

DOCKET NO. 20190173-GU FILED 9/3/2019 DOCUMENT NO. 08583-2019 FPSC - COMMISSION CLERK

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September 3, 2019

#### **E-PORTAL FILING**

Mr. Adam Teitzman, Clerk Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850

Re: New Filing – 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 Mr. Teitzman:

Attached for filing, please find the 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, along with the Direct Testimony and Exhibit DMC-1 of Mr. Derrick M. Craig. Also included with this filing are the following revised tariff pages:

#### **Revised Tariff Sheets**

(Clean and Legislative Versions)

CFG Eighth Revised Sheet No. 105.1

CFG Eighth Revised Sheet No. 105.2

FPUC NG Fourteenth Revised Sheet No. 35.4

FPUC-FORT MEADE Third Revised Sheet No. 64

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:/(Certificate of Service)

## BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Joint Petition for Approval of Gas DOCKET NO. Program (GRIP) Reliability Infrastructure True-Up by Florida Public Utilities Company and the Florida Division of Chesapeake Utilities Corporation and Florida Public Utilities Company-Fort Meade

DATED: September 3, 2019

## JOINT PETITION FOR APPROVAL OF GRIP COST RECOVERY FACTORS BY FLORIDA PUBLIC UTILITIES COMPANY, FLORIDA PUBLIC UTILITIES COMPANY-FORT MEADE, AND THE FLORIDA DIVISION OF CHESAPEAKE UTILITIES CORPORATION

Florida Public Utilities Company, Florida Public Utilities Company-Fort Meade ("Fort Meade") (herein jointly "FPUC"), and the Florida Division of Chesapeake Utilities Corporation ("CFG")(also referred to herein individually as "Company" and jointly as "Companies"), by and through their undersigned counsel, hereby file this Petition, pursuant to Section 366.06, Florida Statutes, and Order No. PSC-2012-0490-TRF-GU, seeking approval from the Florida Public Service Commission ("FPSC" or "Commission") of FPUC's and CFG's GRIP cost recovery factors for the period January 2020 through December 2020. In support of this request, the Companies hereby state:

1) FPUC is a natural gas utility subject to the Commission's jurisdiction under Chapter 366, Florida Statutes. 1 Its principal business address is:

Florida Public Utilities Company 1750 S 14th Street, Suite 200 Fernandina Beach FL 32034

Florida Public Utilities Company – Fort Meade is a division of FPUC with its principal business address being the same as FPUC.

2) CFG is also a natural gas utility subject to the Commission's jurisdiction under Chapter 366, Florida Statutes. Its principal business address is:

<sup>&</sup>lt;sup>1</sup> FPUC's Indiantown Division does not participate in a GRIP program.

Florida Division of Chesapeake Utilities Corporation 1750 S 14th Street, Suite 200 Fernandina Beach FL 32034

3) The name and mailing address of the persons authorized to receive notices are:

Beth Keating, Esq. Gunster, Yoakley & Stewart, P.A. 215 South Monroe Street, Suite 601 Tallahassee, Florida 32301-1839 (850) 521-1706 Mike Cassel AVP, Regulatory and Governmental Affairs Florida Public Utilities Company/Chesapeake 1750 S 14th Street, Suite 200 Fernandina Beach FL 32034 mcassel@fpuc.com

- The Commission is vested with jurisdiction in this matter in accordance with Sections 366.04, 366.041, 366.05, and 366.06, Florida Statutes, pursuant to which the Commission is authorized to establish rates and charges for public utilities, including the relief requested herein, and to consider, among other things, the adequacy of facilities, as well as the utility's ability to improve such facilities. Likewise, in accordance with Section 368.05(2), Florida Statutes, the Commission has the authority to require improvements to natural gas distribution systems as may be necessary to promote the protection of the public.
- 5) Consistent with the requirements of Order No. PSC-12-0490-TRF-GU, issued September 24, 2012, the Companies have included with this filing Schedules A-D, which support the Companies' calculations of the yearly GRIP surcharge factors for the calendar year 2019.
- Testimony and Exhibit DMC-1, which includes the referenced schedules, of Mr. Derrick M. Craig in support of the Companies' request for approval of the requested factors. Therein, Mr. Craig explains that projects in high consequence areas continue to be a priority. As also noted by Mr. Craig, the Companies continue to discover new bare steel, cast iron, and steel tubing beyond that which was originally anticipated.

- 7) As reflected on Schedule B-1, the final GRIP true-up amount for the period January 2018 through December 2018 was an over-recovery of \$2,616,870 for FPUC, an over-recovery of \$192,146 for CFG, and an under-recovery of \$3,693 for Fort Meade.
- 8) The Company projects total GRIP expenditures of \$8,200,000 for mains and \$1,800,000 for services for FPUC, \$1,800,000 for mains and \$200,000 for services for CHPK, and \$0 for Fort Meade for the period January 2020 through December 2020. The projected net true-up is an under–recovery of \$1,103,688 for FPUC, an over-recovery of \$509,752 for CFG, and an under-recovery of \$495 for Fort Meade. After adding the projected GRIP revenue requirement to the (over/under) recovery amount, a total of \$1,513,182 for FPUC and \$701,897 for CFG remains to be refunded, and \$4,188 for Fort Meade remains to be collected during the period January 1, 2020 through December 31, 2020. After adding the projected revenue requirements for the programs and the true-up amounts then dividing this total among the Companies' rate classes, the following are the GRIP Cost Recovery factors for which the Companies seek approval in this petition:

#### **CFG**

		GRIP	
RATE	FACTORS		
CLASS	I	PER THERM	
FTS-A	\$	0.58634	
FTS-B	\$	0.17923	
FTS-1	\$	0.10585	
FTS-2	\$	0.11969	
FTS-2.1	\$	0.11818	
FTS-3	\$	0.04936	
FTS-3.1	\$	0.05900	

FTS-4	\$	0.06632			
FTS-5	\$	0.07411			
FTS-6	\$	0.05246			
FTS-7	\$	0.07043			
FTS-8	\$	0.06898			
FTS-9	\$	0.14575			
FTS-10	\$	0.08765			
FTS-11/FTS- NGV	\$	0.09581			
FTS-12	\$	0.02970			
FTS-13	N	/A			
CFG Experimental CLASS Rate Schedule  FTS-A (Exp FTS-B (Exp FTS-1 (Exp FTS-2 (Exp	) )			3.62 1.85 1.56 6.93	S
FTS-2.1 (Exp) FTS-3 (Exp) FTS-3.1 (Exp)	) )		\$ \$ \$	13.59 15.58 35.77	
<b>FPUC</b>					
RATE SCHEDULE					GRIP FACTORS PER THERM
RESIDENTIAL	ć				\$0.22312
COMMERCIAI	L SI	MALL			\$0.14188

COMMERCIAL SMALL (General Service 1 & 2 & GS 1 & 2 Transportation)	\$0.14188
COMM. LRG VOLUME	\$0.09269
(Large Vol & LV Transportation)	
INTERRUPTIBLE SERVICE	\$0.05864
(Int Service & IS Transportation)	
GENERAL LIGHTING SERVICE	\$0. 49288
(Gen Light Service & GLS Transportation)	\$0.47288
Rate Schedule NGV	\$0.14188
Rate Schedule NGVTS	\$0.14188

# Fort Meade

RATE SCHEDULE	FACTORS PER THERM
RESIDENTIAL	\$0.24865
COMMERCIAL SMALL	\$0.07705
(General Service & GS Transportation)	
COMM. LRG VOLUME	\$0.00000
(Large Vol & LV Transportation)	
INTERRUPTIBLE SERVICE (Int Service & IS Transportation)	\$0.00000
GENERAL LIGHTING SERVICE	\$0.00000

9) The Companies attest that these factors have been calculated correctly and consistent with Commission requirements. Thus, the Companies ask that the Commission approve the proposed factors as set forth herein.

10) Attached to this Petition as Attachment A are proposed tariff pages, in clean and legislative format, reflecting the GRIP factors set forth herein.

WHEREFORE, FPUC, FPUC-Fort Meade, and CFG respectfully request that the Commission approve the proposed GRIP cost recovery factors to be effective for all meter readings for the period January 2020 through December 2020.

RESPECTFULLY SUBMITTED this 3<sup>rd</sup> day of September, 2019, by:

Beth Keating

Gunster, Yoakley & Stewart, P.A. 215 South Monroe St., Suite 601

Tallahassee, FL 32301

(850) 521-1706

Attorneys for Florida Public Utilities Company and the Florida Division of Chesapeake Utilities Corporation

## CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing has been served upon the following by Electronic Mail this 3rd day of September, 2019.

Jennifer Crawford Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850 jcrawfor@psc.state.fl.us	J.R. Kelly/P. Christensen Office of Public Counsel c/o The Florida Legislature 111 W. Madison Street, Room 812 Tallahassee, FL 32399-1400 Kelly.JR@leg.state.fl.us
Mike Cassel 1750 S.W. 14th Street, Suite 200 Fernandina Beach, FL 32034-3052 Mcassel@fpuc.com	

By:

Beth Keating

Gunster, Yoakley & Stewart, P.A. 215 South Monroe St., Suite 601

Tallahassee, FL 32301

(850) 521-1706

# ATTACHMENT A

Florida Public Utilities Company, Florida Public Utilities Company – Indiantown Division,
Florida Public Utilities Company-Fort Meade, and
The Florida Division of Chesapeake Utilities Corporation

## **Revised Tariff Sheets**

(Clean and Legislative Versions)

CFG Eighth Revised Sheet No. 105.1 CFG Eighth Revised Sheet No. 105.2 FPUC NG Fourteenth Revised Sheet No. 35.4 FPUC-FORT MEADE Third Revised Sheet No. 64

#### RATE SCHEDULES MONTHLY RATE ADJUSTMENTS

#### Rate Schedule MRA

## 7. GAS REPLACEMENT INFRASTRUCTURE PROGRAM (GR1P):

### Applicability:

All Customers receiving Transportation Service from the Company and are assigned to or have selected rate schedules FTS-A, FTS-B, FTS-1, FTS-2, FTS-2.1, FTS-3, FTS-3.1, FTS-4, FTS-5, FTS-6, FTS-7, FTS-8, FTS-9, FTS-10, FTS-11, FTS-12, and FTS-13.

The Usage Rate for Transportation Service to each applicable rate classification shall be adjusted by the following recovery factors. The recovery factors for all meters read for the period January 1, 2020 through December 31, 2020 for each rate classification are as follows:

Rate Schedule	Classification of Service	Rate per therm
FTS A	< 130 therms	\$0.58634
FTS-B	> 130 therms up to 250 therms	\$0.17923
FTS-1	> 0 up to 500 therms	\$0.10585
FTS-2	> 500 therms up to 1,000 therms	\$0.11969
FTS-2.1	> 1,000 therms up to 2,500 therms	\$0.11818
FTS-3	> 2,500 therms up to 5,000 therms	\$0.04936
FTS-3.1	> 5,000 therms up to 10,000 therms	\$0.05900
FTS-4	> 10,000 therms up to 25,000 therms	\$0.06632
FTS-5	> 25,000 therms up to 50,000 therms	\$0.07411
FTS-6	> 50,000 therms up to 100,000 therms	\$0.05246
FTS-7	> 100,000 therms up to 200,000 therms	\$0.07043
FTS-8	> 200,000 therms up to 400,000 therms	\$0.06898
FTS-9	> 400,000 therms up to 700,000 therms	\$0.14575
FTS-10	> 700,000 therms up to 1,000,000 therms	\$0.08765
FTS-11	> 1,000,000 therms up to 2,500,000 therms	\$0.09581
FTS-12	> 2,500,000 therms up to 12,500,000	\$0.02970
FTS-13	> 12,500,000 therms	N/A

(Continued to Sheet No. 105.2)

Issued by: Michael P. McMasters, President Chesapeake Utilities Corporation

Effective:

#### RATE SCHEDULES MONTHLY RATE ADJUSTMENTS

Rate Schedule MRA (Continued from Sheet No. 105.1)

# 7. GAS INFRASTRUCTURE REPLACEMENT PROGRAM (GRIP) (Experimental):

## Applicability:

All Customers, assigned to a TTS Shipper, receiving Transportation Service from the Company and are assigned to or have selected rate schedules FTS-A (Exp), FTS-B (Exp), FTS-1 (Exp), FTS-2 (Exp), FTS-2.1 (Exp), FTS-3 (Exp), and FTS-3.1 (Exp).

The Firm Transportation Charge for Transportation Service to each applicable rate classification shall be adjusted by the following recovery factors. The recovery factors for all meters read for the period January 1, 2020 through December 31, 2020 for each rate classification are as follows:

Rate per bill		
\$	3.62	
\$	1.85	
\$	1.56	
\$	6.93	
\$	13.59	
\$	15.58	
\$	35.77	
	\$ \$ \$ \$ \$	\$ 3.62 \$ 1.85 \$ 1.56 \$ 6.93 \$ 13.59 \$ 15.58

(Continued to Sheet No. 105.3)

Issued by: Michael P. McMasters, President Chesapeake Utilities Corporation

Effective:

#### **BILLING ADJUSTMENTS**

(Continued from Sheet No. 35.3)

### Gas Reliability Infrastructure Program (GRIP)

#### **Applicability**

The bill for gas or transportation service supplied to a Customer in any Billing Period shall be adjusted as follows:

The GRIP factors for the period from the first billing cycle for January 2020 through the last billing cycle for December 2020 are as follows:

Rate Class	Rates Per Therm
Rate Schedule RS	\$0.22312
Schedule GS-1	\$0.14188
Rate Schedule GS-2	\$0.14188
Rate Schedule GSTS-1	\$0.14188
Rate Schedule GSTS-2	\$0.14188
Rate Schedule LVS	\$0.09269
Schedule LVTS	\$0.09269
Schedule IS	\$0.05864
Schedule ITS	\$0.05864
Schedule GLS	\$0.49288
Rate Schedule GLSTS	\$0.49288
Rate Schedule NGV	\$0.14188
Rate Schedule NGVTS	\$0.14188

### **BILLING ADJUSTMENTS**

# Gas Reliability Infrastructure Program (GRIP)

#### Applicability

The bill for gas or transportation service supplied to a Customer in any Billing Period shall be adjusted as follows:

The GRIP factors for the period from the first billing cycle for January 2020 through the last billing cycle for December 2020 are as follows:

Rate Class	Rates Per Therm
Mark 10 Mark 25 ID NO MARKSON	
Rate Schedule RS	\$0.24865
Rate Schedule GS-1	\$0.07705
Rate Schedule GS-2	\$0.07705
Rate Schedule GSTS-1	\$0.07705
Rate Schedule GSTS-2	\$0.07705
Rate Schedule LVS	\$0.00000
Rate Schedule LVTS	\$0.00000
Rate Schedule IS	\$0.00000
Rate Schedule ITS	\$0.00000
Rate Schedule GLS	\$0.00000
Rate Schedule GLSTS	\$0.00000
Rate Schedule NGV	\$0.00000
Rate Schedule NGVTS	\$0.00000

Cancels SixthSeventh Sheet No.

#### RATE SCHEDULES MONTHLY RATE ADJUSTMENTS

#### Rate Schedule MRA

## 7. GAS REPLACEMENT INFRASTRUCTURE PROGRAM (GR1P):

#### Applicability:

All Customers receiving Transportation Service from the Company and are assigned to or have selected rate schedules FTS-A, FTS-B, FTS-1, FTS-2, FTS-2.1, FTS-3, FTS-3.1, FTS-4, FTS-5, FTS-6, FTS-7, FTS-8, FTS-9, FTS-10, FTS-11, FTS-12, and FTS-13.

The Usage Rate for Transportation Service to each applicable rate classification shall be adjusted by the following recovery factors. The recovery factors for all meters read for the period January 1, 201920 through December 31, 201920 for each rate classification are as follows:

Rate Schedule	Classification of Service	Rate per therm
ETS A	< 130 therms	\$0.7042358634
FTS-B	> 130 therms up to 250 therms	\$0:2188617923
FTS-1	> 0 up to 500 therms	\$0. <del>13593</del> 10585
FTS-2	> 500 therms up to 1,000 therms	\$0. <del>14607</del> 11969
FTS-2.1	> 1,000 therms up to 2,500 therms	\$0. <del>13888</del> 11818
FTS-3	> 2,500 therms up to 5,000 therms	\$0,0658004936
FTS-3.1	> 5,000 therms up to 10,000 therms	\$0.0733705900
FTS-4	> 10,000 therms up to 25,000 therms	\$0.0838206632
FTS-5	> 25,000 therms up to 50,000 therms	\$0.0883707411
FTS-6	> 50,000 therms up to 100,000 therms	\$0.0666605246
FTS-7	> 100,000 therms up to 200,000 therms	\$0. <del>09056</del> 07043
FTS-8	> 200,000 therms up to 400,000 therms	\$0. <del>08269</del> 06898
FTS-9	> 400,000 therms up to 700,000 therms	\$0. <del>15897</del> 14575
FTS-10	> 700,000 therms up to 1,000,000 therms	\$0. <del>11276</del> 08765
FTS-11	> 1,000,000 therms up to 2,500,000 therms	\$0. <del>15044</del> 09581
FTS-12	> 2,500,000 therms up to 12,500,000	\$0. <del>03753</del> 02970
FTS-13	> 12,500,000 therms	N/A

(Continued to Sheet No. 105.2)

Issued by: Michael P. McMasters, President

Chesapeake Utilities Corporation

Effective:

SeventhEighth Revised Sheet No.

Original Volume No. 4 105.2

Cancels SixthSeventh Revised Sheet No.

#### RATE SCHEDULES MONTHLY RATE ADJUSTMENTS

Rate Schedule MRA (Continued from Sheet No. 105.1)

# 7. GAS INFRASTRUCTURE REPLACEMENT PROGRAM (GRIP) (Experimental):

### Applicability:

All Customers, assigned to a TTS Shipper, receiving Transportation Service from the Company and are assigned to or have selected rate schedules FTS-A (Exp), FTS-B (Exp), FTS-1 (Exp), FTS-2 (Exp), FTS-2.1 (Exp), FTS-3 (Exp), and FTS-3.1 (Exp).

The Firm Transportation Charge for Transportation Service to each applicable rate classification shall be adjusted by the following recovery factors. The recovery factors for all meters read for the period January 1, 201920 through December 31, 201920 for each rate classification are as follows:

Rate per bill		
\$	4.193.62	
\$	<del>2.22</del> 1.85	
\$	<del>2.04</del> 1.56	
\$	<del>8.55</del> 6.93	
\$	<del>15.90</del> 13.59	
\$	<del>19.96</del> 15.58	
\$	43.3735.77	
	\$ \$ \$ \$ \$	

(Continued to Sheet No. 105.3)

Issued by: Michael P. McMasters, President Chesapeake Utilities Corporation

Effective:

#### **BILLING ADJUSTMENTS**

(Continued from Sheet No. 35.3)

## Gas Reliability Infrastructure Program (GRIP)

#### Applicability

The bill for gas or transportation service supplied to a Customer in any Billing Period shall be adjusted as follows:

The GRIP factors for the period from the first billing cycle for January 2019-2020 through the last billing cycle for December 2019-2020 are as follows:

Rate Class	Rates Per Therm
Rate Schedule RS	\$0.2135622312
Schedule GS-1	\$0. <del>13672</del> 14188
Rate Schedule GS-2	\$0. <del>13672</del> <u>14188</u>
Rate Schedule GSTS-1	\$0. <del>13672</del> <u>14188</u>
Rate Schedule GSTS-2	\$0. <del>13672</del> <u>14188</u>
Rate Schedule LVS	\$0.0860609269
Schedule LVTS	\$0.0860609269
Schedule IS	\$0.0583005864
Schedule ITS	\$0. <u>0583005864</u>
Schedule GLS	\$0.37469-49288
Rate Schedule GLSTS	\$0.3746949288
Rate Schedule NGV	\$0. <del>13672</del> <u>14188</u>
Rate Schedule NGVTS	\$0. <del>13672</del> 14188

#### BILLING ADJUSTMENTS

# Gas Reliability Infrastructure Program (GRIP)

### **Applicability**

The bill for gas or transportation service supplied to a Customer in any Billing Period shall be adjusted as follows:

The GRIP factors for the period from the first billing cycle for January 20<u>20</u>49 through the last billing cycle for December 20<u>20</u>49 are as follows:

Rate Class	Rates Per Therm
Rate Schedule RS	\$0. <del>29382</del> 24865
Rate Schedule GS-1	\$0.088837705
Rate Schedule GS-2	\$0.08883-07705
Rate Schedule GSTS-1	\$0. <del>08883</del> _ <u>07705</u>
Rate Schedule GSTS-2	\$0. <del>08883</del> - <u>07705</u>
Rate Schedule LVS	\$0.00000
Rate Schedule LVTS	\$0.00000
Rate Schedule IS	\$0.00000
Rate Schedule ITS	\$0.00000
Rate Schedule GLS	\$0.00000
Rate Schedule GLSTS	\$0.00000
Rate Schedule NGV	\$0.00000
Rate Schedule NGVTS	\$0.00000

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		In Re: Gas Reliability Infrastructure Program
3		DIRECT TESTIMONY OF DERRICK MAURICE CRAIG
4		On behalf of
5		Florida Public Utilities Company,
6	<u>F1</u>	orida Division of Chesapeake Utilities Corporation and Florida Public Utilities
7		Company-Fort Meade
8	Q.	Please state your name, occupation, and business address.
9	A.	My name is Derrick Maurice Craig. I am employed by Florida Public Utilities
10		Company (FPUC or Company) as a Senior Regulatory Analyst. My business
11		address is 1635 Meathe Drive, West Palm Beach, FL 33411.
12	Q.	Describe briefly your education and relevant professional background.
13	A.	In 1991, I received a Bachelor of Electrical Engineering degree from the
L3 L4	A.	In 1991, I received a Bachelor of Electrical Engineering degree from the Georgia Institute of Technology in Atlanta, Georgia and in 1997, I received a
	A.	
L4	Α.	Georgia Institute of Technology in Atlanta, Georgia and in 1997, I received a
L4 L5	A.	Georgia Institute of Technology in Atlanta, Georgia and in 1997, I received a Masters of Business Administration from the University of Virginia (Darden
L4 L5 L6	A.	Georgia Institute of Technology in Atlanta, Georgia and in 1997, I received a Masters of Business Administration from the University of Virginia (Darden Graduate Business School) in Charlottesville, Virginia. I have worked in various engineering and financial analysis roles for several utilities, including
L4 L5 L6 L7	A.	Georgia Institute of Technology in Atlanta, Georgia and in 1997, I received a Masters of Business Administration from the University of Virginia (Darden Graduate Business School) in Charlottesville, Virginia. I have worked in various engineering and financial analysis roles for several utilities, including Baltimore Gas and Electric, Oglethorpe Power Company and Southern
L4 L5 L6 L7	A.	Georgia Institute of Technology in Atlanta, Georgia and in 1997, I received a Masters of Business Administration from the University of Virginia (Darden Graduate Business School) in Charlottesville, Virginia. I have worked in
L4 L5 L6 L7	A.	Georgia Institute of Technology in Atlanta, Georgia and in 1997, I received a Masters of Business Administration from the University of Virginia (Darden Graduate Business School) in Charlottesville, Virginia. I have worked in various engineering and financial analysis roles for several utilities, including Baltimore Gas and Electric, Oglethorpe Power Company and Southern Company. I have been in my current position as Senior Regulatory Analyst

- Service and the Gas Reliability Infrastructure Program) before the Florida
- 2 Public Service Commission.
- 3 Q. Have you filed testimony before the Florida Public Service Commission in
- 4 prior cases?
- 5 A. Yes, I have submitted testimony for the 2020 Swing Service Rider and the
- 6 2019 Purchased Gas Adjustment docket.
- 7 Q. Are you familiar with the Gas Reliability Infrastructure Program
- 8 ("GRIP") of the Company and the associated projected and actual
- 9 revenues and costs?
- 10 A. Yes.
- 11 Q. What is the purpose of your testimony in this docket?
- 12 A. My testimony will provide the actual true-up for January 1, 2018 to December
- 1, 2018 and the actual/estimated true-up based on seven months actual 2019
- data and five months projected 2019 data. My testimony will describe the
- Company's forecast of GRIP investment for natural gas mains and services
- for 2020. Finally, I will summarize the computations that are contained in
- composite exhibit DMC-1 supporting the January through December 2020
- projected GRIP surcharge factors for the FPUC, Florida Division of
- 19 Chesapeake Utilities Corporation (CFG), and Fort Meade natural gas
- 20 divisions.
- Q. Which set of schedules has your company completed and filed?
- 22 A. The Company has prepared and filed in composite Exhibit DMC-1, Schedules
- A, B, C, and D that support the calculation of the yearly GRIP surcharge

1		factors for January 2020 through December 2020 for FPUC, CFG and Fort
2		Meade.
3	Q.	Were the schedules filed by the Company completed by you or under
4		your direct supervision?
5	A.	Yes, they were completed by me.
6	Q.	What is the projection period for this filing?
7	A.	The projection period is January through December 2020.
8	Q.	What is the appropriate final GRIP true-up amount for the period
9		January through December 2018?
10	A.	As shown on Schedule B-1, page 2 of 18, the total over-recovery for FPUC is
11		\$2,616,870 inclusive of interest and CFG, Schedule B-1 page 7 of 15, has a
12		total over-recovery of \$192,146 inclusive of interest. Fort Meade, Schedule
13		B-1 page 12 of 15, has a total under-recovery of \$3,693 inclusive of interest.
14	Q.	What is the projected GRIP true-up amount for the period January
15		through December 2019?
16	A.	For FPUC, the projected GRIP true-up amount is an under-recovery of
17		\$1,103,688 inclusive of interest, for the period January through December
18		2019. CFG has projected an over-recovery for the same period of \$509,752
19		inclusive of interest. Fort Meade has projected an under-recovery for the same
20		period of \$495 inclusive of interest.
21	Q.	What is the total projected GRIP true-up amount to be collected from or
22		refunded to customers for the period January through December 2019?
23	A.	As shown on Schedule C-1, page 3 of 15, the total net over-recovery to be

- refunded for FPUC is \$1,513,182 and CFG, Schedule C-1 page 8 of 15, has a total net over-recovery of \$701,897 to be refunded for the period January through December 2019. Fort Meade, Schedule C-1 page 13 of 15, has a total net under-recovery of \$4,188 to be collected.
- Q. Please describe how the forecasts for the replacement of qualifying distribution mains and services were developed for the projection period.
- In the initial joint petition for approval of GRIP (Order No. PSC-12-0490-7 A. TRF-GU), FPUC and CFG reviewed the remaining eligible infrastructure and 8 9 developed a replacement plan based on our Distribution Integrity 10 Management Program ("DIMP") and estimated it would take approximately 11 10 years to replace our bare steel and cast iron facilities at an accelerated pace. Both companies prioritized the potential replacement projects focusing 12 13 initially on areas of high consequence and areas more susceptible to corrosion. 14 FPUC provides service to large metropolitan areas and the replacement of 15 eligible infrastructure in high-density, urban areas typically cost more than 16 areas that are primarily rural. FPUC and CFG have continued to replace eligible 17 infrastructure aggressively. The Company continues to discover new bare steel, cast 18 iron and steel tubing mains and services for replacement that was not included in the 19 original petition.
- Q. Please describe how the forecasts of the revenue requirements are developed for the projection period.
- A. The projected revenue requirements include several components: 1) the return on estimated qualified investments for the projection period as calculated using the equity and debt components of the weighted average cost of capital

1 from each companies respective prior rate cases. 2) depreciation expense 2 (respectively calculated using the currently approved depreciation rates) and 3 3) expenses for customer and general public notifications associated with 4 GRIP and ad valorem taxes, grossed up for federal and state income taxes. 5 Since FPUC has a bare steel replacement and recovery program, originally approved in the Company's 2004 rate case proceeding, the revenue 6 7 requirement is net of the existing bare steel program, which equates to 8 \$747,727 embedded in base rate revenues. CFG and Fort Meade do not have 9 any recovery amounts embedded in their base rates. The 2019 projected 10 mains and services to be replaced are shown on Exhibit DMC-1, Schedule C-1, pages 4, 9 and 14. FPUC is expecting to invest \$8,200,000 in mains and 11 12 \$1,800,000 for services. CFG is expecting to invest \$1,800,000 in mains, and 13 \$200,000 in services. Fort Meade has no investments expected in 2020.

- Q. What are the resulting net total projected revenue requirements to be recovered during this projection period?
- 16 A. The total projected revenue requirements to be recovered are \$9,851,484 for FPUC, Schedule D-1 page 5 of 15, \$3,479,325 for CFG, Schedule D-1 page 10 of 15, and \$29,715 for Fort Meade, Schedule D-1 page 15 of 15.
- Q. Have you prepared a schedule that shows the calculation of the proposed
  GRIP surcharge factors for each rate class to be applied during the
  billing period January 1, 2020 through December 31, 2020?
- 22 A. Yes, Please see Schedule D-1 pages 5, 10 and 15 for FPUC, CFG, and Fort

  Meade, respectively. For CFG, rate class FTS-13 is excluded from the GRIP

- surcharge factor calculation because there are no customers in the rate class
- 2 and it is closed.
- 3 Q. What should be the effective date of the GRIP surcharge factors for
- 4 billing purposes?
- 5 A. The GRIP surcharge factors should be effective for all meter reading during
- the period of January 1, 2020 through December 31, 2020.
- 7 Q. Does this conclude your testimony?
- 8 A. Yes, it does.

## Florida Public Utilities Company

Gas Reliability Infrastructure Program (GRIP) Calculation of Equity and Debt Returns Schedule A-1
Exhibit\_\_\_\_
Derrick M. Craig (DMC - 1)
Page 1 of 15

Equity Cost Rate	10.85%
Weighted Equity Cost Rate	4.33%
Revenue Expansion Factor	1.350
Weighted Equity Cost Rate, times Revenue Expansion Factor	5.850%
Long Term Debt-CU	0.700%
Short Term Debt	0.590%
Long Term Debt-FC	0.280%
Short Term Debt-Refinanced LTD	0.000%
Customer Deposits	0.080%
Weighted Debt Cost Rate	1.650%
Overall Weighted Cost Rate	5.98%

#### Florida Public Utilities Company

Gas Reliability Infrastructure Program (GRIP)
Calculation of the Projected Revenue Requirements
January 1, 2018 through December 31, 2018

Schedule 8-1
Exhibit\_\_\_\_\_

Derrick M. Craig (DMC - 1) Page 2 of 15

<u>Item</u>	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
Qualified Investment  Qualified Investment - Mains - Current Year 1070 Activity		\$326,853	\$531,442	\$1,330,778	\$409,002	\$527,490	\$171,753	\$177,133	\$530,858	\$360,527	\$475,071	\$479,863	\$234,665	\$5,555,435
Qualified Investment - Mains - Closed 1070 Activity to Plant			(\$712,143)	(\$1,031,358)	(\$432,533)	(\$205,277)	(\$1,064,690)	(\$222,909)	(\$370,738)	(\$192,800)	(\$374.054)	(\$708,525)	(\$520,463)	(\$5,835,490)
Qualified Investment - Services - Current Year 1070 Activity		\$39,526	\$35,740	\$224,492	\$43,381	\$237,879	\$154,820	\$143,303	\$476,868	\$125,588	\$166,245	\$251,764	\$107,698	\$2,007,304
Qualified Investment - Services - Closed 1070 Activity to Plant Qualified Investment - Mains - Current 1010 Activity		\$0	(\$58,894) \$712,143	(\$203,768) \$1,031,358	(\$47,093) \$432,533	(\$109,600) \$205,277	(\$169,678) \$1,064,690	(\$225.049)	(\$457,080)	(\$110,230)	(\$228,140)	(\$186,155)	(\$216,938)	(\$2,012,626)
Qualified Investment - Services - Current 1010 Activity		\$0	\$58,894	\$203,768	\$47,093	\$109,600	\$169,678	\$222,909 \$225,049	\$370,738 \$457,080	\$192,800 \$110,230	\$374,054 \$228,140	\$708,525 \$186,155	\$520,463 \$216,938	\$5,835,490 \$2,012,626
Total Qualified Investment - Mains 1070	\$407,194	\$734,047	\$553,346	\$852,766	\$829,235	\$1,151,447	\$258,511	\$212,735	\$372.855	\$540,582	\$641,599	\$412.937	\$127,139	\$127,139
Total Qualified Investment - Service 1070	\$5,322	\$44,848	\$21,695	\$42,419	\$38,706	\$166,986	\$152,127	\$70,381	\$90,170	\$105.527	\$43,632	\$109,241	\$127.139	\$127,139
Total Qualified Investment - Mains 1010	\$66,062,978	\$66,062,978	\$66,775,121	\$67,806,479	\$68,239,012	\$68,444,289	\$69,508,979	\$69,731,888	\$70,102,626	\$70,295,426	\$70,669,480	\$71,378,005	\$71,898,468	\$71,898,468
Total Qualified Investment - Service 1010	\$20,860,048	\$20,860,048	\$20,918,942	\$21,122,710	\$21,169,803	\$21,279,403	\$21,449,081	\$21,674,130	\$22,131,210	\$22,241,440	\$22,469,580	\$22,655,735	\$22,872,673	\$22,872,673
Total Qualified Investment	\$87,335,542	\$87,701,921	\$88,269,103	\$89,824,373	\$90,276,756	\$91,042,125	\$91,368,698	\$91,689,135	\$92,696,860	\$93,182,975	\$93,824,291	\$94,555,918	\$94,898,281	\$94,898,281
Less: Accumulated Depreciation	(\$5,626,904)	(\$5,816,976)	(\$6,007,047)	(\$6,198,794)	(\$6,393,234)	(\$6,588,718)	(\$6,784,892)	(\$6,983.756)	(\$7,183,608)	(\$7,385,292)	(\$7,587,642)	(\$7,791,316)	(\$7,996,944)	(\$7,996,944)
Net Book Value	\$81,708,638	\$81,884,945	\$82,262,056	\$83,625,579	\$83,883,521	\$84,453,407	\$84,583,805	\$84,705,379	\$85,513,252	\$85,797,683	\$86,236,649	\$86,764,602	\$86,901,337	\$86,901,337
Average Net Qualified Investment	.9	\$81,796,791	\$82,073,501	\$82,943,817	\$83,754,550	\$84,168,464	\$84,518,606	\$84,644,592	\$85,109,316	\$85,655,468	\$86,017,166	\$86,500,625	\$86,832,970	
Depreciation Rates														
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%	
Return on Average Net Qualified Investment														
Equity - Cost of Capital, inclusive of Income Tax Gross-up		7.7600%	6.3900%	6.3900%	6.3900%	6.3900%	6.3900%	6.3900%	6.3900%	6.3900%	6.3900%	6.3900%	6,3900%	
Debt - Cost of Capital		1,4400%	1.4400%	1.4400%	1.4400%	1.4400%	1.4400%	1.4400%	1.4400%	1.4400%	1,4400%	1.4400%	1.4400%	
Equity Component - inclusive of Income Tax Gross-up		\$528,953	\$437,041	\$441,676	\$445,993	\$448,197	\$450,062	\$450,732	\$453,207	\$456,115	\$458,041	\$460,616	\$462,386	\$5,493,019
Debt Component		\$98,156	\$98,488	\$99,533	\$100,505	\$101,002	\$101,422	\$101,574	\$102,131	\$102,787	\$103,221	\$103,801	\$104,200	\$1.216.819
Return Requirement		\$627,109	\$535,530	\$541,208	\$546,498	\$549,199	\$551,484	\$552,306	\$555,338	\$558,902	\$561,262	\$564,417	\$566,585	\$6,709,838
Investment Expenses														
Depreciation Expense - Mains		\$143,136	\$143,136	\$144,679	\$146,914	\$147,851	\$148,296	\$150,603	\$151,086	\$151,889	\$152,307	6152 112	#121.725	#1 man //m
Depreciation Expense - Services		\$46,935	\$46,935	\$47,068	\$47,526	\$47,632	\$47.879	\$48,260	\$48,767	\$49,795	\$152,307	\$153,117 \$50,557	\$154,652 \$50,975	\$1,787,667 \$582,372
Property Taxes		\$136,181	\$136,181	\$136,181	\$136,181	\$136,181	\$136,181	\$136,181	\$136,181	\$136,181	\$136,181	\$136,181	\$136,181	\$1,634,173
General Public Notice Expense & Customer Notice Expense		\$0	\$0	\$1,971	\$943	\$2,190	\$0	\$708	SO	\$2,169	\$0,181	\$130,181	\$0	\$7,980
Total Expense		\$326,253	\$326,253	\$329,899	\$331,564	\$333,854	\$332,356	\$335,752	\$336,034	\$340,034	\$338,531	\$339,855	\$341.809	\$4,012,192
Total Revenue Requirements		\$953,361	\$861,782	\$871,108	\$878,062	\$883,053	\$883,840	\$888,058	\$891,372	\$898,936	\$899,793	\$904,271	\$908,394	\$10,722,030
Annual Revenue Requirement for Bare Steel Replacement Investment		\$62,310	\$62,310	\$62,310	\$62,310	\$62,310	\$62,310	\$62,310	\$62,310	\$62,310	\$62,310	\$62,310	\$62,317	\$747,727
Tax Reform-Adjustment for 2/1-2/6/2018  Net Annual Revenue Requirements		\$891,051	20,079 \$819,551	\$808,798	\$815,752	5920 742	5021 520	5025 710	****	100000000000000000000000000000000000000	1100000000000	ra propriore	0.0200000000000000000000000000000000000	\$20,079
The state of the s	9	\$671,031	3619,331	\$606,798	\$815,752	\$820,743	\$821,530	\$825,748	\$829,062	\$836,626	\$837,483	\$841,961	\$846,077	\$9,994,382
GRIP Surcharge Revenues Collected Month	1	\$ 1,237,987	\$ 1,024,324	\$ 964,815	\$ 959,446	\$ 807,569	\$ 772,269	\$ 678,842	\$ 675,362	\$ 690,386	\$ 662,430	\$ 825,036	\$ 1,027,802	\$10,326,269
Beginning True-Up														\$ (2,231,264)
(Over) and Under Recovery for the Month		\$ (346,936)		\$ (156,017)		\$ 13,174		\$ 146,906	\$ 153,700	\$ 146,240	\$ 175,053	\$ 16,925	\$ (181,725)	
Monthly Interest (Expense)/Income		\$ (3,006)	\$ (3,542)	\$ (4,215)	\$ (4.744)	\$ (4.854)	\$ (4.935)	\$ (4,904)	\$ (4,692)	\$ (4.639)	\$ (4.596)	\$ (4.576)	e (5.017)	£ (52.720)
Ending (Over) and Under Recovery	\$ (2,231,264)	\$ (2,581,205)	\$ (2.789,520)	\$ (2,949,753)	\$ (3,098,191)	\$ (3,089,871)	\$ (3.045,546)	\$ (2,903,543)	\$ (2.754,535)	\$ (2.612,935)	\$ (2.442.477)	\$ (2,430,128)	\$ (2.616,870)	\$ (2,616,870)
Beg of Month Annual Interest Rate		1.49%	1.50%	1.66%	1.86%	1.90%	1.86%	2.00%	1.97%	2.02%	2.13%	2.24%	2.27%	
End of Month Annual Interest Rate		1.50%	1.66%	1.86%	1.90%	1.86%	2,00%	1.97%	2.02%	2.13%	2.13%	2.24%	2.50%	
Average Monthly Interest Rate		0.125%	0.132%	0.147%	0.157%	0.157%	0.161%	0.165%	0.166%	0.173%	0.182%	0.188%	0.199%	

Florida Public Utilities Company Gas Reliability Infrastructure Program (GRIP) Calculation of the Projected Revenue Requirements January 1, 2019 through December 31, 2019

Schedule C-1 Exhibit\_\_ Derrick M. Craig (DMC - 1) Page 3 of 15

Item	Beginning Balance	Actual Jan	Actual Feb	Actual Mar	Actual Apr	Actual May	Actual	Actual	Forecast	Forecast	Forecast	Forecast	Forecast	Year End
Qualified Investment	Distance	200	100	iviai	Apr	iviav	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total/Balance
Qualified Investment - Mains - Current Year 1070 Activity		\$190,735	\$521,052	\$364,809	\$436,204	\$328,314	\$1,200,781	\$887,101	\$794,201	\$794,201	\$794,201	\$794.201	\$794,201	\$7,900,000
Qualified Investment - Mains - Closed 1070 Activity to Plant		\$0	(\$63,893)	(\$676,052)	(\$302,366)	\$21,368	(\$199,841)	(\$43,355)	(\$794,201)	(\$794,201)	(\$794,201)	(\$794,201)	(\$794,201)	(\$5,235,143)
Qualified Investment - Services - Current Year 1070 Activity		\$145,710	\$205,652	\$205,094	\$107,854	\$145,124	\$256,208	\$516,898	\$123,492	\$123,492	\$123,492	\$123,492	\$123,492	\$2,200,000
Qualified Investment - Services - Closed 1070 Activity to Plant		50	(\$155,346)	(\$40,644)	(\$417,089)	(\$70,523)	(\$264,843)	(\$146,160)	(\$123,492)	(\$123,492)	(\$123,492)	(\$123,492)	(\$123,492)	(\$1,712,064)
Qualified Investment - Mains - Current 1010 Activity		\$0	\$63,893	\$676,052	\$302,366	(\$21,368)	\$199,841	\$43,355	\$794,201	\$794,201	\$794,201	\$794,201	\$794,201	\$5,235,143
Qualified Investment - Services - Current 1010 Activity		\$0	\$155,346	\$40,644	\$417,089	\$70,523	\$264,843	\$146,160	\$123,492	\$123,492	\$123,492	\$123,492	\$123,492	\$1,712,064
Total Qualified Investment - Mains 1070	\$127,139	\$317,874	\$775,033	\$463,790	\$597,628	\$947,309	\$1.948.250	\$2,791,996	\$2,791,996	\$2,791,996	\$2,791,996	\$2,791,996	\$2,791,996	\$2,791,996
Total Qualified Investment - Service 1070	\$1	\$145,711	\$196,017	\$360,468	\$51,233	\$125,833	\$117,199	\$487,936	\$487,936	\$487,936	\$487,936	\$487,936	\$487,936	\$487,936
Total Qualified Investment - Mains 1010	\$71,898,468	\$71,898,468	\$71,962,361	\$72,638,413	\$72,940,779	\$72,919,412	\$73,119,252	\$73,162,608	\$73,956,808	\$74,751,009	\$75,545,210	\$76,339,410	\$77,133,611	\$77,133,611
Total Qualified Investment - Service 1010	\$22,872,673	\$22,872,673	\$23,028,019	\$23,068,663	\$23,485,752	\$23,556,275	\$23,821,118	\$23,967,279	\$24,090,770	\$24,214,262	\$24,337,754	\$24,461,246	\$24,584,738	\$24,584,738
Total Qualified Investment	\$94,898,281	\$95,234,726	\$95,961,430	\$96,531,334	\$97,075,392	\$97,548,830	\$99,005,820	\$100,409,818	\$101,327,511	\$102,245,203	\$103,162,896	\$104,080,588	\$104,998,281	\$104,998,281
Less: Accumulated Depreciation	(\$7,996,944)	(\$8,204,187)	(\$8,411,431)	(\$8,619,162)	(\$8,828,450)	(\$9,039,331)	(\$9,250,325)	(\$9,462,348)	(\$9.674,793)	(\$9,889,237)	(\$10,105,680)	(\$10,324,121)	(\$10,544,561)	(\$10,544,561)
Net Book Value	\$86,901,337	\$87,030,538	\$87,549,999	\$87,912,171	\$88,246,942	\$88,509,499	\$89,755,494	\$90,947,470	\$91,652,718	\$92,355,966	\$93,057,216	\$93,756,467	\$94,453,720	\$94,453,720
Average Net Qualified Investment		\$86,965,938	\$87,290,269	\$87,731,085	\$88,079,557	\$88,378,220	\$89,132,497	\$90,351,482	\$91,300,094	\$92,004,342	\$92,706,591	\$93,406,842	\$94,105,094	
Depreciation Rates														
Approved Depreciation Rate-Mains		2.60%	2.60%	2,60%	2.60%	2,60%	2.60%	2 641%	2.6006		23333	2000	7290000	
Approved Depreciation Rate-Services		2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.60%	2.60%	2,60%	2,60%	2.60% 2.70%	
Return on Average Net Qualified Investment														
Equity - Cost of Capital, inclusive of Income Tax Gross-up		5,8500%	5,8500%	5.8500%	5.8500%	5.8500%	5.8500%	5.8500%	5.8500%	5.8500%	5.8500%	5,8500%	5.8500%	
Debt - Cost of Capital		1.6500%	1.6500%	1.6500%	1.6500%	1.6500%	1.6500%	1.6500%	1.6500%	1,6500%	1.6500%	1.6500%	1.6500%	
Equity Component - inclusive of Income Tax Gross-up		\$423,959	\$425,540	\$427,689	\$429,388	\$430,844	\$434,521	\$440,463	\$445,088	\$448,521	\$451,945	\$455,358	# 1 TO THE	22 222 222
Debt Component		\$119,578	\$120,024	\$120,630	\$121,109	\$121,520	\$122,557	\$124,233	\$125,538	\$126,506	\$127,472	\$128,434	\$458,762 \$129,395	\$5,272,079
Return Requirement		\$543,537	\$545,564	\$548,319	\$550,497	\$552,364	\$557,078	\$564,697	\$570,626	\$575,027	\$579,416	- \$583,793	\$588,157	\$6,759,075
Investment Expenses														
Depreciation Expense - Mains		\$155,780	\$155,780	\$155,918	\$157.383	\$158,038	\$157,992	\$158,425	\$158,519	\$160,240	\$161,961	20112	1020000000000	Secretary Secre
Depreciation Expense - Services		\$51,464	\$51,464	\$51,813	\$51,904	\$52,843	\$53,002	\$53,598	\$53,926	\$54,204	\$54,482	\$163,681 \$54,760	\$165,402 \$55,038	\$1,909,120
Property Taxes		\$144,836	\$144,836	\$144,836	\$144,836	\$144,836	\$144,836	\$144,836	\$144,836	\$144,836	\$144,836	\$144,836	\$144,836	\$638,497 \$1,738,027
General Public Notice Expense & Customer Notice Expense		\$343	\$5,837	SO	\$1,544	SO	\$0	\$0	\$4,333	\$4,333	\$4,333	\$4,333	\$4,333	\$29,390
Total Expense	9	\$352,422	\$357,916	\$352,567	\$355,667	\$355,717	\$355,829	\$356,858	\$361,614	\$363,613	\$365,612	\$367,610	\$369,609	\$4,315,033
Total Revenue Requirements		\$895,959	\$903,480	\$900,886	\$906,165	\$908,081	\$912,907	\$921,555	\$932,240	\$938,640	\$945,028	\$951,403	\$957,766	\$11,074,108
Annual Revenue Requirement for Bare Steel Replacement Investment		\$62,310	\$62,310	\$62,310	0/2 210	200.000	4.44	44						
Net Annual Revenue Requirements		\$833,649	\$841,170	\$838,576	\$62,310 \$843,855	\$62,310 \$845,771	\$62,310 \$850,597	\$62,310 \$859,245	\$62,310 \$869,930	\$62,310 \$876,330	\$62,310 \$882,718	\$62,310 \$889,093	\$62,317 \$895,449	\$747,727 \$10,326,381
Section of the sectio									9110727711	303 0,000	2002,710	2007,072	3073,449	310,320,381
GRIP Surcharge Revenues Collected Month		\$ 1,035,933	\$ 1,030,245	\$ 824,210	\$ 813,776	\$ 739,994 \$	651,609	\$ 570,551	602,044 \$	613,707	\$ 637,425	\$ 746,531	\$ 900,086	\$9,166,112
Beginning True-Up														\$ (2,616,870)
(Over) and Under Recovery for the Month		(\$202,284)	(\$189,076)	\$14,367	\$30,078	\$105,777	\$198,988	\$288,694	\$267,886	\$262,623	\$245,292	\$142,562		\$ 1,160,270
Monthly Interest (Expense)/Income		\$ (5.572)				\$ (5,928) \$	(5,465)				\$ (3.247)	S (2,896)	S (2,775)	\$ (56,582)
Ending (Over) and Under Recovery	\$ (2,616,870)	\$ (2,824,727)	\$ (3,019,699)	\$ (3,011,418)	\$ (2,987,393)	\$ (2.887,544) \$	(2,694,020)	\$ (2,410,094) \$	(2,146,396) \$	(1,887,482)				\$ (1,513,182)
Beg of Month Annual Interest Rate		2,50%	2,42%	2.42%	2.43%	2.42%	2.42%	2.28%	2.21%	2.21%	2.21%	2.21%	2.21%	
End of Month Annual Interest Rate		2.42%	2.42%	2.43%	2.42%	2.42%	2,28%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	
Average Monthly Interest Rate		0.205%	0.202%	0.202%	0.202%	0.202%	0.196%	0.187%	0.184%	0.184%	0.184%	0.184%	0.184%	

Florida Public Utilities Company Gas Reliability Infrastructure Program (GRIP) Calculation of the Projected Revenue Requirements January 1, 2020 through December 31, 2020

Schedule C-2 Exhibit\_\_\_\_\_ Derrick M. Craig (DMC - 1) Page 4 of 1S

Section   Sect	Item	Beginning Balance	Forecast Jan	Forecast Feb	Forecast Mar	Forecast Apr	Forecast May	Forecast Jun	Forecast Jul	Forecast Aug	Forecast Sep	Forecast Oct	Forecast Nov	Forecast Dec	Year End Total/Balance
Consider Informers - Norse - Current (1709) Activing 10 Plant (2014)	Qualified Investment		0/07 777	0000 200			4000	120000000	120021200						
Production for the content of the			2 (1) (1) (1) (2) (2)		Control of the Control of the Control										
Confided Investments - Assira - Current 1100 Activity to Plant (Qualified Investments - Assira - Current 1100 Activity to 118,000   \$185,000									Carrier and Committee of the						A STATE OF THE PROPERTY OF THE PARTY OF THE
Condition Incomment - Administr - Current   1010 Activative   \$1833.33   \$															
Pacific Investment - Services - Current Iroli Pachiwity   S185,000   S185,0									700000000000000000000000000000000000000						
Total Qualified Investment Mains 1070 154.0 \$44.79.0 \$44.															250000000000000000000000000000000000000
Section   Sect			\$105,000	4110,000	\$105,000	\$10,000	\$185,000	\$185,000	3183,000	3185,888	3183,000	\$185,000	\$185,000	\$185,000	\$2,220,000
Total Qualified Investment—Service 1070 Total	Total Qualified Investment - Mains 1070	\$2,791,996	\$2,641,996	\$2,491,996	\$2,341,996	\$2,191,996	\$2,041,996	\$1,891,996	\$1,741,996	\$1,591,996	\$1,441,996	\$1,291,996	\$1.141.996	\$991.996	\$991.996
Total Qualified Investments—Miss 1010 1771,336 11 877,036 514 878,002,77 878,036,01 878,002,77 878,036,01 878,002,77 878,036,01 878,002,77 878,036,01 878,002,77 878,036,01 878,002,77 878,036,01 878,002,77 878,036,01 878,002,77 878,002,002,77 878,002,002,002,002,002,002,002,002,002,00		\$487,936	\$452,936	\$417,936	\$382,936	\$347.936	\$312,936	\$277,936	\$242,936	\$207,936	\$172,936				
Todi Quishied Investment		\$77,133,611	\$77,966,944	\$78,800,277	\$79,633,611	\$80,466,944	\$81,300,277	\$82,133,611	\$82,966,944	\$83,800,277	\$84,633,611	\$85,466,944	\$86,300,277	\$87,133,611	
Less Accumulated Depociation Net Book Value    Second Communication   Sil0.344.561   Sil0.746.599   Sil0.346.599   Sil0.346.599   Sil1.247.548   Sil1.476.545   Sil1.476.54		Name and Address of the Owner, where the Owner, which is the Owner, which		14.00	\$25,139,738	\$25,324,738	\$25,509,738	\$25,694,738	\$25,879,738	\$26,064,738	\$26,249,738	\$26,434,738	\$26,619,738	\$26,804,738	\$26,804,738
Net Book Value    \$94,437,720   \$95,064,615   \$95,673,288   \$96,279,799   \$96,883,909   \$97,485,976   \$98,083,762   \$98,083,762   \$99,2776,069   \$99,2776,069   \$99,2776,000   \$99,2776,00	Total Qualified Investment	\$104,998,281	\$105,831,614	\$106,664,947	\$107,498,281	\$108,331,614	\$109,164,947	\$109,998,281	\$110,831,614	\$111,664,947	\$112,498,281	\$113,331,614	\$114,164,947	\$114,998,281	\$114,998,281
Average Net Qualified Investment  S94,79,167  S95,368,951  S95,368,951  S95,976,513  S95,976,513  S95,976,513  S95,976,513  S96,581,854  S97,184,972  S97,785,869  S98,384,544  S98,980,997  S99,575,228  S100,167,238  S100,757,025  S101,344,592  S101,345,922  S101,345,923  S101,345,922  S101,345,9						(\$11,447,645)	(\$11,678,971)	(\$11,912,519)	(\$12,148,288)	(\$12,386,279)	(\$12,626,492)	(\$12,868,927)	(\$13,113,583)	(\$13,360,462)	(\$13,360,462)
Propried table   Prop	Net Book Value	\$94,453,720	\$95,064,615	\$95,673,288	\$96,279,739	\$96,883,969	\$97,485,976	\$98,085,762	\$98,683,326	\$99,278,668	\$99,871,789	\$100,462,687	\$101,051,364	\$101,637,819	\$101,637,819
Approved Depreciation Rate-Mains Approved Depreciation Rate-Mains Approved Depreciation Rate-Services 270% 270% 270% 270% 270% 270% 270% 270%	Average Net Qualified Investment		\$94,759,167	\$95,368,951	\$95,976,513	\$96,581,854	\$97,184,972	\$97,785,869	\$98,384,544	\$98,980,997	\$99,575,228	\$100,167,238	\$100,757,026	\$101,344,592	
Approved Depreciation Rate-Services 2.70%	Depreciation Rates														
Approved Depreciation Rate-Services 2.70%	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%	7.60%	
Equity - Cost of Capital, inclusive of Income Tax Gross-up Debt - Cost of Capital 1.6500% 1.65	Approved Depreciation Rate-Services		2.70%	2.70%	2.70%	2,70%	2,70%	2.70%	2,70%		7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7				
Debt - Cost of Capital   1.6500%															
Equity Component - inclusive of Income Tax Gross-up			5.8500%	5.8500%	5.8500%	5.8500%	5.8500%	5.8500%	5.8500%	5.8500%	5.8500%	5.8500%	5.8500%	5.8500%	
Debt Component   S130,294   S131,132   S131,968   S132,800   S133,629   S134,456   S135,279   S136,099   S136,916   S137,730   S138,541   S139,349   S1618,192   S162,141   S162,1	Debt - Cost of Capital		1.6500%	1.6500%	1.6500%	1.6500%	1.6500%	1.6500%	1.6500%	1.6500%	1.6500%	1.6500%	1.6500%	1.6500%	
Return Requirement \$592,245 \$596,056 \$599,853 \$603,637 \$607,406 \$561,162 \$614,903 \$618,631 \$622,345 \$626,045 \$629,731 \$633,404 \$7355,418 \$1000,000					Charles Day Control				\$479,625	\$482,532	\$485,429	\$488,315	\$491,191	\$494,055	\$5,737,226
Investment Expenses						- Commission of the latest and the l	The state of the s	The second secon	\$135,279	\$136,099	\$136,916	\$137,730	\$138,541	\$139,349	\$1,618,192
Depreciation Expense - Mains   S167,123   S168,928   S170,734   S172,539   S174,345   S176,151   S177,956   S179,762   S181,567   S183,373   S185,178   S186,984   S2,124,641     Depreciation Expense - Services   S55,316   S55,322   S56,418   S56,564   S56,564   S56,981   S57,397   S7,813   S58,229   S58,646   S59,062   S59,478   S59,894   S691,260     Property Taxes   S157,423   S	Return Requirement	-	\$592,245	\$596,056	\$599,853	\$603,637	\$607,406	\$611,162	\$614,903	\$618,631	\$622,345	\$626,045	\$629,731	\$633,404	\$7,355,418
Depreciation Expense - Services   \$55,316   \$55,732   \$56,148   \$56,564   \$56,981   \$57,397   \$87,813   \$58,229   \$58,646   \$59,062   \$59,478   \$59,062   \$59,478   \$59,062   \$69,478   \$69,072   \$69,479   \$69,260   \$69,478   \$69,074   \$69,260   \$69,478   \$69,074   \$69,260   \$69,478   \$69,074   \$69,260   \$69,478   \$69,074   \$69,274															
Property Taxes							(Fig. 1) 2 Fr (1) 1	\$176,151	\$177.956	-\$179,762	\$181,567	\$183,373	\$185,178	\$186,984	\$2,124,641
General Public Notice Expense & Customer Notice Expense & Customer Notice Expense & S4,333 S4										\$58,229	\$58,646	\$59,062	\$59,478	\$59,894	\$691,260
Total Expense \$384,195 \$386,416 \$388,638 \$390,860 \$393,082 \$395,304 \$397,526 \$399,747 \$401,969 \$404,191 \$406,413 \$408,635 \$4,756,975 \$  Total Revenue Requirements \$976,439 \$982,472 \$988,492 \$994,497 \$1,000,488 \$1,006,465 \$1,012,429 \$1,018,379 \$1,024,314 \$1,030,236 \$1,036,144 \$1,042,038 \$12,112,394 \$1,042,048 \$1,042,04											\$157,423	\$157,423	\$157,423	\$157,423	\$1,889,074
Total Revenue Requirements \$976.439 \$982.472 \$988.492 \$994.497 \$1.000.488 \$1.006.465 \$1.012.429 \$1.018.379 \$1.024.314 \$1.030.236 \$1.036.144 \$1.042.038 \$12.112.394 \$1.040.418 \$1.040.048 \$1				100000000000000000000000000000000000000								\$4,333	\$4,333	\$4,333	\$52,000
Annual Revenue Requirement for Bare Steel Replacement Investment \$62,310 \$62,3	Total Expense	19	\$384,195	\$386,416	\$388,638	\$390,860	\$393,082	\$395,304	\$397,526	\$399,747	\$401,969	\$404,191	\$406,413	\$408,635	\$4,756,975
Mar A and D	Total Revenue Requirements	,	\$976,439	\$982,472	\$988,492	\$994,497	\$1,000,488	\$1,006,465	\$1,012,429	\$1,018,379	\$1,024,314	\$1,030,236	\$1,036,144	\$1,042,038	\$12,112,394
			L. C.		\$62,310	\$62,310	\$62,310	\$62,310	\$62,310	\$62,310	\$62,310	\$62,310	\$62,310	\$62,317	\$747,727
	Net Annual Revenue Requirements	i	\$914,129	\$920,162	\$926,182	\$932,187	\$938,178	\$944,155	\$950,119	\$956,069	\$962,004	\$967,926	\$973,834	\$979,721	\$11,364,667

#### Florida Public Utilities Company

Gas Reliability Infrastructure Program (GRIP)
Projection of Qualified Mains & Services Revenue Requirements
Surcharge Calculation - January 1, 2020 through December 31, 2020
Per Therm Rate

Schedule D-1
Exhibit
Derrick M. Craig (DMC - 1)
Page 5 of 15

1. 1/1/20-12/31/20 Qualified Mains & Services Replacement Revenue Requirements \$11,364,667 Mains 74% \$8,409,853 Services 26% \$2,954,813 Net \$10,666,754 2. TRUE-UP from Prior Period (Over)/Under Recovery Estimated thru 12/2019 \$ (1,513,182) 3. 2020 Qualified Mains & Services Replacement Revenue Requirements \$ 9,851,484 Mains 74% \$7,290,098 Services 26% \$2,561,386 Net \$9,851,484

RATE SCHEDULE	2020 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	13,916,212	58.00%	22.00%	\$1,485,604	\$1,603,822	\$3,089,426	\$0.22200	1.00503	\$0.22312	250	\$55.78	\$4.65
COMMERCIAL SMALL (General Service & GS Transportation & NGVS &NGVTS)	14,961,638	17.00%	23.00%	\$435,436	\$1,676,723	\$2,112,158	\$0.14117	1.00503	\$0.14188	2,500	\$354.70	\$29.56
COMM. LRG VOLUME (Large Vol & LV Transportation)	43,304,805	25,00%	46.00%	\$640,346	\$3,353,445	\$3,993,792	\$0.09223	1.00503	\$0.09269	25,000	\$2,317.23	\$193.10
INTERRUPTIBLE SERVICE (Int Service & IS Transportation)	9,996,142	0.00%	8.00%	\$0	\$583,208	\$583,208	\$0.05834	1.00503	\$0.05864	50,000	\$2,931.84	\$244.32
GENERAL LIGHTING SERVICE ( Gen Light Service & GLS Transportation)	148,651	0.00%	1.00%	\$0	\$72,901	\$72,901	\$0,49042	1.00503	\$0.49288	500	\$246.44	\$20.54

TOTAL 82,327,449 100.00% 100.00% \$2,561,386 \$7,290,098 \$9,851,484

# Florida Division of Chesapeake Utilities Corporation

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

Schedule A-1
Exhibit\_\_\_\_
Derrick M. Craig (DMC - 1)
Page 6 of 15

Earnings S	urveillance	Report -	December	31	2018
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10.80%
4.40%
1.3488
5.935%
0.770%
0.590%
0.000%
0.030%
0.000%
1.390%
5.700/
5.79%

Part	Calculation of the Projected Receive Requirements January 1, 2018 through December 31, 2018												Pag Pag	Exhibit Derrick M. Craig (DMC - 1) Page 7 of 15	π-
State   Stat	Item Outlified Investment	Beginning Balance	Actual	.definal	Actual	Apr	Actual	Actual	stetual Jul	Aug	sternal Sep	Actual	Actual	Actual	Year End Total
STATE   STAT	Qualified Investment - Mains - Current 1070 Activity		\$65,104	\$209,453	\$420,099	\$568,280	\$463,831	\$363,299	\$405,095	\$326,365	\$383,866	\$400,347	\$409,958	\$1,110,364	\$5,126,264
State   Stat	Qualified Investment - Mains - Closed 1070 Activity to Plant		1000	(\$135,245)	(\$455,006)		\$1,059,421)	(\$413,604)	(\$291,003)	(\$451,712)	(\$223,047)	(\$393.582)	(\$376,171)	(\$379,203)	(\$4,277,734)
- Current 1010 Activity	Outlified Investment - Services - Current 1070 Activity to Dissipate the Control of Activity the Cont		\$15,561	557,067	547.894	\$35.292	\$65,555	\$55,655	\$20,630	\$61.857	\$73,798	\$87,536	\$60,322	\$42,019	\$601.586
Strong   S	Qualified Investment - Mains - Current 1010 Activity		os	\$135.245	\$455,006	\$59,739	\$1,059,421	S413.604	\$291,003	(107,008)	(\$76,599)	(\$100,903)	(\$70,712)	(\$76,192)	(\$601,586)
Strong   S	Qualified Investment - Services - Current 1010 Activity		S	\$35,332	\$50,128	\$15,239	\$38,113	\$27,844	\$54,773	\$55.751	\$76.599	\$100,903	\$70,712	\$76,192	\$601,586
Secritic   Part   Par	Total Qualified Investment - Maris 1070	\$320,043	\$385,147	952 6513	\$424.419	066 2683	10T 266S	960 2763	5361 188	C235 8.11	077 7023	6463 136	110 2013	200 000	2071.14
Achies (100)  SE121236 SE12123	Total Outlified Investment - Services 1070	SE 001	\$17.363	269 613	\$17.163	617 516	850 193	000,1456	\$501,100	64.1 773	\$370,000	2403,423	117764	51,168,573	\$1,168,573
School   Statistic   Statist	Total Qualified Investment - Mains 1010	\$23,922,233	\$23,922,233	\$24,057,478							\$27.051.010	\$27,444.592	\$20,020,000	796 961 XCX	790 901 8CX
St.	Total Qualified Investment - Services 1010 Total Qualified Investment	\$2,127,336	\$2,127,336	\$2,162,668			1 5	ľ					\$2,652,730	\$2,728,922	\$32,728,922
St. 173-156   St. 175-179	Lose, Accumulated Donneriation	(5x1 000 13)	1700 757 137												
Statistical Colored   Statistical Colored Co	Net Book Value	\$24,773,426	\$24,795,272	J	1 1			1 1					\$28,684,197	\$29,770,534	\$29,770,534
Services  2.00% 2.	Average Net Qualified Investment						1.1				\$27,658,438	\$28,067,346	\$28,481,694	\$29,227,365	
Services 270% 2.20	Depreciation Rates Approved Depreciation Rate-Mains		2 64%	7,619) 6	2 (20%)	7607 6	Zult7) C	70177 €	70677 C	20077 6	, son	20000	7000		
1,400%   1,140	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%	
1,44076	Return on Average Net Qualified Investment Fautre - Coat of Crinital inclusive of Income Tay Googeans		7075677	Server >	/m/occ /	Andrews A	anion and	and a							
\$138,496 \$119,389 \$131,932 \$131,932 \$131,932 \$131,932 \$131,932 \$131,932 \$131,932 \$131,932 \$141,947 \$14	Debt - Cost of Capital		1.1400%	1.1400%	1.1400%	1.1400%	1.1400%	1.1400%	1.1400%	1.1400%	1,1400%	1.1400%	1.1400%	1,1400%	
SST   ST   ST   ST   ST   ST   ST   S	Equity Component - inclusive of Income Tax Gross-up		\$158,496	\$129.389	\$130,953	8133,439	\$136,081	\$138,236	\$110,114	\$141,907	\$143,778	\$145,903	\$148,057	\$151,934	\$1,698,286
SSILATE   SISTATE   SIST	Debt Component	1	\$23,545	\$23,646	\$23,932	\$24,386	\$24.869	\$25,263	\$25,606	\$25,934	\$26.276	\$26,664	\$27,058	\$27,766	\$304.92
SSTATE SS	Keturn Kequirement	1	\$182,041	\$153,035	\$154,884	\$157.825	\$160.950	\$163,499	\$165,719	\$167,840	\$170,053	\$172,567	\$175,115	\$179,700	\$2,003,229
SSTATE   S	Investment Expenses														
Stand Customer Notice Expense	Depreciation Expense - Mains		\$51,832	\$51.832	\$52,125	\$53,110	\$53,326	\$55,622	\$56,518	611,728	\$58,127	\$58,611	\$59,463	\$60,278	\$667,993
Stand Customer Notice Expense   Stand Customer Notice   Stand Custom	Depreciation Expense - Services  Property Table		24,787	54,787	\$4.866	64.679	\$5,013	\$5,099	\$5.161	\$5.285	\$5,410	\$5,583	\$5,810	\$5.969	\$62,749
\$100,113 \$599,227 \$100,428 \$99,528 \$102,010 \$104,697 \$105,729 \$104,876 \$107,104 \$  \$2202,154 \$128,645 \$255,313 \$257,203 \$260,578 \$266,578 \$276,417 \$277,509 \$274,879 \$279,671 \$  \$ 559,901 \$ 291,756 \$ 303,021 \$ 308,816 \$ 280,471 \$ 275,325 \$ 269,166 \$ 287,192 \$ 294,238 \$ 290,993 \$  \$ (77,747) \$ (33,11) \$ (47,708) \$ (51,64) \$ (19,895) \$ (98,16) \$ 1,552 \$ (13,62) \$ (19,59) \$ (11232) \$ (100) \$ (206) \$   \$ 164,174 \$ 86,584 \$ 53,565 \$ 5,901 \$ (45,744) \$ (65,724) \$ (75,641) \$ (74,427) \$ (88,184) \$ (107,712) \$ (119,10) \$ (13,69) \$ (206) \$   \$ 164,174 \$ 86,584 \$ 53,565 \$ 5,901 \$ (45,744) \$ (65,724) \$ (75,654) \$ (74,427) \$ (88,184) \$ (107,712) \$ (119,10) \$ (207,60) \$   \$ 164,174 \$ 86,584 \$ 53,565 \$ 5,901 \$ (45,744) \$ (65,724) \$ (75,654) \$ (74,427) \$ (98,184) \$ (107,712) \$ (119,10) \$ (207,60) \$   \$ 164,174 \$ 86,584 \$ 53,565 \$ 5,901 \$ (45,744) \$ (65,724) \$ (75,654) \$ (74,427) \$ (88,184) \$ (107,712) \$ (119,10) \$ (207,60) \$   \$ 167,77 \$ 1,397,60 \$	General Public Notice Expense and Customer Notice Expense		\$2,205	\$1.319	\$2 148	80	N 1.289	05 1+C	627.13	\$21,289	541.289	\$41,289	\$41.289	\$41,289	\$495,468
\$ 6.383         \$ 528,2154         \$ 528,315         \$ 526,273.03         \$ 526,589         \$ 5270,417         \$ 5271,879         \$ 5274,879         \$ 5279,671         \$ 577,447           \$ 589,901         \$ 291,756         \$ 903,021         \$ 380,471         \$ 275,325         \$ 269,166         \$ 287,192         \$ 290,203         \$ 290,003	Total Expense		\$100,113	\$99,227	\$100,428	\$78,998	\$99,628	\$102,010	\$104,697	\$105,729	\$104,826	\$107,104	\$106,562	\$107.536	\$1,237,239
\$ 539,901         \$ 291,756         \$ 303,021         \$ 308,816         \$ 235,325         \$ 269,166         \$ 280,192         \$ 291,238         \$ 290,903 <t< td=""><td>Tas Reform-Adjustment for 2/1-2/6/2018 Total Revenue Requirements</td><td>,</td><td></td><td></td><td>\$255,313</td><td>\$257,203</td><td>\$260,578</td><td>\$265,509</td><td>\$270,417</td><td>\$273,569</td><td>\$274,879</td><td>\$279,671</td><td>\$281,677</td><td>\$287,236</td><td>\$6,383</td></t<>	Tas Reform-Adjustment for 2/1-2/6/2018 Total Revenue Requirements	,			\$255,313	\$257,203	\$260,578	\$265,509	\$270,417	\$273,569	\$274,879	\$279,671	\$281,677	\$287,236	\$6,383
\$ (77,747) \$ (35,111) \$ (47,708) \$ (51,614) \$ (19,895) \$ (9,816) \$ 1,352 \$ (15,622) \$ (19,559) \$ (11,222) \$ (11,222) \$ (11,222) \$ (16,174) \$ (15,622) \$ (16,174) \$ (11,174) \$ (1	GRIP Surcharge Revenues Collected Month	1-1	359,901		303,021	308.816 \$	1				1.1		311.332 \$	329,985	\$3,602,006
\$ [64,174 \$ 86,584 \$ 55,565 \$ 5,901 \$ (45,744) \$ (65,724) \$ (75,654) \$ (75,654) \$ (88,184) \$ (107,712) \$ (119,150) \$ (14,712) \$ (119,150) \$ (14,712) \$ (119,150) \$ (14,712) \$ (119,150) \$ (14,712) \$ (119,150) \$ (14,712) \$ (119,150) \$ (14,712) \$ (119,150) \$ (14,712) \$ (119,150) \$ (14,712) \$ (119,150) \$ (14,712) \$ (119,150) \$ (119,150) \$ (14,712) \$ (119,150) \$ (119,15	Beginning True-Up (Over) and Under Recovery for the Month Monthly Interest (Expense)/Incone.		(747,747)				\$ (5(8,61)	\$ (918.6)		(13,622) \$	\$ (655.91)		(2)	(42,750)	\$ 164,174 (\$355,155)
1.49% 1.50% 1.60% 1.86% 1.90% 1.80% 2.00% 1.97% 2.02% 2.13% 1.24% 1.50% 0.13% 0.13% 0.15% 0.16%	Ending (Over) and Under Recovery	\$ 164,174	\$ 86,584		5.901	(45,744) \$	(65,724) \$	(75,654) \$		(88.184) \$		\$ (051,611)	\$ (149,057) \$		\$ (192,146)
0.13% 0.13% 0.15% 0.16% 0.16% 0.17% 0.17% 0.17% 0.18%	Beg of Month Annual Interest Rate End of Month Annual Interest Rate		1.50%	1.50%	1.86%	7,36%	1.90%	1.86%	2.00%	1.97%	2.02%	2,13%	2.24%	2.27%	
0,117 0,117 0,117 0,1170 0,1170 0,1170 0,1170 0,1170 0,1170 0,1170 0,1170 0,1170 0,1170 0,1170 0,1170 0,1170 0	Average Monthly Interest Rate		0.13%	7921 0									200	Walter of the Party of the Part	

#### Florida Division of Chesapeake Utilities Corporation

Gas Reliability Infrastructure Program (GRIP)
Calculation of the Projected Revenue Requirements
January 1, 2019 through December 31, 2019

	Beginning	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Forecast	Forecast	Forecast	Forecast	Forecast	Year End
Item Qualified Investment	Balance	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Qualified Investment - Mains - Current 1070 Activity					V 22287 T-000	72323423								
Qualified Investment - Mains - Closed 1070 Activity to Plant		\$781,584 \$0	\$701,075	\$855,131	\$529,285	\$478,776	\$262,031	\$164,411	\$155,542	\$155,542	\$155,542	\$155,542	\$155,542	\$4,550,001
Qualified Investment - Services - Current 1070 Activity		\$54,520	(\$71,025) \$40,883	(\$80,098)	(\$3,062,558)	(\$1,040,982)	(\$404,847)	(\$112,002)	(\$155,542)	(\$155,542)	(\$155,542)	(\$155,542)	(\$155,542)	(\$5,549,219)
Qualified Investment - Services - Closed 1070 Activity to Plant		\$34,320	100000000000000000000000000000000000000	\$27,581	\$57,927	\$17,283	\$24.212	\$12,491	\$23,020	\$23,020	\$23,020	\$23,020	\$23,020	\$350,000
Qualified Investment - Mains - Current 1010 Activity		\$0	(\$72,182)	(\$39,703)	(\$21,833)	(\$53,887)	(\$30,432)	(\$10,452)	(\$25,000)	(\$25,000)	(\$25,000)	(\$25,000)	(\$25,000)	(\$353,489)
Qualified Investment - Services - Current 1010 Activity		\$0	\$71,025 \$72,182	\$80,098	\$3,062,558	\$1,040,982	\$404,847	\$112,002	\$155,542	\$155,542	\$155,542	\$155,542	\$155,542	\$5,549,219
Quantità investica - Service - Caretti 1919 Activity		30	3/2,182	\$39,703	\$21,833	\$53,887	\$30,432	\$10,452	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$353,489
Total Qualified Investment - Mains 1070	\$1,168,573	\$1,950,157	\$2,580,207	\$3,355,240	\$821,967	\$259,761	\$116,946	\$169,355	\$169,355	\$169,355	\$169,355	\$169,355	\$169,355	\$169.355
Total Qualified Investment - Services 1070	\$4,001	\$58,522	\$27,223	\$15,101	\$51,195	\$14.591	\$8.371	\$10,411	\$8,431	\$6,452	\$4,472	\$2,492	\$513	\$513
Total Qualified Investment - Mains 1010	\$28,199,967	\$28,199,967	\$28,270,992	\$28,351,090	\$31,413,648	\$32,454,630	\$32,859,476	\$32,971,478	\$33,127,020	\$33,282,562	\$33,438,103	\$33,593,645	\$33,749,186	\$33,749,186
Total Qualified Investment - Services 1010	\$2,728,922	\$2,728,922	\$2,801,104	\$2,840,807	\$2,862,640	\$2,916,527	\$2,946,958	\$2,957,410	\$2,982,410	\$3,007,410	\$3,032,410	\$3,057,410	\$3,082,410	
Total Qualified Investment	\$32,101,463	\$32,937,567	\$33,679,525	\$34,562,238	\$35,149,450	\$35,645,509	\$35,931,752	\$36,108,654	\$36,287,216	\$36,465,778	\$36,644,340	\$36,822,902	\$37,001,464	\$3,082,410 \$37,001,464
Less: Accumulated Depreciation	(\$2,330,929)	(\$2,398,169)	(\$2,465,409)	(\$2.532,965)	(\$2,600,784)	(\$2,675,288)	(\$2,752,168)	(\$2,829,995)	(\$2,908,087)	(\$2,986,572)	(\$3,065,451)	(\$3,144,723)	(\$3.224.388)	(\$3.224.388)
Net Book Value	\$29,770,534	\$30,539,398	\$31,214,116	\$32,029,273	\$32,548,666	\$32,970,221	\$33,179,584	\$33,278,659	\$33,379,129	\$33,479,206	\$33,578,889	\$33,678,179	\$33,777,076	\$33,777,076
Average Net Qualified Investment		\$30,154,966	\$30,876,757	\$31,621,694	\$32,288,969	\$32,759,443	\$33,074,902	\$33,229,122	\$33,328,894	\$33,429,168	\$33,529,048	\$33,628,534	\$33,727,627	
Depreciation Rates														
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%	
Return on Average Net Qualified Investment														
Equity - Cost of Capital, inclusive of Income Tax Gross-up		5.9350%	5.9350%	5.9350%	5.9350%	5.9350%	5.9350%	5.9350%	5.9350%	5.9350%	5.9350%	A partons		
Debt - Cost of Capital		1.3900%	1.3900%	1.3900%	1,3900%	1.3900%	1.3900%	1,3900%	1.3900%	1.3900%	1.3900%	5.9350% 1.3900%	5.9350% 1.3900%	
Equity Component - inclusive of Income Tax Gross-up		\$149,141	\$152,711	\$156,396	\$159,696	\$162,023	\$163,583	\$164,346	\$164,839	\$165,335	\$165,829	\$166,321	\$166,811	\$1,937,031
Debt Component		\$34,930	\$35,766	\$36,628	\$37,401	\$37,946	\$38,312	\$38,490	\$38,606	\$38,722	\$38,838	\$38,953	\$39.068	\$453,660
Return Requirement		\$184,071	\$188,477	\$193,024	\$197,097	\$199,969	\$201,895	\$202,836	\$203,445	\$204,057	\$204,667	\$205,274	\$205,879	\$2,390,692
Investment Expenses														
Depreciation Expense - Mains		\$61,100	\$61,100	\$61,254	\$61,427	\$68,063	\$70,318	\$71,196	\$71,438	\$71,775	\$72,112	\$72,449	***	****
Depreciation Expense - Services		\$6,140	\$6,140	\$6,302	\$6,392	\$6,441	\$6,562	\$6,631	\$6,654	\$6,710	\$6,767	\$6,823	\$72,786	\$815,018
Property Taxes		\$49,618	\$49,618	\$49,618	\$49,618	\$49,618	\$49,618	\$49,618	\$49,618	\$49,618	\$49,618		\$6,879	\$78,441
General Public Notice Expense and Customer Notice Expense		\$2,012	CHIST MAKE	\$1,740	S0	\$0	S0	\$0	\$49,018	50	\$0	\$49,618	\$49,618 \$0	\$595,416
Total Expense		\$118,870	\$116,858	\$118,914	\$117,437	\$124,122	\$126,498	\$127,445	\$127,710	\$128,103	\$128,497	\$128,890	\$129,283	\$3,752
Total Revenue Requirements		\$302,941	\$305,335	\$311,938	\$314.534	\$324,091	\$328.393	\$330,281	\$331,155	\$332,160	\$333,164	\$334,164	\$335,162	\$3.883.318
GRIP Surcharge Revenues Collected Month	10	\$ 433,474	£ 299.47/	e 202 (20	6 210 202									
	9	3 433,474	\$ 388,476	\$ 392,639	\$ 348,297	\$ 336,190	\$ 310,885	\$ 297,495	\$ 356,344	\$ 343,105	\$ 369,347	\$ 391,404	\$ 413,989	\$4,381,645
Beginning True-Up														\$ (192,146)
(Over) and Under Recovery for the Month		\$ (130,533)	(40000000000000000000000000000000000000					\$ 32,786	\$ (25,189)	\$ (10,944)	\$ (36,183)	\$ (57,239)	\$ (78,827)	(\$498,327)
Monthly Interest (Expense)/Income	-		\$ (737)							\$ (957)	\$ (1,002)			(\$11,425)
Ending (Over) and Under Recovery	\$ (192,146)	\$ (323,207)	\$ (407,085)	\$ (488,690)	\$ (523,474)	\$ (536,643)	\$ (520,170)	\$ (488,326)	\$ (514,437)	\$ (526,338)	\$ (563,524)	\$ (621,853)		
Beg of Month Annual Interest Rate		2,50%	2.42%	2.42%	2.43%	2.42%	2.42%	2.28%	2.21%	2.21%	2.21%	2.21%	2.21%	
End of Month Annual Interest Rate		2.42%	2.42%	2.43%	2.42%	2,42%	2.28%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	
Average Monthly Interest Rate		0.21%	0.20%	0.20%	0.20%	0,20%	0.20%	0.19%	0.18%	0.18%	0,18%	0.18%	0.18%	

Florida Division of Chesapeake Utilities Corporation Gas Reliability Infrastructure Program (GRIP) Calculation of the Projected Revenue Requirements January 1, 2020 through December 31, 2020

Schedule C-2 Exhibit\_ Derrick M. Craig (DMC - 1) Page 9 of 15

<u>Item</u>	Beginning Balance	Forecast Jan	Forecast Fcb	Forecast Mar	Forecast Apr	Forecast May	Forecast Jun	Forecast Jul	Forecast Aug	Forecast Sep	Forecast Oct	Forecasi Nov	Forecast Dec	Year End Total
Qualified Investment														
Qualified Investment - Mains - Current 1070 Activity		\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$150,000	\$1,800,000
Qualified Investment - Mains - Closed 1070 Activity to Plant		(\$164,113)	(\$164,113)	(\$164,113)	(\$164,113)	(\$164,113)	(\$164,113)	(\$164,113)	(\$164,113)	(\$164,113)	(\$164,113)	(\$164,113)	(\$164,113)	(\$1,969,355)
Qualified Investment - Services - Current 1070 Activity		\$16,667	\$16,667	\$16,667	\$16,667	\$16,667	\$16,667	\$16,667	\$16,667	\$16,667	\$16,667	\$16,667	\$16,667	\$200,000
Qualified Investment - Services - Closed 1070 Activity to Plant		(\$16,709)	(\$16,709)	(\$16,709)	(\$16,709)	(\$16,709)	(\$16,709)	(\$16,709)	(\$16,709)	(\$16,709)	(\$16,709)	(\$16,709)	(\$16,709)	(\$200,513)
Qualified Investment - Mains - Current 1010 Activity		\$164,113	\$164,113	\$164,113	\$164,113	\$164,113	\$164,113	\$164,113	\$164,113	\$164,113	\$164,113	\$164,113	\$164,113	\$1,969,355
Qualified Investment - Services - Current 1010 Activity		\$16,709	\$16,709	\$16,709	\$16,709	\$16,709	\$16,709	\$16,709	\$16,709	\$16,709	\$16,709	\$16,709	\$16,709	\$200,513
Total Qualified Investment - Mains 1070	\$169.355	\$155,242	\$141,129	\$127,016	\$112,903	\$98,790	\$84,677	\$70,564	\$56,452	\$42,339	\$28,226	\$14,113	\$0	50
Total Qualified Investment - Services 1070	\$513	\$470	\$427	\$385	\$342	\$299	\$256	\$214	\$171	\$128	\$85	\$43	\$0	\$0 \$0
Total Qualified Investment - Mains 1010	\$33,749,186	\$33,913,299	\$34,077,412	\$34,241,525	\$34,405,638	\$34,569,751	\$34,733,863	\$34,897,976	\$35,062,089	\$35,226,202	\$35,390,315	\$35,554,428	\$35,718,541	
Total Qualified Investment - Services 1010	\$3,082,410	\$3,099,120	\$3,115,829	\$3,132,538	\$3,149,248	\$3,165,957	\$3,182,667	\$3,199,376	\$3,216,085	\$3,232,795	\$3,249,504	\$3,266,214	\$3,282,923	\$35,718,541
Total Qualified Investment	\$37,001,464	\$37,168,131	\$37,334,797		\$37,668,131	\$37,834,797	\$38,001,464	\$38,168,131	\$38,334,797	\$38,501,464	\$38,668,131	\$38,834,797	\$3,282,923	\$3,282,923
			40,100,100	200120111111	201,000,101	221,009,171	220,001,404	230,100,131	336,334,191	338,301,404	338,008,131	338,834,797	339,001,464	\$39,001,464
Less: Accumulated Depreciation	(\$3,224,388)	(\$3.304.446)	(\$3,384,898)	(\$3,465,743)	(\$3,546,981)	(\$3,628,613)	(\$3,710,637)	(82 702 055)	(\$3,875,866)	162 050 070		207.707.200		100000000000000000000000000000000000000
Net Book Value	\$33,777,076		\$33,949,899		\$34,121,150	\$34,206,184		(\$3,793,055) \$34,375,076	\$34,458,931					The state of the s
, , , , , , , , , , , , , , , , , , , ,	322777,070	\$55,605,065	200,747,077	334,033,721	\$54,121,130	3,34,200,184	334,290,827	334,373,076	334,438,931	\$34,542,394	\$34,625,464	\$34,708,140	\$34,790,423	\$34,790,423
Average Net Qualified Investment		\$33,820,380	\$33,906,792	\$33,992,810	\$34,078,435	\$34,163,667	\$34,248,506	\$34,332,951	\$34,417,003	\$34,500,663	\$34,583,929	\$34,666,802	\$34,749,282	
Depreciation Rates														
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%	
Return on Average Net Qualified Investment														
Equity - Cost of Capital, inclusive of Income Tax Gross-up		5.9350%	5.9350%	5.9350%	5.9350%	5.9350%	5,9350%	5.9350%	5.025000	2 002001	* *******		5.02	
Debt - Cost of Capital		1.3900%	1.3900%	1.3900%	1.3900%	1.3900%	1,3900%	1.3900%	5.9350% 1.3900%	5.9350% 1.3900%	5.9350% 1.3900%	5.9350% 1.3900%	5.9350% 1.3900%	
Equity Component - inclusive of Income Tax Gross-up		\$167,270	\$167,697	\$168,123	\$168,546	\$168,968	\$169,387	\$169,805	\$170,221	\$170,635	\$171,046	\$171,456	\$171,864	\$2.035.019
Debt Component		\$39,175	\$39,275	\$39,375	\$39,474	\$39,573	\$39,671	\$39,769	\$39,866	\$39,963	\$40,060	\$40,156	\$40,251	\$476,609
Return Requirement		\$206,445	\$206,973	\$207,498	\$208,020	\$208,541	\$209,059	\$209,574	\$210,087	\$210,598	\$211,106	\$211,612	\$212,115	\$2,511,628
Investment Expenses														
Depreciation Expense - Mains		\$73,123	\$73,479	\$73,834	\$74,190	\$74,546	\$74,901	\$75,257	\$75,612	\$75,968	\$76,323	\$76,679	\$77,035	\$900,947
Depreciation Expense - Services		\$6,935	\$6,973	\$7,011	\$7,048	\$7,086	\$7,123	\$7,161	\$7,199	\$7,236	\$7,274	\$7,311	\$7,349	\$85,706
Property Taxes		\$56,295	\$56,295	\$56,295	\$56,295	\$56,295	\$56,295	\$56,295	\$56,295	\$56,295	\$56,295	\$56,295	\$56,295	\$675,540
General Public Notice Expense and Customer Notice Expense		\$2,205	\$1,319	\$2,148	\$0	\$0	\$0	\$1,729	SO	\$0	\$0	\$0	\$0	\$7,402
Total Expense		\$138,558	\$138,066	\$139,288	\$137,533	\$137.927	\$138,319	\$140,442	\$139,106	\$139,499	\$139,892	\$140,285	\$140,679	\$1,669,595
Total Revenue Requirements		\$345,003	\$345,039	\$346,786	\$345,553	\$346,468	\$347,378	\$350,016	\$349,193	\$350,097	\$350.998	\$351.897	\$352.794	\$4.181.223
			Contraction of the last of the		-				THE PERSON NO.	WASHINGTON TO	45545770	200000000000000000000000000000000000000	2004,174	24,101,223

#### Florida Division of Chesapeake Utilities Corporation

Gas Reliability Infrastructure Program (GRIP) Projection of Qualified Mains & Services Revenue Requirements Surcharge Calculation - January 1, 2020 through December 31, 2020 Per Therm/Bill Rate

Schedule D-1 Exhibit Derrick M. Craig (DMC - 1) Page 10 of 15

1/1/20-12/31/20 Qualified Mains & Services Replacement Revenue Requirements

Services Net

\$ 4,181,223 96% \$4,013,974

4% \$167,249 \$4,181,223

TRUE-UP from Prior Period (Over)/Under Recovery Estimated thru 12/2019

\$ (701,897) \$ 3,479,325

2020 Qualified Mains & Services Replacement Revenue Requirements

96% \$3,340,152 4% \$139,173

Services Net

\$3,479,325

									DOLLARS			GRIP				Experir		ANNUAL	TYPICAL		AVERAGI
RATE CLASS	2020 BILLS	2020 THERMS	SERVICES COS %	MAINS COS %	SERVICES REV REQ		MAINS REV REQ	GRIP REV REQ	PER THERM	EXPANSION FACTOR				PER ILL	EXPANSION FACTOR	FACT	ORS	COST PER BILL	ANNUAL THERMS	ANNUAL COST	MONTHL' COST
FTS-A	14,343	88,655	14.34%	0.951%	\$ 19,957	7 S	31,765	\$51,722	\$0.58341	1.00503	s	0,58634	s	3.61	1.00503	s	3,62	\$ 43.49	110	\$64.50	\$5.3
FTS-B	28,057	289,901	9.74%	1.142%	\$ 13,555	5 \$	38,145	\$51,700	\$0.17834	1.00503	\$	0.17923	s	1.84	1.00503	\$	1.85	\$ 22.22	215	\$38.54	\$3.2
FTS-I	156,072	2,306,263	33.87%	5.861%	\$ 47,138	8 \$	195,766	\$242,904	\$0,10532	1.00503	s	0.10585	S	1.56	1.00503	S	1.56	\$ 18.77	275	\$29.11	\$2,43
FTS-2	10,359	600,119	12.69%	1.611%	\$ 17,66	1 \$	53,810	\$71,471	\$0.11909	1.00503	s	0.11969	S	6.90	1.00503	\$	6.93	\$ 83.21	875	\$104.73	\$8,73
FTS-2.1	8,694	999,642	7.83%	3,193%	\$ 10,897	7 S	106,651	\$117,548	\$0,11759	1.00503	s	0.11818	S	13.52	1.00503	s	13,59	\$ 163.06	1,575	\$186,14	\$15.51
FTS-3	3,730	1,177,039	3.93%	1.567%	\$ 5,469	S	52,340	\$57,809	\$0.04911	1.00503	\$	0.04936	\$	15.50	1.00503	\$	15.58	\$ 186.92	4,000	\$197,44	\$16.45
FTS-3.1	4,183	2,535,709	3.91%	4.294%	S 5,442	2 \$	143,426	\$148,868	\$0.05871	1.00503	s	0.05900	\$	35.59	1.00503	\$	35.77	\$ 429.21	7,300	\$430.73	\$35.89
FTS-4		3,211,195	4.37%	6.162%	\$ 6,082	2 \$	205,820	\$211,902	\$0.06599	1.00503	s	0.06632							12,500	\$829.01	\$69.08
FTS-5		1,187,497	1.24%	2.570%	S 1,726	5 S	85,842	\$87,568	\$0.07374	1,00503	S	0,07411							37,500	\$2,779.22	\$231.60
FTS-6		1,793,238	1.25%	2.750%	\$ 1,740	) <b>s</b>	91,854	\$93,594	\$0.05219	1.00503	S	0.05246							75,000	\$3,934.14	\$327.85
FTS-7		3,673,527	2.20%	7.615%	\$ 3,060	2 \$	254,353	\$257,415	\$0.07007	1.00503	\$	0.07043							150,000	\$10,563.82	\$880,32
FTS-8		5,244,040	1.62%	10.708%	S 2,255	5 S	357,663	\$359,918	\$0.06863	1.00503	s	0.06898							300,000	\$20,693.69	\$1,724.47
FTS-9		3,508,425	1.48%	15.171%	\$ 2,060	s (	506,734	\$508,794	\$0,14502	1.00503	S	0.14575							550,000	\$80,162.54	\$6,680,21
FTS-10		2,511,485	0.45%	6.539%	\$ 626	5 S	218,413	\$219,039	\$0.08721	1.00503	S	0.08765							850,000	\$74,505.60	\$6,208.80
FTS-11 and FTS-NGV		4,756,672	0.61%	13.551%	S 849	s	452,624	\$453,473	\$0.09533	1.00503	\$	0.09581							1,750,000	\$167,673.83	\$13,972.82
FTS-12		18,461,714	0.47%	16.315%	S 654	4 S	544,946	\$545,600	\$0.02955	1.00503	\$	0.02970							3,000,000	\$89,105.11	\$7,425.43
FTS-13		N/A	N/A	0.000%	S	- s	-	\$0	N/A		N/	'A							*	N/A	
TOTAL	225,438	52,345,121	100.00%	100.000%	\$ 139,173	3 S	3,340,152	\$ 3,479,325													

# Florida Public Utilities Company -Ft. Meade

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

Schedule A-1
Exhibit
Derrick M. Craig (DMC - 1)
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# of Services	Cost per Service	Projected Total Investment	_
Earnings Surveillance Report - December 31, 2017			
Equity Cost Rate		11.00%	
Weighted Equity Cost Rate		3.44%	
Revenue Expansion Factor		1.3559	
Weighted Equity Cost Rate, times Revenue Expansion Factor	r	4.660%	
Long Term Debt-CU		0.590%	
Short Term Debt		0.450%	
Short Term Debt-Refinanced LTD		0.000%	
Customer Deposits		0.010%	
Tax Credits-Weighted Cost		0.000%	
Weighted Debt Cost Rate		1.050%	
Overall Weighted Cost Rate		4.49%	

#### Florida Public Utilities-Ft. Meade

Gas Reliability Infrastructure Program (GRIP)
Calculation of the Projected Revenue Requirements
January 1, 2018 through December 31, 2018

9200000	Beginning	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Forecast	Forecast	Forecast	Forecast	Forecast	Year End
<u>Item</u>	Balance	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Qualified Investment										1000000	ALTONO, I	Secretary.	30000	J. Salar
Qualified Investment - Mains - Current 1070 Activity				50	\$0	SO	\$0	\$0	\$0	SO	\$0	SO	SO	\$0
Qualified Investment - Mains - Closed 1070 Activity to Plant				\$0	\$0	SO	\$0	\$0	SO	SO	\$0	SO	50	SO
Qualified Investment - Services - Current 1070 Activity		\$1,138	\$933	\$2,750	\$0	SO	\$39,036	\$11,721	\$2,574	\$711	\$2,407	\$187	SO	\$61,458
Qualified Investment - Services - Closed 1070 Activity to Plant			(\$733)	(\$1,338)	(\$2,750)	\$0	(\$19,321)	(\$21,945)	(\$9,617)	(\$2,449)	(\$3,118)	SO	(\$187)	(\$61,458)
Qualified Investment - Mains - Current 1010 Activity		SO	SO	SO	\$0	SO	\$0	\$0	50	SO	SO	\$0	50	SO
Qualified Investment - Services - Current 1010 Activity		\$0	\$733	\$1,338	\$2,750	So	\$19,321	\$21,945	\$9,617	\$2,449	\$3,118	\$0	\$187	\$61,458
Total Qualified Investment - Mains 1070	So	-		1907	26.1									
Total Qualified Investment - Services 1070		\$0	\$0	\$0	\$0	\$0	\$0	So	\$0	SO	\$0	\$0	\$0	SO
Total Qualified Investment - Services 1070  Total Qualified Investment - Mains 1010	(\$1)	\$1,137	\$1,337	\$2,749	(\$1)	(\$1)	\$19,715	\$9,491	\$2,448	\$711	(\$1)	\$186	(\$1)	(\$1)
	SO	\$0	\$0	\$0	\$0	\$0	\$0	SO	20	SO	\$0	\$0	\$0	\$0
Total Qualified Investment - Services 1010	\$188,731	\$188,731	\$189,464	\$190,802	\$193,552	\$193,552	\$212,873	\$234,818	\$244,434	\$246,883	\$250,001	\$250,001	\$250,188	\$250,188
Total Qualified Investment	\$188,730	\$189,868	\$190,801	\$193,552	\$193,552	\$193,552	\$232,588	\$244,309	\$246,883	\$247,594	\$250,001	\$250,188	\$250,188	\$250,188
Less: Accumulated Depreciation	(\$3,349)	(\$3,774)	(\$4,199)	(\$4,625)	(\$5,054)	(\$5,489)	(\$5,924)	(\$6,403)	(\$6,931)	(\$7,481)	(\$8,036)	(\$8,599)	(\$9,162)	(\$9,162)
Net Book Value	\$185,381	\$186,094	\$186,602	\$188,927	\$188,498	\$188,063	\$226,664	\$237,906	\$239,952	\$240,113	\$241,965	\$241,589	\$241,026	\$241,026
Average Net Qualified Investment	-	\$185,738	\$186,348	\$187,764	\$188,712	\$188,280	\$207,363	\$232,285	\$238,929	\$240,032	\$241,039	\$241,777	0011.000	
10 00 00 00 00 00 00 00 00 00 00 00 00 0						41031200	9207,200	0000000	4430,747	3240,032	3241,039	3241,777	\$241,307	
Depreciation Rates														
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%	
Return on Average Net Qualified Investment														
Equity - Cost of Capital, inclusive of Income Tax Gross-up		7.2000%	5.9400%	5.9400%	5.9400%	5.9400%	5.9400%	5.9400%	5,9400%	5.9400%	5.9400%	5.9400%	5,9400%	
Debt - Cost of Capital		1.0200%	1.0200%	1.0200%	1.0200%	1.0200%	1.0200%	1.0200%	1.0200%	1.0200%	1.0200%	1.0200%	1,0200%	
Equity Component - inclusive of Income Tax Gross-up		\$1,114	\$922	\$929	\$934	\$932	\$1,026	\$1,150	\$1,183	\$1,188	\$1,193	\$1,197	\$1,194	\$12.964
Debt Component		\$158	\$158	\$160	\$160	\$160	\$176	\$197	\$203	\$204	\$205	\$206	\$205	
Return Requirement	_	\$1,272	\$1,081	\$1,089	\$1,095	\$1.092	\$1,203	\$1,347	\$1,386	\$1,392	\$1,398	\$1,402	\$1,400	\$2,193
Investment Expenses														
Depreciation Expense - Mains		\$0	So	SO	\$0	\$0	200	1960	1990	19400	37247	1960		
Depreciation Expense - Services		\$425	\$425	\$426		1216.57	\$0	\$0	SO	\$0	\$0	SO	\$0	\$0
Property Taxes		\$309	\$309	\$309	\$429 \$309	\$435 \$309	\$435	\$479	\$528	\$550	\$555	\$563	\$563	\$5,813
General Public Notice Expense and Customer Notice Expense		\$0	\$0	\$309	\$309	(2007) (0.07)	\$309	\$309	\$309	\$309	\$309	\$309	\$309	\$3,708
Total Expense	_	\$734	\$734	\$735		\$0	\$0	\$0	SO	\$0	\$0	\$0	\$0	50
1.	_	3/34	3/34	3/33	\$738	\$744	\$744	\$788	\$837	\$859	\$864	\$872	\$872	\$9,521
Tax Reform-Adjustment for 2/1-2/6/2018			\$42											\$42
Total Revenue Requirements	_	\$2,006	\$1,857	\$1.824	\$1,833	\$1,836	\$1,947	\$2,135	\$2.223	\$2,251	\$2,262	\$2,274	\$2,272	\$24,720
GRIP Surcharge Revenues Collected Month	<u>s</u>	1,216 \$	864 S	624 \$	680 S	508 S	536 S	402 S	433 5	5 449 5	402 S	492 \$	786	\$7,394
Beginning True-Up														
(Over) and Under Recovery for the Month	S	790 S	992 S	1,200 \$	1.145	1.550	THE REAL PROPERTY.		The second second	en marriage en	10.00000			
Monthly Interest (Expense)/Income	\$	(16) 5			1,152 \$	1.328 \$	1.411 \$	1.733 S	10.000000000000000000000000000000000000				1,000	\$17,326
Ending (Over) and Under Recovery	\$ (13.528) \$				(16) \$ (9.458) \$	(14) \$ (8,144) \$	(12) S (6,746) S	(10) \$ (5,022) \$	(3,239) 5					(\$104)
P. CV. A. U		autore.						193046) 9	(Value / ) -	(15441) 2	410 3	2.202 3	3,093	3,693
Beg of Month Annual Interest Rate		1,49%	1.50%	1.66%	1.86%	1.90%	1.86%	2,00%	1.97%	2.02%	2.13%	2.24%	2.27%	
End of Month Annual Interest Rate		1.50%	1.66%	1.86%	1.90%	1.86%	2.00%	1.97%	2.02%	2.13%	2.24%	2.27%	2.50%	
Average Monthly Interest Rate		0.13%	0.13%	0.15%	0.16%	0.16%	0.16%	0.17%	0.17%	0.17%	0,18%	0.19%	0.20%	

#### Florida Public Utilities-Ft. Meade

Gas Reliability Infrastructure Program (GRIP)
Calculation of the Projected Revenue Requirements
January 1, 2019 through December 31, 2019

Schedule C-1 Exhibit\_\_\_\_\_\_ Derrick M. Craig (DMC+1) Page 13 of 15

	Beginning	Actual	Actual	Actual	Actual	Acmal	Actual	Actual	Forecast	Forecast	Forecast	Forecast	Forecast	Year End
<u>Item</u>	Balance	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Qualified Investment								117 <del>0</del> :	111111111111111111111111111111111111111		-	-	-	-
Qualified Investment - Mains - Current 1070 Activity				SO	\$0	50	\$0	\$0	\$0	SO	So	SO	So	\$0
Qualified Investment - Mains - Closed 1070 Activity to Plant				\$0	SO	SO	\$0	\$0	SO	SO	SO	SO	\$0	50
Qualified Investment - Services - Current 1070 Activity		\$2,536	\$0	\$3,971	(\$2,761)	\$0	\$0	\$0	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$8,744
Qualified Investment - Services - Closed 1070 Activity to Plant		\$0	(\$2,536)	SO	(\$1,870)	SO	\$660	\$0	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$1,000)	(\$8,744)
Qualified Investment - Mains - Current 1010 Activity		SO	\$0	\$0	\$0	SO	\$0	\$0	\$0	\$0	SO	So	SO	SO
Qualified Investment - Services - Current 1010 Activity		\$0	\$2,536	\$0	\$1,870	\$0	(\$660)	\$0	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$8,744
Total Qualified Investment - Mains 1070	SO	SO	\$0	SO	\$0	\$0	\$0	\$0	\$0	\$0	-	***	(7897.)	
Total Qualified Investment - Services 1070	(\$1)	\$2,535	(51)	\$3,970	(\$661)	(\$661)	(\$1)	(\$1)	(\$1)	(\$1)	SO	SO	SO	\$0
Total Qualified Investment - Mains 1010	so	SO	\$0	\$0	\$0	\$0	\$0	S0	(S1)	(S1) S0	(\$1)	(\$1)	(\$1)	(\$1)
Total Qualified Investment - Services 1010	\$250,188	\$250,188	\$252,724	\$252,724	\$254,594	\$254,594	\$253,934	100000000000000000000000000000000000000			\$0	SO	\$0	\$0
Total Qualified Investment	\$250,188	\$252,723	\$252,723	\$256,694	\$253,933	\$253,933	\$253,934	\$253,934	\$254,933	\$255,933	\$256,933	\$257,932	\$258,932	\$258,932
	32,0,100	White, the	4434,143	3230,094	\$233,933	3203,933	\$255,955	\$253,933	\$254,933	\$255,933	\$256,932	\$257,932	\$258,932	\$258,932
Loss: Accumulated Depreciation	(\$9,162)	(\$9,725)	(\$10,288)	(\$10,857)	(\$11.426)	(\$11,999)	(\$12,572)	(\$13,143)	(\$13,714)	(\$14,288)	(\$14,864)	(\$15,442)	(\$16,022)	(\$16,022)
Net Book Value	\$241,026	\$242,998	\$242,435	\$245,837	\$242,507	\$241,934	\$241,361	\$240,790	\$241,219	\$241,645	\$242,068	\$242,490	\$242,910	\$242,910
Average Net Qualified Investment	=	\$242,012	\$242,717	\$244,136	\$244,172	\$242,221	\$241,648	\$241,076	\$241,005	\$241,432	\$241,856	\$242,279	\$242,700	
Depreciation Rates														
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 4 4 4 4		
Approved Depreciation Rate-Services		2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2,60%	2.60%	
Return on Average Net Qualified Investment														
Equity - Cost of Capital, inclusive of Income Tax Gross-up		4.6600%	4,6600%	4.6600%	4.6600%	4.6600%	4,6600%	4.6600%	4,6600%	4.6600%	4.6600%	4.6600%	4.6600%	
Debt - Cost of Capital		1.0500%	1.0500%	1.0500%	1.0500%	1.0500%	1.0500%	1.0500%	1.0500%	1.0500%	1.0500%	1.0500%	1.0500%	
Equity Component - inclusive of Income Tax Gross-up		\$940	\$943	\$948	\$948	\$941	\$938	\$936	\$936	\$938	\$939	\$941	\$942	\$11,290
Debt Component		\$212	\$212	\$214	\$214	\$212	\$211	\$211	\$211	\$211	\$212	\$212	\$212	\$2,544
Return Requirement	_	\$1,152	\$1,155	\$1,162	\$1,162	\$1,153	\$1.150	\$1,147	\$1,147	\$1,149	\$1,151	\$1,153	\$1,155	\$13,834
Investment Expenses														
Depreciation Expense - Mains		SO	Su	SO	50	100	-	190	VOCCHI		0.500			
Depreciation Expense - Services		\$563	\$563	\$569	\$569	\$0 \$573	\$0	\$0	\$0	\$0	SO	\$0	SO	\$0
Property Taxes		\$402	\$402	\$402	\$402	\$402	\$573 \$402	\$571	\$571	\$574	\$576	\$578	\$580	\$6,860
General Public Notice Expense and Customer Notice Expense		SO	\$0	\$402	\$402	\$402	\$402	\$402	\$402	\$402	\$402	\$402	\$402	\$4,824
Total Expense	-	\$965	\$965	\$971	\$971	\$975	\$975	\$973	\$973	\$976	\$0	\$0	\$0	\$0
a summing a sum that of the ser	-	9,02	9705	9771	37/1	2713	3773	3913	3973	3976	\$978	\$980	\$982	\$11,684
Total Revenue Requirements	_	\$2,117	\$2,120	\$2,133	\$2,133	\$2,128	\$2,125	\$2,120	\$2,120	\$2,125	\$2,129	\$2,133	\$2,137	\$25.518
GRIP Surcharge Revenues Collected Month		\$3,685	\$3,385	\$2,293	\$2,264	\$70	\$1,828	\$2,116	\$1,480	\$1,646	\$1,595	\$1.887	\$2,839	\$25,087
Beginning True-Up														
(Over) and Under Recovery for the Month		(1,568)	S (1,265) S	(160) S	(131) S	2,058 \$	297 S		220		9 9999	N2357 13	3	3,693
Monthly Interest (Expense)/Income		6	Automotive Co.				5 S	4 S	100000000000000000000000000000000000000			- Carrier 12	A CONTRACTOR CONTRACTOR	
Ending (Over) and Under Recovery	\$ 3,693 \$						2,943 \$	6 S 2,953 S	10			9 S 4,882 S		\$64 4,188
Beg of Month Annual Interest Rate		2.50%	2.42%	2.42%	2.43%	2.42%	2.42%	2.28%	2.21%	2.21%	2.21%	2.2197	22101	
End of Month Annual Interest Rate		2.42%	2.42%	2.43%	2.42%	2.42%	2.28%	2.21%	2.21%	2.21%		2.21%	2.21%	
Average Monthly Interest Rate		0.21%	0.20%	0.20%	0.20%	0.20%	0.20%	0.19%	0.18%	0.18%	2.21%	2.21%	2.21%	
				W. 2078	W.2478	17.21178	17,2076	11.1976	11.1876	0.18%	0.18%	0.18%	0.18%	

#### Florida Public Utilities-Ft. Meade

Gas Reliability Infrastructure Program (GRIP)
Calculation of the Projected Revenue Requirements
January 1, 2020 through December 31, 2020

Item	Beginning Balance	Forecast Jan	Forecast Feb	Forecast Mar	Forecast Apr	Forecast May	Forecast Jun	Forecast Jul	Forecast Aug	Forecast Sep	Forecast Oct	Forecast Nov	Forecast Dec	Year End Total
Qualified Investment			67		-	-	5,000	-	11155	220	5655	1101	Dec	Total
Qualified Investment - Mains - Current 1070 Activity		\$0	\$0	\$0	SO	SO	\$0	\$0	\$0	\$0	\$0	\$0	SO	\$0
Qualified Investment - Mains - Closed 1070 Activity to Plant		50	50	\$0	\$0	\$0	\$0	SO	SO	So	50	\$0	SO	\$0
Qualified Investment - Services - Current 1070 Activity		\$0	50	\$0	SO	\$0	\$0	\$0	\$0	SO	SO	50	SO	\$0
Qualified Investment - Services - Closed 1070 Activity to Plant		\$0	SO	\$0	\$0	SO	\$0	\$0	\$0	SO	SO	\$0	\$0	SO
Qualified Investment - Mains - Current 1010 Activity		\$0	SO	\$0	50	50	\$0	\$0	\$0	SO	SO	SO	\$0	50
Qualified Investment - Services - Current 1010 Activity		\$0	SO	SO	\$0	\$0	\$0	\$0	SO	So	\$0	SO	So	\$0 \$0
Total Qualified Investment - Mains 1070	So	\$0	SO	So	SO	SO	SO	\$0	\$0	SO	\$0	So	***	-
Total Qualified Investment - Services 1070	(S1)	(\$1)	(\$1)	(\$1)	(\$1)	(S1)	(\$1)	(\$1)	(\$1)	(\$1)	(\$1)	(\$1)	\$0 (\$1)	\$0
Total Qualified Investment - Mains 1010	SO	\$0	\$0	SO	SO	SO	\$0	S0	\$0	S0	\$0	(S1) S0	(S1) S0	(\$1)
Total Qualified Investment - Services 1010	\$258,932	\$258,932	\$258,932	\$258,932	\$258,932	\$258,932	\$258,932	\$258,932	\$258,932	\$258,932	\$258,932	\$258,932	\$258,932	\$0
Total Qualified Investment	\$258.932	\$258,932	\$258,932	\$258,932	\$258,932	\$258,932	\$258,932	\$258,932	\$258,932	\$258,932	\$258,932	\$258,932	\$258,932	\$258,932 \$258,932
					750000	92.0,552		9270,722	9270,752	3236,732	\$238,732	3238,932	\$238,932	\$258,932
Less: Accumulated Depreciation	(\$16,022)	(\$16,605)	(\$17,188)	(\$17,771)	(\$18,354)	(\$18.937)	(\$19,520)	(\$20,103)	(\$20,686)	(\$21,269)	(\$21,852)	(\$22,435)	(\$23,018)	(\$23,018)
Net Book Value	\$242,910	\$242,327	\$241,744	\$241,161	\$240,578	\$239,995	\$239,412	\$238,829	\$238,246	\$237,663	\$237,080	\$236,497	\$235,914	\$235,914
													0.000.011	9200,014
Average Net Qualified Investment	=	\$242,618	\$242,035	\$241,452	\$240,869	\$240,286	\$239,703	\$239,120	\$238,537	\$237,954	\$237,371	\$236,788	\$236,205	
Depreciation Rates														
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%	
Return on Average Net Qualified Investment														
Equity - Cost of Capital, inclusive of Income Tax Gross-up		4.6600%	4.6600%	4,6600%	4.6600%	4,6600%	4.6600%	4.6600%	4.6600%	4.6600%	4,6600%	4.6600%	4.6600%	
Debt - Cost of Capital		1.0500%	1.0500%	1,0500%	1.0500%	1.0500%	1.0500%	1.0500%	1.0500%	1.0500%	1.0500%	1.0500%	1.0500%	
Equity Component - inclusive of Income Tax Gross-up		\$942	\$940	\$938	\$935	\$933	\$931	\$929	\$926	\$924	\$922	\$920	\$917	\$11,157
Debt Component		\$212	\$212	\$211	\$211	\$210	\$210	\$209	\$209	\$208	\$208	\$207	\$207	\$2,514
Return Requirement	-	\$1,154	\$1,152	\$1,149	\$1,146	\$1,143	\$1,141	\$1,138	\$1.135	\$1,132	\$1,129	\$1,127	\$1,124	\$13,670
Investment Expenses														
Depreciation Expense - Mains		SO	\$0	SO	SO	SO	\$0	\$0	\$0	\$0	200	1960	120	7000
Depreciation Expense - Services		\$583	\$583	\$583	\$583	\$583	\$583	\$583	\$583	\$583	\$0	SO	\$0	\$0
Property Taxes		\$405	\$405	\$405	\$405	\$405	\$405	\$405	\$405	\$405	\$583 \$405	\$583	\$583	\$6,996
General Public Notice Expense and Customer Notice Expense		S0	SO.	\$0	\$0	\$0	\$0	S0	S0	\$403	\$405	\$405	\$405	\$4,860
Total Expense	-	\$988	\$988	\$988	\$988	\$988	\$988	\$988	5988	\$988	\$988	\$988	\$988	\$0
	100				9700	\$200	3700	3700	3200	3788	3788	3988	3988	\$11,856
Total Revenue Requirements	-	\$2,142	\$2,140	\$2,137	\$2,134	\$2,131	\$2,129	\$2,126	\$2,123	\$2,120	\$2,117	\$2,115	\$2,112	\$25,526

#### Florida Public Utilities Company-Fort Meade

Gas Reliability Infrastructure Program (GRIP)
Projection of Qualified Mains & Services Revenue Requirements
Surcharge Calculation - January 1, 2020 through December 31, 2020
Per Therm Rate

Schedule D-1
Exhibit\_\_\_
Derrick M. Craig (DMC - 1)
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1.	1/1/20-12/31/20 Qualified Mains & Services Replacement Revenue Requ	uirements		S	25,526
	Mains	0%	\$0		
	Services	100%	\$25,526		
	Net		\$25,526		
2.	TRUE-UP from Prior Period (Over)/Under Recovery Estimated thru 12/	2019		S	4,188
3.	2020 Qualified Mains & Services Replacement Revenue Requirements			S	29,715
	Mains	0%	\$0		
	Services	100%	\$29,715		
	Net	10 <u></u>	\$29,715		

_	RATE SCHEDULE	2019 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
R	ESIDENTIAL	69,663	58.00%	22,00%	\$17,235	\$0	\$17,235	\$0.24740	1.00503	\$0.24865	250	\$62.16	\$5.18
	COMMERCIAL SMALL General Service & GS Transportation)	65,892	17.00%	23.00%	\$5,052	\$0	\$5,052	\$0.07666	1.00503	\$0.07705	2,500	\$192,62	\$16.05
	COMM, LRG VOLUME  Large Vol & LV Transportation)	0	25.00%	46.00%	\$7,429	\$0	\$7,429	\$0.00000	1.00503	\$0.00000	25,000	\$0.00	\$0.00
	NTERRUPTIBLE 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
G	SENERAL LIGHTING SERVICE	0	0.00%	1.00%	\$0	\$0	\$0	\$0.00000	1,00503	\$0.00000	500	\$0.00	\$0.00

TOTAL	135,555	100.00%	100.00%	\$29,715	\$0	\$29,715