

Item	Beginning Balance	Actual Jan	Actual Feb	Actual Mar	Actual Apr	Actual May	Actual Jun	Actual Jul	Actual Aug	Actual Sep	Actual Oct	Actual Nov	Actual Dec	Year End Total/Balance
<b>Qualified Investment</b>														
Qualified Investment - Mains - Current 1070 Activity		\$123,706	\$147,654	\$525,387	\$70,812	\$715,464	\$472,314	\$439,172	\$366,266	\$433,010	\$831,401	\$154,345	\$ 995,176	\$5,274,707
Qualified Investment - Mains - Closed 1070 Activity to Plant		(\$13,921)	(\$1,157,042)	(\$848,346)	(\$128,066)	(\$20,590)	(\$47,664)	(\$477,392)	(\$7,064)	(\$2,742)	(\$53,095)	(\$10,525)	\$ (3,781,502)	(\$6,547,949)
Qualified Investment - Services - Current 1070 Activity		(\$2,300)	\$6,740	(\$175)	\$143,737	\$3,277	\$105,307	\$19,810	\$26,794	\$22,855	\$17,644	\$2,178	\$ 71,480	\$417,348
Qualified Investment - Services - Closed 1070 Activity to Plant		\$2,300	(\$3,765)	(\$12,995)	(\$46,018)	(\$42,963)	(\$135,089)	(\$25,616)	(\$19,543)	(\$35,981)	(\$12,750)	(\$13,447)	\$ (67,477)	(\$413,345)
Qualified Investment - Mains - Current 1010 Activity		\$13,921	\$1,157,042	\$848,346	\$128,066	\$20,590	\$47,664	\$477,392	\$7,064	\$2,742	\$53,095	\$10,525	\$3,781,502	\$6,547,949
Qualified Investment - Services - Current 1010 Activity		(\$2,300)	\$3,765	\$12,995	\$46,018	\$42,963	\$135,089	\$25,616	\$19,543	\$35,981	\$12,750	\$13,447	\$67,477	\$413,345
<b>Total Qualified Investment - Mains 1070</b>	\$1,708,694	\$1,818,479	\$809,090	\$486,131	\$428,877	\$1,123,751	\$1,548,402	\$1,510,182	\$1,869,384	\$2,299,652	\$3,077,958	\$3,221,778	\$435,452	\$435,452
<b>Total Qualified Investment - Services 1070</b>	(\$1)	(\$1)	\$2,974	(\$10,195)	\$87,523	\$47,837	\$18,054	\$12,248	\$19,500	\$6,374	\$11,268	(\$1)	\$4,002	\$4,002
<b>Total Qualified Investment - Mains 1010</b>	\$8,251,273	\$8,265,194	\$9,422,236	\$10,270,582	\$10,398,648	\$10,419,238	\$10,466,902	\$10,944,294	\$10,951,358	\$10,954,100	\$11,007,194	\$11,017,719	\$14,799,222	\$14,799,222
<b>Total Qualified Investment - Services 1010</b>	\$639,153	\$636,853	\$640,618	\$653,613	\$699,631	\$742,594	\$877,683	\$903,299	\$922,842	\$958,823	\$971,574	\$985,021	\$1,052,498	\$1,052,498
<b>Total Qualified Investment</b>	\$10,599,119	\$10,720,525	\$10,874,919	\$11,400,131	\$11,614,679	\$12,333,420	\$12,911,041	\$13,370,023	\$13,763,083	\$14,218,949	\$15,067,994	\$15,224,517	\$16,291,174	\$16,291,174
Less: Accumulated Depreciation 1080	(\$243,858)	(\$263,174)	(\$282,515)	(\$304,371)	(\$328,095)	(\$352,199)	(\$376,445)	(\$401,098)	(\$426,843)	(\$452,647)	(\$478,538)	(\$504,573)	(\$530,661)	(\$530,661)
<b>Net Book Value</b>	\$10,355,261	\$10,457,351	\$10,592,404	\$11,095,760	\$11,286,584	\$11,981,221	\$12,534,596	\$12,968,925	\$13,336,240	\$13,766,302	\$14,589,456	\$14,719,944	\$15,760,513	\$15,760,513
<b>Average Net Qualified Investment</b>		\$10,406,306	\$10,524,877	\$10,844,082	\$11,191,172	\$11,633,903	\$12,257,909	\$12,751,761	\$13,152,583	\$13,551,271	\$14,177,879	\$14,654,700	\$15,240,228	
<b>Depreciation Rates</b>														
Approved Depreciation Rate-Mains		2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	
Approved Depreciation Rate-Services		2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	
<b>Return on Average Net Qualified Investment</b>														
Equity - Cost of Capital, inclusive of Income Tax Gross-up		7.9400%	7.9400%	7.9400%	7.9400%	7.9400%	7.9400%	7.9400%	7.9400%	7.9400%	7.9400%	7.9400%	7.9400%	
Debt - Cost of Capital		1.3900%	1.3900%	1.3900%	1.3900%	1.3900%	1.3900%	1.3900%	1.3900%	1.3900%	1.3900%	1.3900%	1.3900%	
<b>Equity Component - inclusive of Income Tax Gross-up</b>	\$68,855	\$69,640	\$71,752	\$74,048	\$76,978	\$81,106	\$84,374	\$87,026	\$89,664	\$93,810	\$96,965	\$100,840	\$995,058	\$995,058
<b>Debt Component</b>	\$12,054	\$12,191	\$12,561	\$12,963	\$13,476	\$14,199	\$14,771	\$15,235	\$15,697	\$16,423	\$16,975	\$17,653	\$174,198	\$174,198
<b>Return Requirement</b>	\$80,909	\$81,831	\$84,313	\$87,011	\$90,454	\$95,305	\$99,145	\$102,261	\$105,361	\$110,233	\$113,940	\$118,493	\$1,169,256	\$1,169,256
<b>Investment Expenses</b>														
Depreciation Expense - Mains		\$17,878	\$17,908	\$20,415	\$22,253	\$22,530	\$22,575	\$22,678	\$23,713	\$23,728	\$23,734	\$23,849	\$23,872	\$265,133
Depreciation Expense - Services		\$1,438	\$1,433	\$1,441	\$1,471	\$1,574	\$1,671	\$1,975	\$2,032	\$2,076	\$2,157	\$2,186	\$2,216	\$21,670
Property Taxes	2.00%	\$17,259	\$17,259	\$17,259	\$17,259	\$17,259	\$17,259	\$17,259	\$17,259	\$17,259	\$17,259	\$17,259	\$17,259	\$207,108
General Public Notice and Customer Notice Expense		(\$711)	\$4,137	\$3,859	\$6,629	\$0	\$5,651	\$0	\$907	\$937	\$4,937			\$0
<b>Total Expense</b>		\$35,864	\$40,737	\$42,974	\$47,612	\$41,363	\$47,156	\$41,912	\$43,911	\$44,000	\$48,087	\$43,294	\$43,347	\$520,258
<b>Net Revenue Requirements</b>		\$116,773	\$122,568	\$127,287	\$134,623	\$131,817	\$142,461	\$141,057	\$146,172	\$149,361	\$158,320	\$157,234	\$161,840	\$1,689,514
<b>GRIP Surcharge Revenues Collected Month</b>	\$	162,428	\$ 169,594	\$ 161,829	\$ 149,591	\$ 145,847	\$ 140,796	\$ 137,816	\$ 125,995	\$ 137,432	\$ 147,441	\$ 139,271	\$ 157,335	\$1,775,375
<b>Beginning True-Up (Over) and Under Recovery for the Month</b>	\$	(45,655)	\$ (47,026)	\$ (34,542)	\$ (14,968)	\$ (14,030)	\$ 1,665	\$ 3,241	\$ 20,177	\$ 11,929	\$ 10,880	\$ 17,963	\$ 4,505	\$ (85,861)
<b>Monthly Interest (Expense)/Income</b>	\$	13	\$ 10	\$ 6	\$ 5	\$ 4	\$ 4	\$ 4	\$ 6	\$ 8	\$ 9	\$ 11	\$ 25	\$105
<b>Ending (Over) and Under Recovery</b>	\$	211,175	\$ 165,533	\$ 118,517	\$ 83,981	\$ 69,018	\$ 54,992	\$ 56,661	\$ 59,906	\$ 80,089	\$ 92,026	\$ 102,915	\$ 120,889	\$ 125,419
<b>Beg of Month Annual Interest Rate</b>		0.08%	0.09%	0.08%	0.06%	0.08%	0.09%	0.09%	0.08%	0.10%	0.12%	0.09%	0.15%	
<b>End of Month Annual Interest Rate</b>		0.09%	0.08%	0.06%	0.08%	0.09%	0.09%	0.08%	0.10%	0.12%	0.09%	0.15%	0.34%	
<b>Average Monthly Interest Rate</b>		0.01%	0.01%	0.01%	0.01%	0.01%	0.01%	0.007%	0.008%	0.009%	0.009%	0.010%	0.020%	



**Florida Division of Chesapeake Utilities Corporation**  
 Gas Reliability Infrastructure Program (GRIP)  
 Calculation of the Projected Revenue Requirements  
 January 1, 2017 through December 31, 2017

Schedule C-2  
 Exhibit \_\_\_\_\_  
 Michael Cassel (MC-1)  
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Item	Beginning Balance	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year End Total
<b>Qualified Investment</b>														
Qualified Investment - Mains - Current 1070 Activity		\$125,783	\$125,783	\$125,783	\$125,783	\$125,783	\$125,783	\$125,783	\$125,783	\$125,783	\$125,783	\$125,783	\$125,783	\$1,509,396
Qualified Investment - Mains - Closed 1070 Activity to Plant		(\$119,494)	(\$119,494)	(\$119,494)	(\$119,494)	(\$119,494)	(\$119,494)	(\$119,494)	(\$119,494)	(\$119,494)	(\$119,494)	(\$119,494)	(\$119,494)	(\$1,433,928)
Qualified Investment - Services - Current 1070 Activity		\$9,468	\$9,468	\$9,468	\$9,468	\$9,468	\$9,468	\$9,468	\$9,468	\$9,468	\$9,468	\$9,468	\$9,468	\$113,616
Qualified Investment - Services - Closed 1070 Activity to Plant		(\$9,468)	(\$9,468)	(\$9,468)	(\$9,468)	(\$9,468)	(\$9,468)	(\$9,468)	(\$9,468)	(\$9,468)	(\$9,468)	(\$9,468)	(\$9,468)	(\$113,616)
Qualified Investment - Mains - Current 1010 Activity		\$119,494	\$119,494	\$119,494	\$119,494	\$119,494	\$119,494	\$119,494	\$119,494	\$119,494	\$119,494	\$119,494	\$119,494	\$1,433,928
Qualified Investment - Services - Current 1010 Activity		\$9,468	\$9,468	\$9,468	\$9,468	\$9,468	\$9,468	\$9,468	\$9,468	\$9,468	\$9,468	\$9,468	\$9,468	\$113,616
<b>Total Qualified Investment - Mains 1070</b>	\$2,383,679	\$2,389,968	\$2,396,257	\$2,402,546	\$2,408,835	\$2,415,124	\$2,421,413	\$2,427,702	\$2,433,991	\$2,440,280	\$2,446,569	\$2,452,858	\$2,459,147	\$2,459,147
<b>Total Qualified Investment - Services 1070</b>	\$46,421	\$46,421	\$46,421	\$46,421	\$46,421	\$46,421	\$46,421	\$46,421	\$46,421	\$46,421	\$46,421	\$46,421	\$46,421	\$46,421
<b>Total Qualified Investment - Mains 1010</b>	\$17,764,950	\$17,884,444	\$18,003,938	\$18,123,432	\$18,242,926	\$18,362,420	\$18,481,914	\$18,601,408	\$18,720,902	\$18,840,396	\$18,959,890	\$19,079,384	\$19,198,878	\$19,198,878
<b>Total Qualified Investment - Services 1010</b>	\$1,436,981	\$1,446,449	\$1,455,917	\$1,465,385	\$1,474,853	\$1,484,321	\$1,493,789	\$1,503,257	\$1,512,725	\$1,522,193	\$1,531,661	\$1,541,129	\$1,550,597	\$1,550,597
<b>Total Qualified Investment</b>	\$21,632,032	\$21,767,283	\$21,902,534	\$22,037,785	\$22,173,036	\$22,308,287	\$22,443,538	\$22,578,789	\$22,714,040	\$22,849,291	\$22,984,542	\$23,119,793	\$23,255,044	\$23,255,044
Less: Accumulated Depreciation	(\$976,590)	(\$1,018,314)	(\$1,060,319)	(\$1,102,604)	(\$1,145,168)	(\$1,188,012)	(\$1,231,137)	(\$1,274,542)	(\$1,318,227)	(\$1,362,193)	(\$1,406,439)	(\$1,450,965)	(\$1,495,772)	(\$1,495,772)
<b>Net Book Value</b>	\$20,655,442	\$20,748,969	\$20,842,215	\$20,935,181	\$21,027,868	\$21,120,275	\$21,212,401	\$21,304,247	\$21,395,813	\$21,487,098	\$21,578,103	\$21,668,828	\$21,759,272	\$21,759,272
<b>Average Net Qualified Investment</b>		\$20,702,206	\$20,795,592	\$20,888,698	\$20,981,525	\$21,074,072	\$21,166,338	\$21,258,324	\$21,350,030	\$21,441,456	\$21,532,601	\$21,623,466	\$21,714,050	
<b>Depreciation Rates</b>														
Approved Depreciation Rate-Mains		2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%
Approved Depreciation Rate-Services		2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%
<b>Return on Average Net Qualified Investment</b>														
Equity - Cost of Capital, inclusive of Income Tax Gross-up		7.9060%	7.9060%	7.9060%	7.9060%	7.9060%	7.9060%	7.9060%	7.9060%	7.9060%	7.9060%	7.9060%	7.9060%	7.9060%
Debt - Cost of Capital		1.1800%	1.1800%	1.1800%	1.1800%	1.1800%	1.1800%	1.1800%	1.1800%	1.1800%	1.1800%	1.1800%	1.1800%	1.1800%
Equity Component - inclusive of Income Tax Gross-up		\$136,393	\$137,008	\$137,622	\$138,233	\$138,843	\$139,451	\$140,057	\$140,661	\$141,263	\$141,864	\$142,463	\$143,059	\$1,676,918
Debt Component		\$20,357	\$20,449	\$20,541	\$20,632	\$20,723	\$20,814	\$20,904	\$20,994	\$21,084	\$21,174	\$21,263	\$21,352	\$250,286
<b>Return Requirement</b>		\$156,750	\$157,457	\$158,162	\$158,865	\$159,566	\$160,264	\$160,961	\$161,655	\$162,348	\$163,038	\$163,726	\$164,412	\$1,927,204
<b>Investment Expenses</b>														
Depreciation Expense - Mains		\$38,491	\$38,750	\$39,009	\$39,267	\$39,526	\$39,785	\$40,044	\$40,303	\$40,562	\$40,821	\$41,080	\$41,339	\$478,977
Depreciation Expense - Services		\$3,233	\$3,255	\$3,276	\$3,297	\$3,318	\$3,340	\$3,361	\$3,382	\$3,404	\$3,425	\$3,446	\$3,468	\$40,205
Property Taxes		\$34,426	\$34,426	\$34,426	\$34,426	\$34,426	\$34,426	\$34,426	\$34,426	\$34,426	\$34,426	\$34,426	\$34,426	\$413,112
General Public Notice Expense and Customer Notice Expense		\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$18,000
<b>Total Expense</b>		\$77,650	\$77,931	\$78,211	\$78,490	\$78,770	\$79,051	\$79,331	\$79,611	\$79,892	\$80,172	\$80,452	\$80,733	\$950,294
<b>Total Revenue Requirements</b>		\$234,400	\$235,388	\$236,373	\$237,355	\$238,336	\$239,315	\$240,292	\$241,266	\$242,240	\$243,210	\$244,178	\$245,145	\$2,877,498

**Florida Division of Chesapeake Utilities Corporation**  
 Gas Reliability Infrastructure Program (GRIP)  
 Projection of Qualified Mains & Services Revenue Requirements  
 Surcharge Calculation - January 1, 2017 through December 31, 2017  
 Per Therm/Bill Rate

Schedule D-1  
 Exhibit \_\_\_\_\_  
 Michael Cassel (MC-1)  
 Page 10 of 14

1.	1/1/17-12/31/17 Qualified Mains & Services Replacement Revenue Requirements		\$	2,877,498
	Mains	96%	\$2,762,398	
	Services	4%	\$115,100	
	Net		<u>\$2,877,498</u>	
2.	TRUE-UP from Prior Period (Over)/Under Recovery Estimated thru 12/2016		\$	312,797
3.	2017 Qualified Mains & Services Replacement Revenue Requirements		\$	3,190,295
	Mains	96%	\$3,062,683	
	Services	4%	\$127,612	
	Net		<u>\$3,190,295</u>	

RATE CLASS	2017 BILLS	2017 THERMS	SERVICES COS %	MAINS COS %	SERVICES REV REQ	MAINS REV REQ	GRIP REV REQ	DOLLARS PER THERM	EXPANSION FACTOR	GRIP FACTORS PER THERM	\$ PER BILL	EXPANSION FACTOR	Experimental		TYPICAL ANNUAL THERMS	ANNUAL COST	ANNUAL COST	AVERAGE MONTHLY COST
													GRIP FACTORS PER BILL	ANNUAL COST PER BILL				
FTS-A	16,295	105,175	14.34%	0.951%	\$ 18,300	\$ 29,126	\$47,426	\$0.45092	1.00503	\$ 0.45319	\$ 2.91	1.00503	\$ 2.93	\$ 35.10	110	\$49.85	\$4.15	
FTS-B	27,867	312,933	9.74%	1.142%	\$ 12,429	\$ 34,976	\$47,405	\$0.15149	1.00503	\$ 0.15225	\$ 1.70	1.00503	\$ 1.71	\$ 20.52	215	\$32.73	\$2.73	
FTS-1	131,776	2,158,434	33.87%	5.861%	\$ 43,222	\$ 179,504	\$222,726	\$0.10319	1.00503	\$ 0.10371	\$ 1.69	1.00503	\$ 1.70	\$ 20.38	275	\$28.52	\$2.38	
FTS-2	9,862	589,648	12.69%	1.611%	\$ 16,194	\$ 49,340	\$65,534	\$0.11114	1.00503	\$ 0.11170	\$ 6.65	1.00503	\$ 6.68	\$ 80.14	875	\$97.74	\$8.14	
FTS-2.1	8,277	949,743	7.83%	3.193%	\$ 9,992	\$ 97,791	\$107,783	\$0.11349	1.00503	\$ 0.11406	\$ 13.02	1.00503	\$ 13.09	\$ 157.05	1,575	\$179.64	\$14.97	
FTS-3	3,401	1,176,678	3.93%	1.567%	\$ 5,015	\$ 47,992	\$53,007	\$0.04505	1.00503	\$ 0.04527	\$ 15.59	1.00503	\$ 15.66	\$ 187.97	4,000	\$181.10	\$15.09	
FTS-3.1	3,810	2,275,311	3.91%	4.294%	\$ 4,990	\$ 131,512	\$136,502	\$0.05999	1.00503	\$ 0.06029	\$ 35.83	1.00503	\$ 36.01	\$ 432.09	7,300	\$440.15	\$36.68	
FTS-4		2,699,940	4.37%	6.162%	\$ 5,577	\$ 188,723	\$194,300	\$0.07196	1.00503	\$ 0.07233					12,500	\$904.08	\$75.34	
FTS-5		1,077,421	1.24%	2.570%	\$ 1,582	\$ 78,711	\$80,293	\$0.07452	1.00503	\$ 0.07490					37,500	\$2,808.68	\$234.06	
FTS-6		1,450,400	1.25%	2.750%	\$ 1,595	\$ 84,224	\$85,819	\$0.05917	1.00503	\$ 0.05947					75,000	\$4,460.01	\$371.67	
FTS-7		2,913,398	2.20%	7.615%	\$ 2,807	\$ 233,223	\$236,030	\$0.08102	1.00503	\$ 0.08142					150,000	\$12,213.43	\$1,017.79	
FTS-8		5,130,600	1.62%	10.708%	\$ 2,067	\$ 327,952	\$330,019	\$0.06432	1.00503	\$ 0.06465					300,000	\$19,394.16	\$1,616.18	
FTS-9		3,212,361	1.48%	15.171%	\$ 1,889	\$ 464,640	\$466,529	\$0.14523	1.00503	\$ 0.14596					550,000	\$80,277.90	\$6,689.83	
FTS-10		2,166,309	0.45%	6.539%	\$ 574	\$ 200,269	\$200,843	\$0.09271	1.00503	\$ 0.09318					850,000	\$79,201.65	\$6,600.14	
FTS-11		7,632,263	0.61%	13.551%	\$ 778	\$ 415,024	\$415,802	\$0.05448	1.00503	\$ 0.05475					1,750,000	\$95,818.71	\$7,984.89	
FTS-12		13,439,528	0.47%	16.315%	\$ 600	\$ 499,677	\$500,277	\$0.03722	1.00503	\$ 0.03741					3,000,000	\$112,234.61	\$9,352.88	
FTS-13		N/A	N/A	0.000%	\$ -	\$ -	\$0 N/A			N/A					-	N/A		
<b>TOTAL</b>	<u>201,288</u>	<u>47,290,142</u>	<u>100.00%</u>	<u>100.000%</u>	<u>\$ 127,612</u>	<u>\$ 3,062,683</u>	<u>\$ 3,190,295</u>											

**Florida Public Utilities Company -Ft. Meade**

Gas Reliability Infrastructure Program (GRIP)  
Investment and Calculation of Equity and Debt Returns

Schedule A-1  
Exhibit \_\_\_\_\_  
Michael Cassel (MC-1)  
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	<u># of Services</u>	<u>Cost per Service</u>	<u>Projected Total Investment</u>
Earnings Surveillance Report - December 31, 2015			
Equity Cost Rate			11.00%
Weighted Equity Cost Rate			4.27%
Revenue Expansion Factor			1.6401
Weighted Equity Cost Rate , times Revenue Expansion Factor			<u>7.000%</u>
Long Term Debt-CU			0.840%
Short Term Debt			0.150%
Short Term Debt-Refinanced LTD			0.000%
Customer Deposits			0.080%
Tax Credits-Weighted Cost			<u>0.000%</u>
Weighted Debt Cost Rate			<u>1.070%</u>
Overall Weighted Cost Rate			<u><u>5.34%</u></u>





**Florida Public Utilities-Ft. Meade**  
 Gas Reliability Infrastructure Program (GRIP)  
 Calculation of the Projected Revenue Requirements  
 January 1, 2017 through December 31, 2017

Schedule C-2  
 Exhibit  
 Michael Cassel (MC-1)  
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Item	Beginning Balance	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year End Total
<b>Qualified Investment</b>														
Qualified Investment - Mains - Current 1070 Activity		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Qualified Investment - Mains - Closed 1070 Activity to Plant		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Qualified Investment - Services - Current 1070 Activity		\$39,583	\$39,583	\$39,583	\$39,583	\$39,583	\$39,583	\$39,583	\$39,583	\$0	\$0	\$0	\$0	\$277,081
Qualified Investment - Services - Closed 1070 Activity to Plant		(\$39,583)	(\$39,583)	(\$39,583)	(\$39,583)	(\$39,583)	(\$39,583)	(\$39,583)	\$0	\$0	\$0	\$0	\$0	(\$277,081)
Qualified Investment - Mains - Current 1010 Activity		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Qualified Investment - Services - Current 1010 Activity		\$39,583	\$39,583	\$39,583	\$39,583	\$39,583	\$39,583	\$39,583	\$0	\$0	\$0	\$0	\$0	\$277,081
<b>Total Qualified Investment - Mains 1070</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Qualified Investment - Services 1070</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Qualified Investment - Mains 1010</b>	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Qualified Investment - Services 1010</b>	\$197,915	\$237,498	\$277,081	\$316,664	\$356,247	\$395,830	\$435,413	\$474,996	\$474,996	\$474,996	\$474,996	\$474,996	\$474,996	\$474,996
<b>Total Qualified Investment</b>	\$197,915	\$237,498	\$277,081	\$316,664	\$356,247	\$395,830	\$435,413	\$474,996	\$474,996	\$474,996	\$474,996	\$474,996	\$474,996	\$474,996
Less: Accumulated Depreciation	(\$890)	(\$1,335)	(\$1,869)	(\$2,492)	(\$3,204)	(\$4,006)	(\$4,897)	(\$5,877)	(\$6,946)	(\$8,015)	(\$9,084)	(\$10,153)	(\$11,222)	(\$11,222)
<b>Net Book Value</b>	\$197,025	\$236,163	\$275,212	\$314,172	\$353,043	\$391,824	\$430,516	\$469,119	\$468,050	\$466,981	\$465,912	\$464,843	\$463,774	\$463,774
<b>Average Net Qualified Investment</b>		\$216,594	\$255,688	\$294,692	\$333,608	\$372,434	\$411,170	\$449,818	\$468,585	\$467,516	\$466,447	\$465,378	\$464,309	
<b>Depreciation Rates</b>														
Approved Depreciation Rate-Mains		2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%	2.60%
Approved Depreciation Rate-Services		2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%
<b>Return on Average Net Qualified Investment</b>														
Equity - Cost of Capital, inclusive of Income Tax Gross-up		7.0000%	7.0000%	7.0000%	7.0000%	7.0000%	7.0000%	7.0000%	7.0000%	7.0000%	7.0000%	7.0000%	7.0000%	7.0000%
Debt - Cost of Capital		1.0700%	1.0700%	1.0700%	1.0700%	1.0700%	1.0700%	1.0700%	1.0700%	1.0700%	1.0700%	1.0700%	1.0700%	1.0700%
Equity Component - inclusive of Income Tax Gross-up		\$1,263	\$1,492	\$1,719	\$1,946	\$2,173	\$2,398	\$2,624	\$2,733	\$2,727	\$2,721	\$2,715	\$2,708	\$27,220
Debt Component		\$193	\$228	\$263	\$297	\$332	\$367	\$401	\$418	\$417	\$416	\$415	\$414	\$4,161
<b>Return Requirement</b>		\$1,457	\$1,720	\$1,982	\$2,244	\$2,505	\$2,765	\$3,025	\$3,151	\$3,144	\$3,137	\$3,130	\$3,122	\$31,380
<b>Investment Expenses</b>														
Depreciation Expense - Mains		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Depreciation Expense - Services		\$445	\$534	\$623	\$712	\$802	\$891	\$980	\$1,069	\$1,069	\$1,069	\$1,069	\$1,069	\$10,332
Property Taxes		\$328	\$328	\$328	\$328	\$328	\$328	\$328	\$328	\$328	\$328	\$328	\$328	\$3,936
General Public Notice Expense and Customer Notice Expense		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total Expense</b>		\$773	\$862	\$951	\$1,040	\$1,130	\$1,219	\$1,308	\$1,397	\$1,397	\$1,397	\$1,397	\$1,397	\$14,268
<b>Total Revenue Requirements</b>		\$2,230	\$2,582	\$2,933	\$3,284	\$3,635	\$3,984	\$4,333	\$4,548	\$4,541	\$4,534	\$4,527	\$4,519	\$45,648

**Florida Public Utilities Company-Fort Meade**  
 Gas Reliability Infrastructure Program (GRIP)  
 Projection of Qualified Mains & Services Revenue Requirements  
 Surcharge Calculation - January 1, 2017 through December 31, 2017  
 Per Therm Rate

Schedule D-1  
 Exhibit \_\_\_\_\_  
 Michael Cassel (MC-1)  
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1. 1/1/17-12/31/17 Qualified Mains & Services Replacement Revenue Requirements		\$	45,648
Mains	0%	\$0	
Services	100%	\$45,648	
Net		<u>\$45,648</u>	
2. TRUE-UP from Prior Period (Over)/Under Recovery Estimated thru 12/2016		\$	4,210
3. 2017 Qualified Mains & Services Replacement Revenue Requirements		\$	49,859
Mains	0%	\$0	
Services	100%	\$49,859	
Net		<u>\$49,859</u>	

RATE SCHEDULE	2017 THERMS	SERVICES COS %	MAINS COS %	SERVICES REV REQ	MAINS REV REQ	GRIP REV REQ	DOLLARS PER THERM	TAX FACTOR	GRIP FACTORS PER THERM	TYPICAL ANNUAL THERMS	ANNUAL COST	AVERAGE MONTHLY COST
RESIDENTIAL	78,698	58.00%	22.00%	\$28,918	\$0	\$28,918	\$0.36746	1.00503	\$0.36931	250	\$92.33	\$7.69
COMMERCIAL SMALL (General Service & GS Transportation)	72,983	17.00%	23.00%	\$8,476	\$0	\$8,476	\$0.11614	1.00503	\$0.11672	2,500	\$291.80	\$24.32
COMM. LRG VOLUME (Large Vol & LV Transportation)	0	25.00%	46.00%	\$12,465	\$0	\$12,465	\$0.00000	1.00503	\$0.00000	25,000	\$0.00	\$0.00
INTERRUPTIBLE SERVICE (Int Service & IS Transportation)	0	0.00%	8.00%	\$0	\$0	\$0	\$0.00000	1.00503	\$0.00000	50,000	\$0.00	\$0.00
GENERAL LIGHTING SERVICE	0	0.00%	1.00%	\$0	\$0	\$0	\$0.00000	1.00503	\$0.00000	500	\$0.00	\$0.00
<b>TOTAL</b>	<u>151,681</u>	<u>100.00%</u>	<u>100.00%</u>	<u>\$49,859</u>	<u>\$0</u>	<u>\$49,859</u>						

**ATTACHMENT A**

**Table 1**  
**FPUC Pipe Replacement Program Progress**

Year	Mains (Miles)					Number of Services				
	Replaced	Replaced	Remaining	Remaining	Total	Replaced	Replaced	Remaining	Remaining	Total
	Cast Iron	Bare Steel	Cast Iron at Year-End	Bare Steel at Year-End		Cast Iron	Bare Steel	Cast Iron at Year-End	Bare Steel at Year-End	
Jul-12			0.9	197.10	198.00			0	7980	7980
2012		6.00	0.9	191.10	192.00		91	0	7889	7889
2013	0.6	26.40	0.3	164.70	165.00		895	0	6994	6994
2014		38.00	0.3	126.70	127.00		1164	0	4543	4543
2015		30.00	0.3	96.70	97.00		605	0	3938	3938
2016		29.00	0.3	67.70	68.00		815	0	3123	3123
2017	0.3	13.70	0	54.00	54.00		650	0	2473	2473
2018		14.00	0	40.00	40.00		650	0	1823	1823
2019		14.00	0	26.00	26.00		650	0	1173	1173
2020		14.00	0	12.00	12.00		650	0	523	523
2021		10.00	0	2.00	2.00		465	0	58	58
2022		2.00	0	0.00	0.00		58	0	0	0

**Table 2**  
**Chesapeake Pipe Replacement Program Progress**

Year	Mains (Miles)					Number of Services				
	Replaced	Replaced	Remaining	Remaining	Total	Replaced	Replaced	Remaining	Remaining	Total
	Cast Iron	Bare Steel	Cast Iron at Year-End	Bare Steel at Year-End		Cast Iron	Bare Steel	Cast Iron at Year-End	Bare Steel at Year-End	
Jul-12			0	152.00	152.00			0	762	762
2012		5.00	0	147.00	147.00		34	0	728	728
2013		3.00	0	144.00	144.00		139	0	589	589
2014		19.00	0	125.00	125.00		47	0	542	542
2015		34.00	0	91.00	91.00		284	0	258	258
2016		30.00	0	61.00	61.00		52	0	206	206
2017		13.00	0	48.00	48.00		42	0	164	164
2018		13.00	0	35.00	35.00		42	0	122	122
2019		13.00	0	22.00	22.00		42	0	80	80
2020		13.00	0	9.00	9.00		42	0	38	38
2021		7.00	0	2.00	2.00		26	0	12	12
2022		2.00	0	0.00	0.00		12	0	0	0

**Table 3**  
**Fort Meade Pipe Replacement Program Progress**

Year	Mains (Miles)					Number of Services				
	Replaced	Replaced	Remaining	Remaining	Total	Replaced	Replaced	Remaining	Remaining	Total
	Cast Iron	Steel	Cast Iron at Year-End	Steel at Year-End		Cast Iron	Steel	Cast Iron at Year-End	Steel at Year-End	
Jan-16			0	0	0			0	250	250
2016		0	0	0	0		100	0	150	150
2017		0	0	0	0		125	0	25	25
2018		0	0	0	0		25	0	0	0

**ATTACHMENT B**

Company	Year	Month	Amount	Description
FN	2015	April	\$ 29,155	
FN			\$ 5,409	Notification Letters mailed for the following (includes paper, envelopes and postage): * To FPU customers to notify them of upcoming work, what to expect, resident safety and list of contractors that will need to access their property and map of the project work area * To FPU HOA developments to notify them of upcoming work, what to expect, resident safety and list of contractors that will need to access their property * To City Officials to notify them of upcoming work, what to expect, benefits of our work and map of project work area
FN			\$ 23,746	Notification Letters mailed for the following (includes paper, envelopes and postage): * To FPU customers to notify them of upcoming work, what to expect, resident safety and list of contractors that will need to access their property and map of the project work area * To non-FPU customers to notify them of upcoming work, what to expect, resident safety and list of contractors that may need to access their property Door Hangers - Notification placed on doors to notify residents about upcoming work and how this will affect them Vehicle Decals - Magnet placed on each GRIP contractor vehicle that identifies them as a contractor for FPU
FN	2015	August	\$ 15,067	Door Hangers - Notification placed on door to inform resident that we will return shortly for the final stage of restoration and clean-up. Notification Letters mailed for the following (includes paper, envelopes and postage): * To FPU customers to notify them of upcoming work, what to expect, resident safety and list of contractors that will need to access their property and map of the project work area * To non-FPU customers to notify them of upcoming work, what to expect, resident safety and list of contractors that may need to access their property * To City Officials to notify them of upcoming work, what to expect, benefits of our work and map of project work area * To FPU HOA developments to notify them of upcoming work, what to expect, resident safety and list of contractors that will need to access their property
FN	2016	May	\$ 18,792	
			\$ 14,018	Notification Letters mailed for the following (includes paper, envelopes and postage): * To FPU customers to notify them of upcoming work, what to expect, resident safety and list of contractors that will need to access their property and map of the project work area * To non-FPU customers to notify them of upcoming work, what to expect, resident safety and list of contractors that may need to access their property * To City Officials plus an email blast to notify them of upcoming work, what to expect, benefits of our work and map of project work area Door Hangers - Notification placed on door to inform resident that we will return shortly for the final stage of restoration and clean-up. Vehicle Decals - Magnet placed on each GRIP contractor vehicle that identifies them as a contractor for FPU
			\$ 4,774	Notification Letters mailed for the following (includes paper, envelopes and postage): * To FPU customers to notify them of upcoming work, what to expect, resident safety and list of contractors that will need to access their property and map of the project work area * To non-FPU customers to notify them of upcoming work, what to expect, resident safety and list of contractors that may need to access their property * To City Officials plus an email blast to notify them of upcoming work, what to expect, benefits of our work and map of project work area Vehicle Decals - Magnet placed on each GRIP contractor vehicle that identifies them as a contractor for FPU
	2016	December	\$ 23,926	Projected Notification Letters mailed for the following (includes paper, envelopes and postage): * To FPU customers to notify them of upcoming work, what to expect, resident safety and list of contractors that will need to access their property and map of the project work area * To non-FPU customers to notify them of upcoming work, what to expect, resident safety and list of contractors that may need to access their property * To City Officials plus an email blast to notify them of upcoming work, what to expect, benefits of our work and map of project work area Door Hangers - Notification placed on door to inform resident that we will return shortly for the final stage of restoration and clean-up. Vehicle Decals - Magnet placed on each GRIP contractor vehicle that identifies them as a contractor for FPU