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April 11, 2023

VIA E-PORTAL

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

Re: Docket No. 20230029 – GU: Petition for approval of gas utility access and replacement directive, by Florida Public Utilities Company.

Dear Mr. Teitzman:

Attached for filing, please find Florida Public Utilities Company's Responses to Staff's First Data Requests issued in the above-referenced docket on March 30, 2023.

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

Sincerely,



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MEK

Docket No. 20230029 – GU: Petition for approval of gas utility access and replacement directive, by Florida Public Utilities Company.

**FLORIDA PUBLIC UTILITIES COMPANY’S RESPONSES TO
STAFF’S FIRST DATA REQUESTS**

- 1. Please refer to Florida Public Utilities Company’s (FPUC or Utility) petition for approval of gas utility access and replacement directive (GUARD). Please indicate whether or not each of the improvements proposed under FPUC’s GUARD program are the result of an official regulatory requirement (such as a requirement from the Pipeline and Hazardous Materials Safety Administration (PHMSA) or other regulatory authority). If so, please identify each requirement and the regulatory authorities that issued each requirement for each proposed improvement. If not, please provide FPUC’s perceived justification for each requested improvement.**

Company Response:

The specific proposed improvements requested under the FPUC’s GUARD program are not the result of an official regulatory requirement but are driven by risks identified under the ongoing FPUC Distribution Integrity Management Program (DIMP), as well as by multiple special DIMP risk assessments performed by an independent outside contractor. Enhancing safety by identifying and reducing pipeline integrity risks is the purpose of the PHMSA 2009 regulatory requirement, “Pipeline Safety: Integrity Management Program for Gas Distribution Pipelines”. In addition, in 2011, PHMSA issued a “Call to Action” to accelerate the repair, rehabilitation, and replacement of the highest risk pipeline infrastructure. Although the 2012 FPUC GRIP program focused on eliminating high-risk facilities such as bare steel and cast iron pipe, the FPUC GUARD program will further reduce distribution system integrity risks by eliminating pending threats such as vintage plastic pipe subject to brittle failures (PHMSA 1999 advisory bulletins (ADB-99-01 and ADB-99-02)), inaccessible gas main and gas services that exist in the rear of customer homes, steel pipe with corrosion control challenges, and aging infrastructure. While the Company’s systems are safe and adhere to industry standards, this program will ensure that our facilities continue to meet ongoing federal initiatives and appropriately reduce any unnecessary risks to the public due to facilities that are aged or inaccessible.

- 2. Please identify and provide any studies conducted supporting the need for the proposed GUARD improvements and its benefits to the general body of ratepayers.**

Company Response:

The Company’s independent outside contractor performed and prepared two different studies. The first was a risk analysis of the existing FPUC facilities of record that exist within the rear lot areas of premises, and the second outlined a risk analysis of the “problematic” and

“reliability” facilities of record that pose a heightened risk for breach or failure; and thus, an elevated safety risk as well. The GUARD Program would give FPUC the ability to take proactive measures to enhance the safety and reliability of its system for years to come, and the FPUC customers will benefit from a safer and more reliable natural gas service and a sustainable system for many upcoming decades. More information about these analyses is provided in the response to Data Request question 6B and 6C.

3. **Please refer to FPUC’s petition, paragraph 3, on pages 2 through 3, for the following questions.**
 - a. **Please explain how the 10-year term was determined for the GUARD program. For each alternative term considered, please explain why it was not selected.**
 - b. **Please explain how the estimated total GUARD program cost shown in Exhibit 2 of the petition was developed.**
 - c. **Please provide a table identifying the estimated annual GUARD program costs by each proposed improvement for each year of the 10-year program term.**

Company Response:

3A – The Company anticipates that it will be able to complete the work detailed in this filing within the 10-year timespan. After this initial term, the Company wishes to continue to use the program and established reporting methods to include additional projects in the scope of the GUARD as assessments of the systems are completed and projects are identified. This will allow the Company to continue to complete the work in a timely manner in order to keep the system safe without the increased cost of a rate case. As the previously approved GRIP program was a 10-year program, FPUC believes that it is prudent to re-evaluate the GUARD program after a similar 10 year period. While the identification of risk under the Company’s DIMP will always be ongoing, an approved GUARD program will substantially improve the risk profile of the Company’s system.

3B – The Company utilized historical costs from the GRIP program in order to establish a loaded run rate by proposed improvement type, adjusted for future value for the potential for inflated construction costs that may occur during the 10-year program. The run rate was then extended against the planned scope of replacement each year in order to obtain the total GUARD program cost. For each project type, the Company used the recommendations of the independent outside contractor to determine the anticipated scope of construction work.

3C – A table identifying the estimated annual GUARD program costs by each proposed improvement for each year of the 10-year program term has been provided and is attached as Exhibit ROG 3C – GUARD Program Costs.

While the Company will do its best to adhere to its plan to the best of its ability, the projects filed and completed each year may vary based on a multitude of variables that may or may not

be in the Company's control such as timelines, construction planning, cost of projects, contractor resources, risk factors, or other construction inputs.

4. **Please provide a construction timeline detailing anticipated construction activities throughout the 10-year term of the GUARD program.**

Company Response:

A program construction schedule identifying the timeline of projects for the 10-year term of the GUARD program has been provided and is attached as Exhibit DR 4 – GUARD Construction Schedule. While the Company will do its best to adhere to its plan to the best of its ability, the projects filed and completed each year may vary based on a multitude of variables that may or may not be in the Company's control such as timelines, construction planning, cost of projects, contractor resources, risk factors, or other construction inputs.

5. **Please refer to FPUC's petition, paragraph 7, on page 4, for the following questions.**
 - a. **Please identify all remaining activities under the Utility's current Gas Reliability Infrastructure Program (GRIP). As part of this response, please identify the current status and the estimated completion date for each remaining activity.**
 - b. **Please identify which components of the GUARD program are currently included under the GRIP.**
 - c. **Provide the total GRIP investment to date (2012-2023).**

Company Response:

5A – The last GRIP project to be completed is the West Palm Beach project. The Company is currently working on coordinating with the City of West Palm Beach and acquiring permits for the project. The Company estimates completing the project by the end of July 2023. The estimated cost of the project is \$170,000.

5B – None of the proposed GUARD projects were included in GRIP program or the recently approved rate case. However, per paragraph 15 of the petition any remaining bare steel, cast iron, and steel tubing services that are discovered that would've been eligible under GRIP will be completed under GUARD as it is discovered.

5C – The total estimated GRIP investment from 2012-2023 is \$203,176,721. This includes the West Palm Beach project in progress and any residual restoration from other GRIP projects.

6. **Please refer to FPUC's petition, paragraph 8, on pages 4 through 5, for the following questions.**
 - a. **Please identify the outside contractor utilized, and detail how this contractor was selected. As part of this response, please identify the contractor cost and all alternative contractors considered, if any, along with the associated cost and reason they were not selected for each.**
 - b. **Please detail the results of the data analysis and risk assessment conducted by the outside contractor.**

- c. Please provide a copy of the outside contractor’s recommendation and prioritization of facilities that need to be replaced.**
- d. Please state if FPUC will seek recovery of the contractor fees. If yes, please explain in which proceeding.**

Company Response:

6A – FPUC utilized the services of independent outside contractor “R.J. Ruiz and Associates, Inc.” dba “RUIZ” to facilitate the DIMP review of the Company’s natural gas facilities of record. The Cost of services for RUIZ fell below the Company’s internal procurement policy requirement to issue a bid. This contractor was selected because of their prior relationship with the Company, professional engineering expertise, unique experience, and immense knowledge in natural gas distribution and transmission systems, and in assessing gas distribution system DIMP risk. Key staff members for the contractor have been intimately involved in similar assessments and similar programs for other natural gas utilities in Florida (i.e. the Florida City Gas SAFE program), which was similarly focused on rear easement access projects. Alternative contractors were considered, but RUIZ was the most qualified for the subject matter and scope of this assessment due to his work with other similar programs. The total estimated cost for the services of R.J. Ruiz and Associates is \$40,000.

6B – RUIZ performed a thorough review of the records provided by the Company, collaborated with the Company’s Subject Matter Experts to complete data analyses, conducted two different DIMP risk assessments, and developed a DIMP risk ranking model to arrive at the following conclusion: we have high confidence that FPUC’s natural gas system is overall safe and reliable, but there are several opportunities for improvement.

The Company currently operates and maintains over four hundred forty-six (446) miles of residential rear lot natural gas distribution mains, of which approximately two hundred thirty-seven (237) miles are at a higher risk of failure. The risk assessments that were completed demonstrate that certain threats do exist on the FPUC natural gas distribution facilities of record located within rear lots of residential homes, and these two hundred thirty-seven (237) miles of gas pipe segments have a higher likelihood of failure and consequence of failure when compared to other rear-lot facilities that FPUC operates.

The Company currently operates over ninety-seven (97) miles of pipe that is at increased risk because it is constructed of material that has been identified as being subject to heightened risk of failure. Approximately seventy-six (76) miles of these facilities are considered to show a moderate-to-high level of risk. The issues that these problematic facility segments show are, among other items, pipeline under buildings, Aldyl-A plastic pipe, difficult to locate plastic pipe due to deteriorated tracer tape or wire, inability to complete multiple inactive service disconnections due to faulty fittings, coated steel pipe with disbondment issues or cathodic protection integrity issues such as stray current or isolated steel, and exposed pipe.

The Company also operates approximately sixty-six (66) “span pipe” segments that also show a considerable level of risk. These are aboveground and exposed pipe segments that are not only

subject to natural force or outside force damage, but also demonstrate historical issues around coating deterioration, sagged pipe and stresses associated with movement.

In addition, twenty-two (22) of the Company's district metering and pressure regulating stations and city gate tap stations also show moderate-to-high levels of risk. Four (4) stations have notable evidence of corroded pipe, equipment and features, while the others show the presence of obsolete equipment currently in-service which presents challenges for maintenance and operations.

6C – A copy of the outside contractor's final engineering reports executive summary and recommendations has been provided as attached Exhibit DR 6C-1 – Ruiz Executive Summary – Rear Lot and Exhibit DR 6C-2 – Ruiz Executive Summary – Problematic.

6D – Similar to the treatment of other engineering, designing and planning construction costs, the Company plans to capitalize the costs of RUIZ. The costs will be included in the initial projects for 2023.

7. Please provide a general description of the locations of proposed GUARD projects to be completed from April 2023 to December 2024.

Company Response:

The Company plans to initially focus on rear lot and problematic pipe replacement projects in the City of Winter Springs, the Town of Lake Park, and at the Village of Indiantown. The 2023 Span pipe replacement projects will take place in unincorporated Palm Beach County and within the city of West Palm Beach. In 2024, the Company plans to have ongoing projects within multiple areas of its service territory, including Palm Beach County and the Central Florida areas of its system such as Winter Haven, Sanford, Debary, and the New Smyrna Beach area.

8. Please provide Exhibit 4 in Excel format.

Company Response:

The Excel version of Exhibit 4 has been provided as Exhibit DR 8 – GUARD Revenue Requirements.

9. Referring to Exhibit 4, page 2 of 3, of the petition, please explain the beginning balance of \$5.84 M. Does this amount include the remaining balance of GRIP investments that was not rolled into rate base in Docket No. 20220067-GU (rate case docket)?

Company Response:

The GUARD beginning balance of \$5.84MM represents GRIP investments from 2022 not rolled into rate base in the recent rate case Docket No. 20220067-GU.

10. Paragraph 31 of the petition states “A full assessment of the system for projects and facilities that could fall under this project is still in progress.” However, paragraph 8

states that the company will utilize the contractor's recommendation and prioritization of facilities. Please explain the process of how the company prioritizes facilities.

Company Response:

At the time of filing the GUARD application only a preliminary assessment was completed by the Contractor. The Company has received the final risk assessment reports prepared by the outside contractor, which outlines and ranks the risk of the facilities considered for replacement under the scope of this program. The risk ranking methodology utilized by the contractor is in accordance with section 192.1007(c) of Title 49 of the Code of Federal Regulations, which considers and evaluates current and potential threats on the gas distribution system as well as the likelihood and consequence of failure by pipe segment. The results of the contractor report were reviewed and adjusted by the Company's subject matter experts. The Company will prioritize the facilities for replacement based on highest risk of failure identified in the contractor's risk assessment, input from the Company subject matter experts, and from the Company's DIMP, which considers factors such as pipe diameter, material, pipeline class locations, surrounding population density, leak history, areas with common risky materials and other environmental factors. Paragraph 31 of the petition states that the full assessment is still progress because the Company intends on conducting this DIMP risk assessment annually to ensure all areas are being assessed and that the highest risk areas are being addressed earlier in the program.

- 11. Please refer to FPUC's petition, paragraph 30, on page 13, for the following questions.**
- a. Please identify the estimated construction-related savings and all associated benefits FPUC anticipates by implementing the GUARD program now as opposed to later.**
 - b. Please explain the process the Utility intends to use to select construction contractors for the GUARD program.**

Company Response:

11A – FPUC established an accelerated 10-year term for the GUARD because the Company believes that implementation of this program now, as opposed to later or on a more gradual basis, may have the added benefit of construction-related savings over the life of the program. The Company believes that material and construction labor costs may increase as a direct result of inflation, market conditions and other factors. Addressing the Company's construction needs now will avoid the impact of market increases to the extent that much of GUARD replacement activity may be addressed during the earlier years of the Program. FPUC will always consider cost saving measures such as coordinating with other utilities, municipalities, and sharing restoration costs with other utilities and contractors.

11B – The Company will strictly adhere to its supply chain and procurement procedures for vendor selection. FPUC will prepare a Request for Proposal outlining the specific requirements and expectations of the program and will release invitations to bid on the projects under the program to multiple qualified Contractors for competitive bidding. Contractor selection

procedures will follow an intense evaluation of qualifications, safety record, diversity, experience, and pricing.

12. Please refer to FPUC’s petition, paragraph 10, on pages 5 through 6, for the following questions.

- a. Please detail what criteria FPUC used to determine that approximately 237 miles of mains require replacement of the 446 miles of mains identified as being located in rear easements/difficult to access areas.**
- b. Please explain how the Utility intends to refine its estimate of the miles of mains that will be replaced under the GUARD program. As part of this response, please indicate what additional data the Utility requires to refine this estimate, and identify how long the refinement process is expected to take.**
- c. Please identify any plans for the remainder of mains located in rear easements/difficult to access areas that are not planned for replacement under the GUARD program.**

Company Response:

12A – The DIMP risk ranking model (developed by the contractor) analyzes risk characteristics of likelihood and consequence of failure which were input from sources such as existing rear mains with historical leaks by cause, rear mains with historical inaccessible “Cannot-Get-In (CGI)” locations, attributes of the rear mains such as pressure, material and diameter of pipeline. It also uses public GIS data to determine population density in order to consider both the number of structures within proximity and the average distance between main and structure. The risk model is geo-spatially aware which means the cause and consequence scores are unique to the geographical location of the main. It uses both the attributes of the pipeline, CGI data, and leak repair data while considering the physical location of the data to produce geographically accurate risk scores. Because the model indicated rear lot segments were considered “high risk” based on the aforementioned approach, an additional review was conducted. From that review, segments that existed within a common residential neighborhood development that were installed during the same time frame and contained pipeline segments of similar characteristics such as diameter, material type, and coating type, were grouped as “contiguous high risk” mains. From the total rear lot mileage of four hundred forty-six (446) miles, the total mileage of contiguous high risk mains with a Risk Rank priority 1 is two hundred thirty-seven (237) miles.

12B – Based on the data provided within the DIMP risk assessment reports, The Company has high levels of confidence on the initial two hundred thirty-seven (237) rear lot miles necessary to be replaced. However, during specific project limit selection of the two hundred thirty-seven (237) rear lot miles to be replaced, certain design requirements may cause slight adjustments in actual rear main to be retired due to factors such as maintaining cathodic protection continuity, feasibility of construction installation means and methods, and other considerations. The Company anticipates this mileage adjustment to be minor in nature.

12C – The remainder of mains located in rear easements/difficult to access areas that are not planned for replacement under the GUARD program will continue to be monitored closely and continue to be operated and maintained. The Company will continue to conduct its annual DIMP risk assessment to ensure all areas are being assessed and that the highest risk areas are being addressed during the scope of the program. FPUC will determine through the annual DIMP risk assessments if additional rear lot mains require replacement in the future.

13. Considering some pipelines are on private property and/or have rear access, would the property owner need to be onsite at the time of the work being done?

Company Response:

The Company’s planned construction activities under this program will take place on road rights-of-way so property owner involvement should be minimal. As with all construction projects, however, the Company will be notifying all adjoining landowners of the planned construction activities well in advance of beginning each project. For the rear easement access projects, the Company’s contractor will need to access the customer’s private property for purposes of installing new service lines, relocating or replacing natural gas meters, relighting gas appliances, and cutting off and removing the retired gas service “risers”. The Company and its contractors will schedule and coordinate these efforts very closely with each property owner to ensure a seamless transition and minimal impact to the customer.

14. Please refer to FPUC’s petition, paragraph 20, on page 10. Please explain how the estimate of 20 percent more mains to be installed than retired was determined.

Company Response:

Exhibit 3 of the petition demonstrates a schematic drawing example of how additional mains are needed to be installed in order to retire existing rear lot mains. The example shows a common scenario where in order to retire a single existing rear lot main, which is currently common to service natural gas to premises on both sides of the neighborhood block (red lines), the Company may need to install two (2) mains, each within either side of the front road rights-of-way (brown/yellow lines). On a contiguous project, these new front gas mains (brown/yellow lines) would then be common to premises on both sides of the street which would involve both “shortside” service lines as well as “longside” service line road crossings. The Company estimates that for every five (5) rear lot gas mains to be retired, six (6) new front gas mains will be necessary, which equates to a 20 percent difference of mains installed versus retired.

15. Please list the municipalities and communities that have a single source of gas. Have those communities experienced any gas emergency situations and hence the need to have an additional backup natural gas supply pipeline? Please discuss.

Company Response:

The Company is not proposing to build a second feed or to loop all communities that have a single source of gas. However, communities such as Palm Beach Shores, Singer Island, South

Palm Beach, Manalapan, New Smyrna Beach, Edgewater, Deerfield Beach, and Hypoluxo Island are particularly vulnerable to service disruption based on their location on islands or peninsulas, as well as other factors. While these communities have experienced small outages and disruptions, there have not been any recent gas emergency situations that required additional backup supply. However, given the increased risk of disruption due to third party damage and natural disasters associated with these locations, the Company will continue to monitor and prioritize projects as necessary in order to mitigate risks for failure. Additionally, repairing subaqueous facilities requires additional expertise and coordination with contactors and municipalities to mend those facilities if they were to be damaged. Repairs across bridge spans could also require bridge lane shutdowns that could cause traffic disruptions to the community.

16. If work on a gas pipeline is expected to cause outages, how long should a customer or business be expected to be without natural gas as the petition, on paragraph 18 states that some communities have a single gas pipeline?

Company Response:

Under normal operating conditions, Company-scheduled gas pipeline construction, maintenance, or work is generally performed in a way that does not cause outages. Paragraph 18 of the petition elaborates on the risk of certain service territory communities that currently lack redundancy due to a single source pipeline. These instances represent risk primarily due to potential third-party excavation damage or other outside force risk of rupture. Thus, while planned work by the utility on the line should not entail an outage, or an outage of any significance, an “uncontrollable” rupture caused by a third party to one of these pipelines that serve as the sole source of natural gas to the community, could have a duration of multiple weeks.

17. Paragraph 20 of the petition states that “polyethylene pipe will be used for most replacement and relocation of pipe as well as installation of new pipe.” Please state the estimated lifespan of the polyethylene pipe.

Company Response:

According to industry standard specifications such as American Society for Testing and Materials (ASTM) D2513: “Standard Specification for Polyethylene (PE) Gas Pressure Pipe, Tubing, and Fittings”, as well as publications by the Plastics Pipe Institute (PPI), the life expectancy of polyethylene pipe is conservatively 50 to 100 years.

“Durability – PE pipe installations are cost-effective and have long-term cost advantages due to the pipe’s physical properties, leak-free joints and reduced maintenance costs. The PE pipe industry estimates a service life for PE pipe to be, conservatively, 50-100 years provided that the system has been properly designed, installed and operated in accordance with industry established practice and the manufacturer’s recommendations. This longevity confers savings in replacement costs for generations to come. Properly designed and installed PE piping

systems require little on-going maintenance. PE pipe is resistant to most ordinary chemicals and is not susceptible to galvanic corrosion or electrolysis.”¹

However as stated in the most recent rate case the approved depreciation rate for mains and services are 1.60% and 2.50%, which equates to a depreciable life of 75 years and 55 years respectively.²

18. Please refer to FPUC’s petition, paragraph 16, on page 8, for the following questions.

- a. Please detail any reliability issues experienced at each of the proposed locations for the reliability improvements under the GUARD program by year for the past 10 years. As part of this response, please indicate whether or not FPUC’s system reliability would be affected if these improvements are not made. If so, please explain how.**
- b. Please identify a Commission Order where a similar project has been approved outside of a base rate proceeding.**

Company Response:

18A – In general, the Company’s natural gas pipeline system is safe and reliable, but the Company has identified several communities that are at higher risk for reliability issues than others, which can rise to the level of a safety risk depending upon the community and its residents. In most cases, these communities have experienced dangerously low gas pressures as a result of cold weather demand. The risk of disruption due to increased demand from existing and potential customers is therefore significant. Many customers in these areas, including residential, commercial and emergency facilities, use natural gas to fuel generators to be used in cases of emergency and loss of electric power. In the event of a natural disaster, including hurricanes, systems that regularly experience low pressure will be particularly susceptible to complete loss of pressure and outage if widespread generators are activated at the same time. Widespread loss of electric power and natural gas as an emergency fuel source would be catastrophic.

In other cases, the risk of outages and disruption arises from the location of the single feed serving those communities, especially if the pipeline is sub-aqueous to the intercoastal canal system. Should third-party damage in a water way cause an interruption in service to the only feed to these communities, it may take weeks to repair the damage and restore service.

The reliability projects proposed by the Company would achieve reinforcement and improve reliability to the areas they serve and mitigate the risks uncontrollable outages and interruption of services to customers as a result of cold weather usage, natural disasters, and third-party damages to specific communities.

¹ Plastic Pipe Institute “Handbook of Polyethylene Pipe”, Chapter 1, page 9.

² As approved in Commission order PSC-2023-0103-PPF-GU in Docket 20220067

18B – The Company is not aware of a Florida Commission Order for similar projects done under the requested circumstances. However, FPUC does not anticipate another rate case proceeding in the immediate future and the risks and reliability issues described exist today and increase over time.

- 19. Please refer to FPUC’s petition, paragraph 17, on pages 8 through 9. Please identify all instances where cold weather has caused volumetric pressure to fall to dangerously low levels by year for the past 10 years. As part of this response, please identify the number of customer outages experienced during each occurrence as a result.**

Company Response:

The Company has a data storage limitation of 15,000 pipeline volumetric readings of which a subset are instances where weather has caused volumetric pressure to fall to dangerously low levels. However, the Company is able to provide, as Exhibit DR 19, Examples of Low-Pressure Readings and Alerts, which is a summary of the low-pressure readings from July 17, 2021 to April 3, 2023 for those segments where cold weather has caused volumetric pressure to fall to low levels. Low pressure occurrences are based on hourly readings, and FPUC’s Talon system issues automated alerts to key operations personnel every four (4) hours while the low-pressure condition exists.

Reliability projects included in GUARD are preventive measures in order prevent loss of pressure from cold weather from taking place in communities most susceptible to a low-pressure event, as a result of the increased demand from existing and potential residential, commercial and emergency facility customers. These projects would also mitigate the uncontrollable outages and risks interruption of services to customers as a result of natural disasters and third-party damages to specific communities.

- 20. Please refer to FPUC’s petition, paragraph 18, on page 9. Please identify the number of “uncontrollable outages” that have occurred in communities served by a single gas pipeline by year for the past 10 years.**

Company Response:

According to rule FAC 25-12.084.3, “Each operator shall immediately report to the Commission any distribution system-related accident or failure which interrupts service to either 10% or more of its meters or 500 or more meters.” Using this as the basis for what is considered an “uncontrollable outage”, the Company would need to manually extract from its databases the number of outages associated with communities such as Palm Beach Shores, Singer Island, South Palm Beach, Manalapan, New Smyrna Beach, Edgewater, Deerfield Beach, and Hypoluxo Island that are particularly vulnerable to service disruption based on their location on islands or peninsulas, as well as other factors.

- 21. Page 1 of the petition refers to “distribution lines and services that are made of suspect material identified since GRIP was implemented.” Please identify the pipe materials that are considered “suspect material.”**

Company Response:

Examples of suspect materials of distribution mains and services include extruded steel tubing, vintage plastic materials such as Aldyl-A plastic pipe subject to brittle-like cracking installed from prior to 1974 through 1990, and certain orange plastic pipe and some black plastic pipe typically installed during the 1970s and 1980s that also has a potential for brittle-like cracking. For more information refer to paragraph 15 of the petition.

- 22. Please refer to FPUC’s petition, paragraph 12, on pages 6 through 7. For each type of distribution mains and service lines in need of expedited replacement, please explain how each was determined to need expedited replacement, and identify any issues the Utility has encountered with each type by year for the past 10 years.**

Company Response:

While the Company’s systems are safe and adhere to industry standards, this GUARD program will ensure that our facilities continue to meet ongoing federal initiatives and appropriately reduce any unnecessary risks to the public due to facilities that are aged or inaccessible. Responses to questions 6B, 11A, 12A, 12B and 12C detail the need to expedite replacement of the facilities.

- 23. Please refer to FPUC’s petition, paragraph 14, on page 7, for the following questions.**
- a. Please provide a preliminary estimate of the amount of shallow/exposed pipe that would need expedited replacement, and identify the estimated total replacement cost. If unknown, please explain how FPUC intends to investigate this issue, and identify when the Utility intends to provide an estimate of the associated costs to the Commission.**
 - b. Please indicate whether or not it is standard practice for FPUC to replace shallow/exposed pipe as it is discovered. If so, please explain why expedited replacement of shallow/exposed pipe is necessary for inclusion in the GUARD program.**

Company Response:

23A – At the time the filing, the Company and RUIZ were still preparing their initial assessments of the Company’s facilities. Since those assessments were complete, the Company’s preliminary estimate of the amount of shallow/exposed pipe that would need expedited replacement is approximately 2.80 miles, some of which are major feeder lines that are exposed within major river channels and lakes. These locations represent the portions of pipeline that could be exposed laying at the bottom of the waterways due to erosion over the years. This risk represents likelihood and consequence of failure associated with threats around outside force damages as these waterways are navigable, as well as corrosion threats and other

integrity concerns. The Company also intends on monitoring additional areas of SME-reported shallow distribution pipe and will report to the Commission as deemed necessary. The costs of these projects are still being determined. The timing of these projects will be based on the risk assessment and other factors for the projects compared to other projects.

23B – Yes, the Company’s standard practice is to replace minor shallow/exposed pipeline segments as they are discovered, based on the scope and risk. However, the shallow/exposed pipe segments that are identified in the response to question 23A that would be included in the GUARD program, are large scale and highly complex construction projects, and are therefore not routine replacement of shallow/exposed pipeline projects. As part of the Company’s ongoing risk ranking and assessment, it anticipates that it will include more shallow/exposed pipe projects as they are found.

- 24. Exhibit 5 of the petition contains FPUC’s proposed tariff revisions related to the GUARD program for which the Utility is seeking implementation in January 2024. Para graph 29 of the petition states that the first true up filing for a combined remaining GRIP and proposed GUARD will be made in September 2023. Please discuss what the differences would be of the tariffs filed in this docket and what the company plans to file in September 2023. Will the September filing include tariffs?**

Company Response:

The rates in the tariff sheets provided in this docket were calculated using an estimate of expenses for GUARD in 2023. The Company anticipates that the rates in the tariff sheets to be filed in September 2023 will be calculated based upon actuals for the first 4 months of the program, April – July 2023, and an estimate for the remainder of the year.

- 25. FPUC is requesting the proposed GUARD factors be effective in January 2024. However, First Revised Sheet No. 7.403 indicates year 2023. Please explain.**

Company Response:

The Company proposes an effective date of January 1, 2024, for the first factors that would include GUARD costs, but the Company would like the program itself to be effective April 1, 2023. Tariff Sheet 7.403, which pertains to the effective dates of the GUARD factors erroneously indicates effectiveness during calendar year 2023, when it should be 2024.

- 26. Referring to First Revised Sheet No. 7.405, please explain why FPUC is proposing to delete “grossed up for federal and state income taxes” language from the Ad valorem taxes.**

Company Response:

The referenced edit to Sheet No. 7.405 was made in error and not intended to be included.

27. Assuming FPUC does not petition the Commission for a rate case in the next 10 years, what is FPUC's estimated average annual customer rate impact of the proposed GUARD for each customer class for 2024 through 2034?

Company Response:

Exhibit ROG 27 – FPUC Projected Customer Impact extrapolates the estimated cost of the GUARD program over the lifespan of the proposed contemplated work. The costs per year in the attachment are estimated expenses per year for the program. While the Company will attempt to adhere to the proposed timing and cost projects it provided to the best of its ability, the projects filed and completed each year will vary based on a multitude of variables that may or may not be in the Company’s control such as timelines, construction planning, cost of projects, contractor resources, risk factors or other construction inputs.

Estimated Annual GUARD Program Costs By Proposed Improvement
 (Table per Data Request 3C)

Proposed Improvement	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
Access Rear Easement Projects	\$ 5,010,000	\$ 20,798,814	\$ 20,798,814	\$ 20,798,814	\$ 20,798,814	\$ 20,798,814	\$ 20,798,814	\$ 20,798,814	\$ 20,798,814	\$ 2,575,450	\$ 173,975,965
Span Pipe Replacement Projects	\$ 2,600,000	\$ 846,947	\$ 2,258,524	\$ 2,258,524	\$ 2,258,524	\$ 2,258,524	\$ 2,258,524	\$ 2,258,524	\$ 2,258,524	\$ 1,129,262	\$ 20,385,879
Obsolete Facility Projects	\$ -	\$ 1,155,005	\$ 1,155,005	\$ 1,155,005	\$ 1,155,005	\$ 1,155,005	\$ 1,155,005	\$ 1,155,005	\$ 1,155,005	\$ 1,155,005	\$ 10,395,041
Pipeline Loop Projects	\$ -	\$ 1,689,261	\$ 1,689,261	\$ 1,689,261	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,067,783
Secondary Feed Projects	\$ -	\$ -	\$ 1,688,288	\$ 1,688,288	\$ 1,688,287	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,064,864
Total	\$ 7,610,000	\$ 24,490,027	\$ 27,589,893	\$ 27,589,893	\$ 25,900,631	\$ 24,212,343	\$ 24,212,343	\$ 24,212,343	\$ 24,212,343	\$ 4,859,717	\$ 214,889,532
Cumulative YOY	\$ 7,610,000	\$ 32,100,027	\$ 59,689,919	\$ 87,279,812	\$ 113,180,442	\$ 137,392,786	\$ 161,605,129	\$ 185,817,472	\$ 210,029,815	\$ 214,889,532	

1.0 EXECUTIVE SUMMARY

PURPOSE

The purpose of this study was to perform a formal risk assessment on the rear lot portions of the existing natural gas distribution system that is owned and operated by Florida Public Utilities Company (FPUC). FPUC has noted that its employees and representatives have had many cases of incomplete work orders and have experienced general challenges around accessing its rear lot gas mains, services and meters due to a variety of reasons. The study identifies current and potential threats that are present on these rear lot natural gas distribution systems and establishes a relative risk rank for each of the rear lot pipeline segments, in order for FPUC to have a full understanding of its risk and for FPUC to make decisions on how to mitigate them.

METHODS USED

RUIZ used information provided by FPUC to perform a risk assessment for each segment of rear lot main that FPUC currently operates.

The historical leak data and historical "Cant Get In" (CGI) data, along with associated attribute data, was geo-coded by address location and into a spatial GIS environment. FPUC rear lot gas main data was also imported into GIS and cleaned. Together this data was used to identify the leaks and CGIs that have occurred within areas of rear-lot gas facilities.

Two different risk analyses were then conducted to identify and rank threats on the rear lot natural gas distribution systems. The first being a system risk assessment which was based on historical leaks that have occurred on rear lot facilities from 2017 through mid July of 2022. The rear lot leak data was exported from GIS and was given a relative risk rank by leak cause and sub threat. The second risk analysis was a Subject Matter Expert (SME) Risk Assessment that was conducted based on feedback from SMEs during an in-person meeting. The combined system risk assessment and SME Risk Assessment established a risk rank by threat type in the existing FPUC system.

The final step was to rank each segment of rear lot main based on its Relative Risk Of Failure, using the risk rank by threat type established. A model was developed to assign a risk rank to each rear lot main based on its likelihood and consequence of failure associated with historical threats and similar pipe characteristics. The pre-final model was then manually analyzed for quality control and was slightly adjusted to ensure areas where SMEs identify threats were captured and ranked appropriately. The resulting risk pipe segments were conservatively grouped based on contiguous mains that exist within common neighborhood developments, in order to obtain the final risk ranks and risk priority orders for all FPUC existing rear lot facilities of record.

FINDINGS AND CONCLUSIONS

RUIZ performed a thorough review of the records provided by FPUC, collaborated with the FPUC SMEs to complete data analyses, conducted risk assessments, and developed a risk ranking model to arrive at the following conclusion:

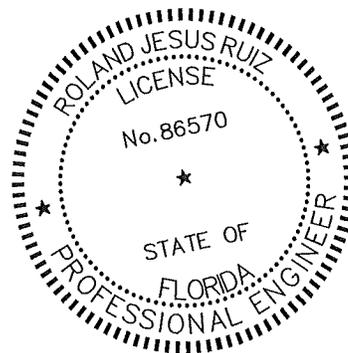
FPUC currently operates and maintains over 446 miles of residential rear lot natural gas distribution main, of which approximately 237 miles are at a higher risk of failure. The risk assessments that were completed demonstrate that certain threats do exist on the FPUC natural gas distribution facilities of record located within rear lots of residential homes, and these 237 miles of gas pipe segments have a higher likelihood of failure and consequence of failure when compared to other rear-lot facilities that FPUC operates.

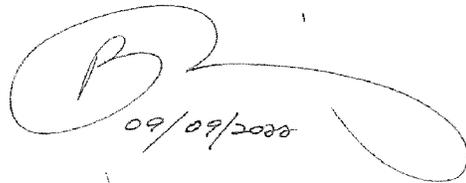
RECOMMENDATIONS

Gas distribution mains and services that are located within the rear of residential homes presents a challenge to most natural gas local distribution companies. The condition presents issues with access for operating and maintaining the system, conducting compliance repairs, and responding to emergency situations. This report, along with the current FPUC Distribution Integrity Management Program, identifies certain threats that exist on the FPUC natural gas distribution system, including those portions of the system that exist within the rear of residential homes, which essentially worsens the threat because of the lack of proper accessibility.

RUIZ hereby provides the following recommendations:

- FPUC should continuously monitor system threats, adjust and re-prioritize pipe segment risk ranks as needed, and deploy short-term risk mitigation activities.
- FPUC should continue to strengthen the FPUC Damage Prevention Program.
- FPUC should consider deploying a long-term program to replace aging Rear Lot natural gas infrastructure, giving priority to those rear main segments considered “high-risk” and risk priority order “1”.
- FPUC should use new polyethylene pipe per ASTM standard D-2513 for areas considered for new construction and for replacement.




09/09/2008

1.0 EXECUTIVE SUMMARY

PURPOSE

The purpose of this study was to perform a formal risk assessment on the portions of the natural gas distribution mains and services of record considered “problematic” that are owned and operated by Florida Public Utilities Company (FPUC). FPUC has noted that its employees and representatives have had several work orders and cases of leaks, threats and other general challenges around existing main or service segments made of Xtrubed steel tubing, Aldyl-A vintage plastic, also known areas of exposed above ground mainlines crossing certain features such as waterways (Span Pipes), city gate and regulator station sites that currently have obsolete valves, regulators, and other equipment, areas of the system where shallow main and services are present, and even facilities made of bare steel (those residual portions not replaced under GRIP). The study identifies current and potential threats that are present on these portions of the natural gas distribution systems and establishes a relative risk rank for each of the main segments in the system, for FPUC to have a full understanding of its risk and for FPUC to make decisions on how to mitigate them. The study also observes areas of the system that are a threat for “reliability” purposes, such as areas of the system that lack redundancy because they are fed from a single source, and areas of the system that have presented operating pressure problems related to small diameter pipe networks during peak loading.

METHODS USED

RUIZ used information provided by FPUC to perform a risk assessment for each segment of “problematic” and “reliability” mains and services that FPUC currently operates.

The methods used for this risk assessment resemble those utilized and summarized during the “FPUC Rear Lot Facilities Risk Analysis” exercise and report dated September 9th, 2022. The GIS historical leak data that was geo-coded by address used for the said analysis, along with associated attribute data, was utilized to buffer the leaks to mains based on Aldyl-A failures, Xtrubed steel tubing failures, bare steel failures, and similar problematic leak types. Then, system threat risk characteristics of likelihood and consequence of failure were input from sources such as mains with historical leaks by cause, attributes of the rear mains like pressure, material and diameter of pipeline, were fed into the same risk ranking model which runs a script using GIS research tools to determine a risk ranking score.

Risk ranking on Span Pipe segments were further supplemented from FPUC-provided historical above ground inspection reports performed and completed by operator qualified FPUC employees. The reports were analyzed for past coating failures, presence of atmospheric corrosion and even certain pipe spans that have sagged and lack proper support. The risk rank for the above ground segments considers potential impact radius based on pressure, diameter, and class location dependent on population density and vicinity to structures intended for human occupancy.

Historical issues at city gate purchase stations, district regulator stations, and other metering and regulator sites were observed from reports generated by the Subject Matter Experts (SMEs) that normally maintain and operate these sites. A total of 21 different sites have concerns, some of which being obsolete pressure regulators, inoperable valves, and corrosion issues. Each site’s relative risk was ranked based on the threat type risk rank methodology established during the “FPUC Rear Lot Facilities Risk Analysis”.

The preliminary results of the risk analysis were reviewed with individual subject matter experts from each of the divisions of FPUC. The purpose of the review was to validate and calibrate the results of the risk ranking model against the experience and system knowledge of the subject matter experts that know the distribution system. The final risk rank for each “problematic” segment was based on best available data which have been reviewed and approved by the FPUC area subject matter experts.

FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

While the Florida Public Utilities Company (FPUC) natural gas distribution system of record is relatively healthy in nature, this study has identified there are certain threats that are present in the system, that represents a considerable level of risk. These threats were categorized by two major categories, “Problematic” pipe, and “Reliability” areas of concern.

RUIZ performed a thorough review of the records provided by FPUC, and collaborated with the FPUC SMEs to complete data analyses, conduct risk assessments, and developed a risk ranking model to arrive at the following conclusions and recommendations:

- **FPUC operates over 97 miles of at-risk problematic pipe, of which approximately 76 miles of these facilities are considered to show a moderate-to-high level of risk.** The problems that these facility segments show are, among other items, pipeline under buildings, Aldyl-A plastic pipe, difficult to locate plastic pipe due to deteriorated tracer tape or wire, inability to complete multiple inactive service disconnections due to faulty fittings, coated steel pipe with disbondment issues or cathodic protection integrity issues such as stray current or isolated steel, thin wall pipe, and exposed pipe.
 - *RECOMMENDATION NO. 1: FPUC should consider deploying a long-term program to replace moderate to high risk “problematic” natural gas infrastructure, giving priority to those segments considered “high-risk”. The existing problematic mains and services presents operational risks and challenges for FPUC and its customers.*

- **FPUC currently operates and maintains 66 above ground “span pipe” segments of which 51 show moderate-to-high levels of risk.** These are aboveground and exposed pipe segments that are not only subject to natural force or outside force damages, but also demonstrate historical issues around coating deterioration, sagged pipe and stresses associated to movement.
 - *RECOMMENDATION NO. 2: FPUC should consider deploying a long-term program to replace moderate to high-risk span pipe segments in the distribution system. The replacement pipe should be installed via horizontal directional drilling at proper depths underneath the waterways or ditches. This will drastically reduce the risk of span pipes and will also reduce O&M expenses related to maintenance.*

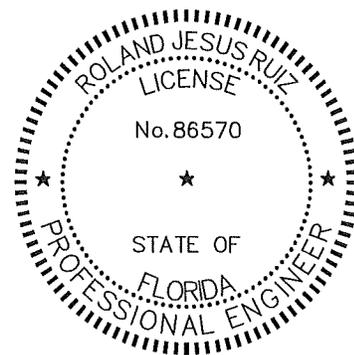
- **21 of the Company's district metering and pressure regulating stations and city gate purchase tap stations also show considerable levels of risk.** SMEs have reported that Four (4) stations have notable evidence of corroded pipe, equipment and features, while another 17 show the presence of obsolete equipment currently in-service which present challenges for maintenance and operations such as discontinued pressure regulators with inability to purchase replacement parts, difficult to operate plug or gate valves, inability to bypass a flow meter for differential testing, proving, or similar maintenance without shutting-in the station, and the inability to test regulator lockup without shutting-in the station due to missing run isolation valves.
 - *RECOMMENDATION NO. 3: FPUC should evaluate the feasibility of replacing corroded and obsolete equipment at the 21 existing district regulator stations and city gate stations. Depending on layout of the existing stations, it may be possible to replace certain pipe run segments or swap out flanged end regulators for more modern equipment without having to incur the cost of renewing and rebuilding the entire station*

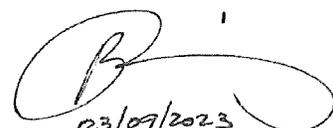
- **FPUC Subject Matter Experts have reported historical areas of risk related to “single point of failure” areas fed by a single gas main line with no redundancy.** Since excavation damages are the highest threat to the FPUC system, there is a considerable level of probability that these segments may sustain a rupture by outside forces. Should there be a third-party excavation damage on a mainline segment that serves as the only feed to an entire sub-system, the FPUC customers would likely endure a mass outage that will cause considerable inconvenience for many days, as well as FPUC will incur excess O&M expenses in labor needed to reactivate and relight the customer services and gas appliances and equipment.
 - *RECOMMENDATION NO. 4: FPUC should consider deploying capital for reliability projects that will introduce a secondary source of gas pipeline to those subnetworks that are currently operating off of a single source mainline that lack redundancy, giving priority to those subnetworks that contain a large number of active FPUC customers.*

- **FPUC has also reported certain areas of the network with small diameter pipe, which have historically caused low pressure and “no-gas” situations under peak “design-day” loading during cold weather days**
 - *RECOMMENDATION NO. 5: For proper prediction of vulnerability related to possible low pressure events and capacity concerns, It is recommended for FPUC to invest in the installation of additional remote real time electronic pressure recording devices at the locations of these areas of concern. FPUC should also invest in formal hydraulic system capacity planning, modeling, and studies, to predict and determine the probable outcomes associated to cold weather events and other system design heating degree day conditions*

- As a general note, and specifically for the other areas of system risk identified in this study, which has not been specifically summarized in this section:

- RECOMENDATION NO. 6: FPUC should continuously monitor system threats, adjust and re-prioritize pipe segment risk ranks as needed, and deploy short-term risk mitigation activities. FPUC should continue advocating its Distribution Integrity Management Program and monitor system threats continuously to re-prioritize the ranks of risky mains as needed and on a periodic basis (minimum once per year). Continue to deploy robust leak survey programs using advanced new technology, deploy enhanced and remote corrosion monitoring activities, and conduct preventative maintenance to ensure short term risk of failure is mitigated in any way possible.
- RECOMMENDATION NO. 7: FPUC should continue to strengthen the FPUC Damage Prevention Program. Continue the all-employee culture for Patrolling the FPUC Gas System, Public Awareness, and Damage Prevention in accordance with RP 1162 / 49 CFR 192.616. Initiatives should have a strong emphasis on homeowner educational notifications for excavation 811 laws and safety tips, using social media, radio announcements, TV commercials, mailers, and other methods. Continue to perform general contractor excavator training and educational seminars and meetings. FPUC should take the lead on hosting state-wide seminars in front of builder associations, local and state fire departments, annual FDOT Utility coordination conferences, and similar type events.




03/09/2023

Hourly Low Pressure Readings

Lane Asphalts				
Alert Type*	# of Alerts	Nominal Pressure (psi)	Average Pressure (psi)	% of Nominal Pressure
Low Alert	12,799	100.0	91.9	92%
Medium Alert	2,068	100.0	82.8	83%
High Alert	99	100.0	76.3	76%
Critical Alert	32	100.0	72.4	72%

10 Most Recent Low Pressure Days				
Date and Time	Nominal Pressure (psi)	Lowest Daily Pressure (psi)	% of Nominal Pressure	
1/16/2023 10:00	100.0	46.6	47%	
1/15/2023 19:00	100.0	47.2	47%	
4/21/2022 13:00	100.0	30.4	30%	
2/15/2022 9:00	100.0	47.2	47%	
2/14/2022 9:00	100.0	41.7	42%	
2/10/2022 8:00	100.0	43.6	44%	
2/1/2022 8:00	100.0	44.0	44%	
1/31/2022 9:00	100.0	46.9	47%	
1/24/2022 9:00	100.0	42.8	43%	
1/23/2022 21:00	100.0	46.8	47%	

***Alert Type based on the nominal pressure of this system**

Low Alert: Pressure Reading between 100% and 80% of nominal pressure

Medium Alert: Pressure Reading between 80% and 60% of nominal pressure

High Alert: Pressure Reading between 60% and 50% of nominal pressure

Critical Alert: Pressure Reading below 50% of nominal pressure

Hourly Low Pressure Readings

Boston Whaler

Alert Type*	# of Alerts	Nominal Pressure (psi)	Average Pressure (psi)	% of Nominal Pressure
Low Alert	14,682	55.0	54.6	99%
Medium Alert	237	55.0	44.7	81%
High Alert	50	55.0	44.2	80%
Critical Alert	12	55.0	35.1	64%

10 Most Recent Low Pressure Days

Date and Time	Nominal Pressure (psi)	Lowest Daily Pressure (psi)	% of Nominal Pressure
1/16/2023 7:00	55.0	26.9	49%
1/15/2023 21:00	55.0	27.6	50%
2/15/2022 1:00	55.0	27.9	51%
2/14/2022 9:00	55.0	27.5	50%
2/10/2022 9:00	55.0	27.7	50%
2/7/2022 10:00	55.0	32.5	59%
1/31/2022 2:00	55.0	27.2	49%
1/30/2022 20:00	55.0	27.1	49%
1/24/2022 6:00	55.0	26.8	49%
1/18/2022 9:00	55.0	26.5	48%

***Alert Type based on the nominal pressure of this system**

Low Alert: Pressure Reading between 100% and 80% of nominal pressure

Medium Alert: Pressure Reading between 80% and 60% of nominal pressure

High Alert: Pressure Reading between 60% and 50% of nominal pressure

Critical Alert: Pressure Reading below 50% of nominal pressure

Hourly Low Pressure Readings

South Ocean

Alert Type*	# of Alerts	Nominal Pressure (psi)	Average Pressure (psi)	% of Nominal Pressure
Low Alert	6,755	20.0	18.9	95%
Medium Alert	305	20.0	14.8	74%
High Alert	23	20.0	11.1	56%
Critical Alert	4	20.0	6.7	33%

10 Most Recent Low Pressure Days

Date and Time	Nominal Pressure (psi)	Lowest Daily Pressure (psi)	% of Nominal Pressure
1/15/2023 10:00	20.0	11.5	57%
1/14/2023 10:00	20.0	10.0	50%
12/25/2022 12:00	20.0	10.9	54%
12/24/2022 10:00	20.0	10.6	53%
2/14/2022 9:00	20.0	11.5	57%
1/30/2022 10:00	20.0	11.9	60%
1/29/2022 10:00	20.0	10.2	51%
1/24/2022 9:00	20.0	10.2	51%
1/16/2022 14:00	20.0	9.8	49%
8/23/2021 16:00	20.0	3.3	16%

***Alert Type based on the nominal pressure of this system**

Low Alert: Pressure Reading between 100% and 90% of nominal pressure

Medium Alert: Pressure Reading between 90% and 80% of nominal pressure

High Alert: Pressure Reading between 80% and 50% of nominal pressure

Critical Alert: Pressure Reading below 50% of nominal pressure

Hourly Low Pressure Readings

North Ocean				
Alert Type*	# of Alerts	Nominal Pressure (psi)	Average Pressure (psi)	% of Nominal Pressure
Low Alert	2,427	20.0	19.3	96%
Medium Alert	390	20.0	17.3	86%
High Alert	105	20.0	14.9	74%
Critical Alert	-	20.0		

10 Most Recent Critical Pressure Days

Date and Time	Nominal Pressure (psi)	Lowest Pressure (psi)	% of Nominal Pressure
3/20/2023 10:00	20.0	15.1	76%
3/16/2023 10:00	20.0	15.8	79%
2/13/2023 10:00	20.0	14.4	72%
2/4/2023 10:00	20.0	15.0	75%
1/16/2023 9:00	20.0	15.6	78%
1/15/2023 10:00	20.0	13.8	69%
1/14/2023 10:00	20.0	12.3	61%
1/11/2023 9:00	20.0	15.9	79%
12/29/2022 10:00	20.0	15.3	76%
12/27/2022 10:00	20.0	15.6	78%

***Alert Type based on the nominal pressure of this system**

Low Alert: Pressure Reading between 100% and 90% of nominal pressure

Medium Alert: Pressure Reading between 90% and 80% of nominal pressure

High Alert: Pressure Reading between 80% and 50% of nominal pressure

Critical Alert: Pressure Reading below 50% of nominal pressure

Hourly Low Pressure Readings

Ritz Carlton

Alert Type*	# of Alerts	Nominal Pressure (psi)	Average Pressure (psi)	% of Nominal Pressure
Low Alert	6,180	20.0	19.1	96%
Medium Alert	1,626	20.0	17.2	86%
High Alert	477	20.0	14.7	74%
Critical Alert	1	20.0	9.9	49%

10 Most Recent Critical Pressure Days

Date and Time	Nominal Pressure (psi)	Lowest Pressure (psi)	% of Nominal Pressure
3/31/2023 9:00	20.0	14.4	72%
3/23/2023 9:00	20.0	15.8	79%
3/22/2023 10:00	20.0	15.1	75%
3/21/2023 9:00	20.0	14.9	74%
3/20/2023 10:00	20.0	13.1	65%
3/17/2023 10:00	20.0	14.7	74%
3/16/2023 10:00	20.0	13.3	67%
3/15/2023 10:00	20.0	15.2	76%
2/18/2023 9:00	20.0	16.0	80%
1/14/2023 10:00	20.0	9.9	49%

***Alert Type based on the nominal pressure of this system**

Low Alert: Pressure Reading between 100% and 90% of nominal pressure

Medium Alert: Pressure Reading between 90% and 80% of nominal pressure

High Alert: Pressure Reading between 80% and 50% of nominal pressure

Critical Alert: Pressure Reading below 50% of nominal pressure

Hourly Low Pressure Readings

Embassy Deerfield

Alert Type*	# of Alerts	Nominal Pressure (psi)	Average Pressure (psi)	% of Nominal Pressure
Low Alert	976	50.0	48.5	97%
Medium Alert	7	50.0	39.3	79%
High Alert	-	50.0		
Critical Alert	3	50.0	20.1	40%

10 Most Recent Critical Pressure Days

Date and Time	Nominal Pressure (psi)	Lowest Pressure (psi)	% of Nominal Pressure
4/1/2023 10:00	50.0	49.7	99%
3/31/2023 10:00	50.0	47.7	95%
3/30/2023 11:00	50.0	48.3	97%
3/24/2023 11:00	50.0	49.2	98%
3/23/2023 10:00	50.0	49.0	98%
3/22/2023 11:00	50.0	48.3	97%
1/14/2023 12:00	50.0	39.3	79%
12/26/2022 12:00	50.0	39.4	79%
1/29/2022 12:00	50.0	39.9	80%
7/22/2021 17:00	50.0	19.1	38%

***Alert Type based on the nominal pressure of this system**

Low Alert: Pressure Reading between 100% and 80% of nominal pressure

Medium Alert: Pressure Reading between 80% and 60% of nominal pressure

High Alert: Pressure Reading between 60% and 50% of nominal pressure

Critical Alert: Pressure Reading below 50% of nominal pressure

Florida Public Utilities Company
Gas Utility Access and Replace Directive
Calculation of Equity and Debt Returns

Rate Case

Equity Cost Rate	10.25%
Weighted Equity Cost Rate	4.627%
Revenue Expansion Factor	1.3495
Weighted Equity Cost Rate , times Revenue Expansion Factor	<u>6.24%</u>
Long Term Debt-CU	1.136%
Short Term Debt	0.150%
Customer Deposits	0.056%
Weighted Debt Cost Rate	<u>1.34%</u>
Overall Weighted Cost Rate	<u><u>5.97%</u></u>

Florida Public Utilities Company
Gas Utility Access and Replace Directive
Calculation of the Projected Revenue Requirements
January 1, 2023 through December 31, 2023

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
Qualified Investment														
Qualified Investment - Mains - Current Year 1070 Activity	\$0	\$0	\$0	\$0	\$744,089	\$744,089	\$744,089	\$744,089	\$744,089	\$744,089	\$744,089	\$744,089	\$744,089	\$6,696,800
Qualified Investment - Mains - Closed 1070 Activity to Plant	\$0	\$0	\$0	\$0	(\$744,089)	(\$744,089)	(\$744,089)	(\$744,089)	(\$744,089)	(\$744,089)	(\$744,089)	(\$744,089)	(\$744,089)	(\$6,696,800)
Qualified Investment - Services - Current Year 1070 Activity	\$0	\$0	\$0	\$0	\$101,467	\$101,467	\$101,467	\$101,467	\$101,467	\$101,467	\$101,467	\$101,467	\$101,467	\$913,200
Qualified Investment - Services - Closed 1070 Activity to Plant	\$0	\$0	\$0	\$0	(\$101,467)	(\$101,467)	(\$101,467)	(\$101,467)	(\$101,467)	(\$101,467)	(\$101,467)	(\$101,467)	(\$101,467)	(\$913,200)
Qualified Investment - M&R - Current Year 1070 Activity	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Qualified Investment - M&R - Closed 1070 Activity to Plant	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Qualified Investment - Mains - Current 1010 Activity	\$0	\$0	\$0	\$0	\$744,089	\$744,089	\$744,089	\$744,089	\$744,089	\$744,089	\$744,089	\$744,089	\$744,089	\$6,696,800
Qualified Investment - Services - Current 1010 Activity	\$0	\$0	\$0	\$0	\$101,467	\$101,467	\$101,467	\$101,467	\$101,467	\$101,467	\$101,467	\$101,467	\$101,467	\$913,200
Qualified Investment - M&R - Current 1010 Activity	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - Mains 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - Service 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - Mains 1010	\$3,755,806	\$3,755,806	\$3,755,806	\$3,755,806	\$4,499,895	\$5,243,984	\$5,988,072	\$6,732,161	\$7,476,250	\$8,220,339	\$8,964,428	\$9,708,517	\$10,452,606	\$10,452,606
Total Qualified Investment - Service 1010	\$2,083,527	\$2,083,527	\$2,083,527	\$2,083,527	\$2,184,993	\$2,286,460	\$2,387,927	\$2,489,393	\$2,590,860	\$2,692,327	\$2,793,793	\$2,895,260	\$2,996,727	\$2,996,727
Total Qualified Investment - M&R 1010	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment	\$5,839,332	\$5,839,332	\$5,839,332	\$5,839,332	\$6,684,888	\$7,530,444	\$8,375,999	\$9,221,555	\$10,067,110	\$10,912,666	\$11,758,221	\$12,603,777	\$13,449,332	\$13,449,332
Less: Accumulated Depreciation	(\$3,525,995)	(\$3,535,344)	(\$3,544,692)	(\$3,554,040)	(\$3,563,389)	(\$3,572,737)	(\$3,582,085)	(\$3,591,433)	(\$3,600,781)	(\$3,610,129)	(\$3,619,477)	(\$3,628,825)	(\$3,638,173)	(\$3,647,521)
Net Book Value	\$2,313,337	\$2,303,988	\$2,294,640	\$2,285,292	\$3,121,499	\$3,957,707	\$4,793,914	\$5,630,122	\$6,466,330	\$7,302,538	\$8,138,745	\$8,974,953	\$9,811,160	\$9,801,811
Average Net Qualified Investment	\$2,308,663	\$2,299,315	\$2,289,966	\$2,280,618	\$3,139,001	\$3,975,209	\$4,811,417	\$5,647,625	\$6,483,833	\$7,320,041	\$8,156,249	\$8,992,457	\$9,828,665	\$9,819,316
Depreciation Rates														
Approved Depreciation Rate - Mains	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%
Approved Depreciation Rate - Services	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Approved Depreciation Rate - M&R City Gate	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Return on Average Net Qualified Investment														
Equity - Cost of Capital, inclusive of Income Tax Gross-up	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%
Debt - Cost of Capital	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%
Equity Component - inclusive of Income Tax Gross-up	\$12,013	\$11,964	\$11,916	\$11,867	\$14,067	\$18,415	\$22,757	\$27,092	\$31,422	\$35,744	\$40,061	\$44,372	\$48,676	\$318,499
Debt Component	\$2,582	\$2,571	\$2,561	\$2,551	\$3,023	\$3,958	\$4,891	\$5,823	\$6,753	\$7,683	\$8,610	\$9,536	\$10,461	\$68,452
Return Requirement	\$14,595	\$14,536	\$14,477	\$14,418	\$17,090	\$22,373	\$27,648	\$32,915	\$38,175	\$43,427	\$48,671	\$53,908	\$59,137	\$386,951
Investment Expenses														
Depreciation Expense - Mains	\$5,008	\$5,008	\$5,008	\$5,008	\$6,000	\$6,992	\$7,984	\$8,976	\$9,968	\$10,960	\$11,953	\$12,945	\$13,937	\$98,809
Depreciation Expense - Services	\$4,341	\$4,341	\$4,341	\$4,341	\$4,552	\$4,763	\$4,973	\$5,185	\$5,396	\$5,607	\$5,818	\$6,029	\$6,240	\$59,698
Depreciation Expense - M&R City Gate	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Property Taxes	\$3,856	\$3,856	\$3,856	\$3,856	\$3,856	\$3,856	\$3,856	\$3,856	\$3,856	\$3,856	\$3,856	\$3,856	\$3,856	\$38,556
General Public Notice Expense & Customer Notice Expense	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$10,000
Total Expense	\$14,204	\$14,204	\$14,204	\$14,204	\$15,407	\$16,611	\$17,815	\$19,018	\$20,222	\$21,425	\$22,629	\$23,832	\$25,036	\$217,171
Total Revenue Requirements	\$28,799	\$28,740	\$28,681	\$28,622	\$31,294	\$37,700	\$44,259	\$50,729	\$57,199	\$63,648	\$70,096	\$76,537	\$82,969	\$600,725

Florida Public Utilities Company
 Gas Utility Access and Replace Directive
 Projection of Qualified Mains & Services Revenue Requirements
 Surcharge Calculation - January 1, 2023 through December 31, 2023
 Per Therm Rate

1. 1/1/23-12/31/23 Qualified Mains & Services Replacement Revenue Requirements		\$	600,725
Mains	88%	\$528,638	
Services	12%	\$72,087	
M&R	0%	\$0	
Net		<u>\$600,725</u>	
2. TRUE-UP from Prior Period (Over) Under Recovery Estimated thru 12/2022		\$	1,583,781
3. 2023 Qualified Mains & Services Replacement Revenue Requirements		\$	2,184,506
Mains	88%	\$1,922,365	
Services	12%	\$262,141	
M&R	0%	\$0	
Net		<u>\$2,184,506</u>	

RATE SCHEDULE	2023 THERMS	SERVICES COS %	MAINS COS %	M&R COS %	SERVICES REV REQ	MAINS REV REQ	M&R REV REQ	GUARD REV REQ	DOLLARS PER THERM	TAX FACTOR	GUARD FACTORS PER THERM	TYPICAL ANNUAL THERMS	ANNUAL COST	AVERAGE MONTHLY COST
RES-1	1,520,128	27.37%	1.20%	1.20%	\$71,748	\$23,128	\$0	\$94,876	\$0.06241	1.00503	\$0.06273	54	\$3.37	\$0.28
RES-2	5,975,749	36.45%	4.71%	4.71%	\$95,645	\$90,624	\$0	\$186,269	\$0.03117	1.00503	\$0.03133	159	\$4.98	\$0.42
RES-3	12,959,345	19.15%	10.05%	10.05%	\$50,188	\$193,126	\$0	\$243,315	\$0.01878	1.00503	\$0.01887	665	\$12.55	\$1.05
RES-SG	96,299	1.09%	0.09%	0.09%	\$2,851	\$1,799	\$0	\$4,649	\$0.04828	1.00503	\$0.04852	109	\$5.29	\$0.44
GS-1	691,996	3.10%	0.60%	0.60%	\$8,133	\$11,530	\$0	\$19,663	\$0.02841	1.00503	\$0.02856	322	\$9.20	\$0.77
GS-2	7,230,026	4.14%	6.03%	6.03%	\$10,863	\$115,839	\$0	\$126,693	\$0.01752	1.00503	\$0.01761	2,902	\$31.12	\$4.26
GS-3	11,772,698	3.40%	9.57%	9.57%	\$8,922	\$184,048	\$0	\$192,970	\$0.01639	1.00503	\$0.01647	7,312	\$120.46	\$10.04
GS-4	24,944,789	3.66%	19.88%	19.88%	\$9,589	\$382,197	\$0	\$391,786	0.01571	1.00503	0.01579	17,895	\$281.05	\$23.42
GS-5	12,549,693	0.59%	9.71%	9.71%	\$1,434	\$186,615	\$0	\$188,050	\$0.01498	1.00503	\$0.01506	110,084	\$1,657.86	\$138.15
GS-6	11,918,155	0.21%	9.23%	9.23%	\$557	\$177,434	\$0	\$177,991	\$0.01493	1.00503	\$0.01501	350,531	\$5,261.37	\$438.45
GS-7	9,260,735	0.08%	7.06%	7.06%	\$211	\$135,804	\$0	\$136,015	\$0.01469	1.00503	\$0.01476	771,728	\$11,391.39	\$949.30
GS-8 (A-D)	22,737,656	0.05%	17.26%	17.26%	\$128	\$331,812	\$0	\$331,939	\$0.01460	1.00503	\$0.01467	2,842,207	\$41,701.10	\$3,475.09
COM-INT	9,502,459	0.17%	3.58%	3.58%	\$450	\$68,782	\$0	\$69,231	\$0.00729	1.00503	\$0.00732	338,968	\$4,092.92	\$341.08
COM-NGV	1,469,075	0.01%	0.89%	0.89%	\$25	\$17,085	\$0	\$17,110	\$0.01165	1.00503	\$0.01171	340,759	\$3,988.74	\$332.40
COM-OL	59,723	0.02%	0.08%	0.08%	\$48	\$1,470	\$0	\$1,518	\$0.01522	1.00503	\$0.01530	3,439	\$52.61	\$4.38
COM-SG	62,693	0.51%	0.06%	0.06%	\$1,348	\$1,083	\$0	\$2,431	\$0.03878	1.00503	\$0.03897	207	\$8.06	\$0.67
TOTAL	132,791,038	100%	100%	100%	262,141	1,922,365	0	2,184,506						

Florida Public Utilities Company
Gas Utility Access and Replace Directive
Calculation of the Projected Revenue Requirements
January 1, 2024 through December 31, 2024

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
Qualified Investment														
Qualified Investment - Mains - Current Year 1070 Activity		\$1,632,668	\$1,632,668	\$1,632,668	\$1,632,668	\$1,632,668	\$1,632,668	\$1,632,668	\$1,632,668	\$1,632,668	\$1,632,668	\$1,632,668	\$1,632,668	\$19,592,022
Qualified Investment - Mains - Closed 1070 Activity to Plant		(\$1,632,668)	(\$1,632,668)	(\$1,632,668)	(\$1,632,668)	(\$1,632,668)	(\$1,632,668)	(\$1,632,668)	(\$1,632,668)	(\$1,632,668)	(\$1,632,668)	(\$1,632,668)	(\$1,632,668)	(\$19,592,022)
Qualified Investment - Services - Current Year 1010 Activity		\$285,717	\$285,717	\$285,717	\$285,717	\$285,717	\$285,717	\$285,717	\$285,717	\$285,717	\$285,717	\$285,717	\$285,717	\$3,428,604
Qualified Investment - Services - Closed 1070 Activity to Plant		(\$285,717)	(\$285,717)	(\$285,717)	(\$285,717)	(\$285,717)	(\$285,717)	(\$285,717)	(\$285,717)	(\$285,717)	(\$285,717)	(\$285,717)	(\$285,717)	(\$3,428,604)
Qualified Investment - M&R - Current Year 1070 Activity		\$122,450	\$122,450	\$122,450	\$122,450	\$122,450	\$122,450	\$122,450	\$122,450	\$122,450	\$122,450	\$122,450	\$122,450	\$1,469,402
Qualified Investment - M&R - Closed 1070 Activity to Plant		(\$122,450)	(\$122,450)	(\$122,450)	(\$122,450)	(\$122,450)	(\$122,450)	(\$122,450)	(\$122,450)	(\$122,450)	(\$122,450)	(\$122,450)	(\$122,450)	(\$1,469,402)
Qualified Investment - Mains - Current 1010 Activity		\$1,632,668	\$1,632,668	\$1,632,668	\$1,632,668	\$1,632,668	\$1,632,668	\$1,632,668	\$1,632,668	\$1,632,668	\$1,632,668	\$1,632,668	\$1,632,668	\$19,592,022
Qualified Investment - Services - Current 1010 Activity		\$285,717	\$285,717	\$285,717	\$285,717	\$285,717	\$285,717	\$285,717	\$285,717	\$285,717	\$285,717	\$285,717	\$285,717	\$3,428,604
Qualified Investment - M&R - Current 1010 Activity		\$122,450	\$122,450	\$122,450	\$122,450	\$122,450	\$122,450	\$122,450	\$122,450	\$122,450	\$122,450	\$122,450	\$122,450	\$1,469,402
Total Qualified Investment - Mains 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - Service 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - Mains 1010	\$10,452,606	\$12,085,274	\$13,717,943	\$15,350,611	\$16,983,280	\$18,615,948	\$20,248,617	\$21,881,285	\$23,513,954	\$25,146,622	\$26,779,290	\$28,411,959	\$30,044,627	\$30,044,627
Total Qualified Investment - Service 1010	\$2,996,727	\$3,282,444	\$3,568,161	\$3,853,878	\$4,139,595	\$4,425,312	\$4,711,029	\$4,996,746	\$5,282,462	\$5,568,179	\$5,853,896	\$6,139,613	\$6,425,330	\$6,425,330
Total Qualified Investment - M&R 1010	\$0	\$122,450	\$244,900	\$367,350	\$489,800	\$612,250	\$734,700	\$857,150	\$979,600	\$1,102,050	\$1,224,500	\$1,346,950	\$1,469,400	\$1,469,400
Total Qualified Investment	\$13,449,332	\$15,490,168	\$17,531,004	\$19,571,839	\$21,612,675	\$23,653,510	\$25,694,346	\$27,735,181	\$29,776,017	\$31,816,853	\$33,857,688	\$35,898,524	\$37,939,359	\$37,939,359
Less: Accumulated Depreciation	(\$3,681,502)	(\$3,701,938)	(\$3,722,400)	(\$3,751,889)	(\$3,781,406)	(\$3,813,950)	(\$3,849,522)	(\$3,888,120)	(\$3,929,746)	(\$3,974,399)	(\$4,022,079)	(\$4,072,787)	(\$4,126,521)	(\$4,126,521)
Net Book Value	\$9,767,830	\$11,788,230	\$13,808,604	\$15,819,950	\$17,831,268	\$19,839,560	\$21,844,824	\$23,847,061	\$25,846,271	\$27,842,454	\$29,835,609	\$31,825,737	\$33,818,838	\$33,818,838
Average Net Qualified Investment	\$10,778,030	\$12,796,917	\$14,812,777	\$16,823,609	\$18,835,414	\$20,842,192	\$22,845,943	\$24,846,666	\$26,844,362	\$28,839,031	\$30,830,673	\$32,819,288		
Depreciation Rates														
Approved Depreciation Rate-Mains		1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%
Approved Depreciation Rate-Services		2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Approved Depreciation Rate - M&R City Gate		2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Return on Average Net Qualified Investment														
Equity - Cost of Capital, inclusive of Income Tax Gross-up		6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%
Debt - Cost of Capital		1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%
Equity Component - inclusive of Income Tax Gross-up	\$56,083	\$66,588	\$77,078	\$87,551	\$98,009	\$108,451	\$118,878	\$129,288	\$139,683	\$150,062	\$160,426	\$170,773	\$181,101	\$181,101
Debt Component	\$12,053	\$14,311	\$16,566	\$18,817	\$21,064	\$23,309	\$25,549	\$27,787	\$30,021	\$32,252	\$34,479	\$36,703	\$38,926	\$38,926
Return Requirement	\$68,136	\$80,899	\$93,643	\$106,368	\$119,073	\$131,760	\$144,427	\$157,075	\$169,704	\$182,314	\$194,905	\$207,476	\$220,027	\$220,027
Investment Expenses														
Depreciation Expense - Mains	\$13,937	\$16,114	\$18,291	\$20,467	\$22,644	\$24,821	\$26,998	\$29,175	\$31,352	\$33,529	\$35,706	\$37,883	\$39,959	\$39,959
Depreciation Expense - Services	\$6,243	\$6,838	\$7,434	\$8,029	\$8,624	\$9,219	\$9,815	\$10,410	\$11,005	\$11,600	\$12,196	\$12,791	\$13,386	\$13,386
Depreciation Expense - M&R City Gate	\$255	\$510	\$765	\$1,020	\$1,276	\$1,531	\$1,786	\$2,041	\$2,296	\$2,551	\$2,806	\$3,061	\$3,316	\$3,316
Property Taxes	\$16,280	\$16,280	\$16,280	\$16,280	\$16,280	\$16,280	\$16,280	\$16,280	\$16,280	\$16,280	\$16,280	\$16,280	\$16,280	\$195,357
General Public Notice Expense & Customer Notice Expense	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Total Expense	\$37,715	\$40,742	\$43,769	\$46,797	\$49,824	\$52,851	\$55,878	\$58,905	\$61,933	\$64,960	\$67,987	\$71,014	\$74,041	\$74,041
Total Revenue Requirements	\$105,851	\$121,641	\$137,412	\$153,164	\$168,897	\$184,611	\$200,305	\$215,981	\$231,637	\$247,274	\$262,892	\$278,491	\$294,074	\$294,074

Florida Public Utilities Company
Gas Utility Access and Replace Directive
Projection of Qualified Main & Service Revenue Requirements
Surcharge Calculation - January 1, 2024 through December 31, 2024
Per Therm Rate

1. 11/24-12/31/24 Qualified Mains & Services Replacement Revenue Requirements				\$	2,308,157
Mains	80%	\$1,846,525			
Services	14%	\$323,142			
M&R	6%	\$138,489			
Net		<u>\$2,308,157</u>			
2. TRUE-UP from Prior Period (Over) Under Recovery Estimated thru 12/2023				\$	-
3. 2024 Qualified Mains & Services Replacement Revenue Requirements				\$	2,308,157
Mains	80%	\$1,846,525			
Services	14%	\$323,142			
M&R	6%	\$138,489			
Net		<u>\$2,308,157</u>			

RATE SCHEDULE	2023 THERMS	SERVICES COS %	MAINS COS %	M&R COS %	SERVICES REV REQ	MAINS REV REQ	M&R REV REQ	GUARD REV REQ	DOLLARS PER THERM	TAX FACTOR	GUARD FACTORS PER THERM	TYPICAL ANNUAL THERMS	ANNUAL COST	AVERAGE MONTHLY COST
RES-1	1,520,128	27.37%	1.20%	1.20%	\$88,444	\$22,215	\$1,666	\$112,325	\$0.07389	1.00503	\$0.07326	54	\$4.00	\$0.33
RES-2	5,975,749	36.45%	4.71%	4.71%	\$117,502	\$87,049	\$6,529	\$211,410	\$0.03539	1.00503	\$0.03557	159	\$5.65	\$0.47
RES-3	12,959,345	19.15%	10.05%	10.05%	\$61,867	\$185,507	\$13,913	\$261,288	\$0.02016	1.00503	\$0.02026	665	\$13.47	\$1.12
RES-SG	96,299	1.09%	0.09%	0.09%	\$3,514	\$1,728	\$120	\$5,371	\$0.05578	1.00503	\$0.05606	109	\$6.11	\$0.51
GS-1	691,596	3.10%	0.60%	0.60%	\$10,026	\$11,075	\$831	\$21,931	\$0.03169	1.00503	\$0.03185	322	\$10.26	\$0.86
GS-2	7,230,026	4.14%	6.03%	6.03%	\$13,391	\$111,260	\$8,344	\$132,995	\$0.01839	1.00503	\$0.01849	2,902	\$53.66	\$4.47
GS-3	11,772,608	3.40%	9.57%	9.57%	\$10,998	\$176,787	\$13,259	\$201,044	\$0.01708	1.00503	\$0.01716	7,312	\$125.50	\$10.46
GS-4	24,944,789	3.66%	19.88%	19.88%	\$11,820	\$367,119	\$27,534	\$406,473	0.01629	1.00503	0.01638	17,805	\$291.59	\$24.30
GS-5	12,549,693	0.55%	9.71%	9.71%	\$1,768	\$179,253	\$13,444	\$194,465	\$0.01550	1.00503	\$0.01557	110,084	\$1,714.41	\$142.87
GS-6	11,918,155	0.21%	9.23%	9.23%	\$687	\$170,434	\$12,783	\$183,903	\$0.01543	1.00503	\$0.01551	350,534	\$5,436.13	\$453.01
GS-7	9,260,735	0.08%	7.06%	7.06%	\$260	\$138,446	\$9,783	\$140,490	\$0.01517	1.00503	\$0.01525	771,728	\$11,766.37	\$980.53
GS-8 (A-D)	22,737,656	0.05%	17.26%	17.26%	\$157	\$318,721	\$23,904	\$342,782	\$0.01508	1.00503	\$0.01515	2,842,207	\$43,063.33	\$3,588.61
COM-INT	9,502,459	0.17%	3.58%	3.58%	\$554	\$66,068	\$4,955	\$71,578	\$0.00753	1.00503	\$0.00757	558,968	\$4,231.63	\$352.64
COM-NGV	1,469,075	0.01%	0.89%	0.89%	\$31	\$16,411	\$1,231	\$17,673	\$0.01203	1.00503	\$0.01209	340,759	\$4,119.92	\$343.33
COM-OL	99,723	0.02%	0.08%	0.08%	\$59	\$1,412	\$106	\$1,577	\$0.01582	1.00503	\$0.01590	3,439	\$54.66	\$4.56
COM-SG	62,693	0.51%	0.06%	0.06%	\$1,662	\$1,040	\$78	\$2,780	\$0.04434	1.00503	\$0.04457	207	\$9.22	\$0.77
TOTAL	132,791,038	100%	100%	100%	323,142	1,846,525	138,489	2,308,157						

Florida Public Utilities Company
Gas Utility Access and Replace Directive
Calculation of the Projected Revenue Requirements
January 1, 2025 through December 31, 2025

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
Qualified Investment														
Qualified Investment - Mains - Current Year 1070 Activity	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$22,071,914
Qualified Investment - Mains - Closed 1070 Activity to Plant	(\$1,839,326)	(\$1,839,326)	(\$1,839,326)	(\$1,839,326)	(\$1,839,326)	(\$1,839,326)	(\$1,839,326)	(\$1,839,326)	(\$1,839,326)	(\$1,839,326)	(\$1,839,326)	(\$1,839,326)	(\$1,839,326)	(\$22,071,914)
Qualified Investment - Services - Current Year 1070 Activity	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$3,862,585
Qualified Investment - Services - Closed 1070 Activity to Plant	(\$321,882)	(\$321,882)	(\$321,882)	(\$321,882)	(\$321,882)	(\$321,882)	(\$321,882)	(\$321,882)	(\$321,882)	(\$321,882)	(\$321,882)	(\$321,882)	(\$321,882)	(\$3,862,585)
Qualified Investment - M&R - Current Year 1070 Activity	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$1,655,394
Qualified Investment - M&R - Closed 1070 Activity to Plant	(\$137,949)	(\$137,949)	(\$137,949)	(\$137,949)	(\$137,949)	(\$137,949)	(\$137,949)	(\$137,949)	(\$137,949)	(\$137,949)	(\$137,949)	(\$137,949)	(\$137,949)	(\$1,655,394)
Qualified Investment - Mains - Current 1010 Activity	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$22,071,914
Qualified Investment - Services - Current 1010 Activity	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$3,862,585
Qualified Investment - M&R - Current 1010 Activity	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$1,655,394
Total Qualified Investment - Mains 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - Service 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - Mains 1010	\$30,044,627	\$31,883,954	\$33,723,280	\$35,562,606	\$37,401,932	\$39,241,258	\$41,080,585	\$42,919,911	\$44,759,237	\$46,598,563	\$48,437,889	\$50,277,216	\$52,116,542	\$52,116,542
Total Qualified Investment - Service 1010	\$6,425,330	\$6,747,213	\$7,069,095	\$7,390,977	\$7,712,859	\$8,034,741	\$8,356,623	\$8,678,505	\$9,000,387	\$9,322,269	\$9,644,151	\$9,966,033	\$10,287,915	\$10,287,915
Total Qualified Investment - M&R 1010	\$1,469,402	\$1,607,351	\$1,745,301	\$1,883,250	\$2,021,199	\$2,159,149	\$2,297,098	\$2,435,048	\$2,572,997	\$2,710,947	\$2,848,896	\$2,986,846	\$3,124,795	\$3,124,795
Total Qualified Investment	\$37,939,359	\$40,238,517	\$42,537,675	\$44,836,833	\$47,135,990	\$49,435,148	\$51,734,306	\$54,033,464	\$56,332,621	\$58,631,779	\$60,930,937	\$63,230,095	\$65,529,252	\$65,529,252
Less: Accumulated Depreciation	(\$4,126,521)	(\$4,183,316)	(\$4,240,111)	(\$4,296,906)	(\$4,353,701)	(\$4,410,496)	(\$4,467,291)	(\$4,524,086)	(\$4,580,881)	(\$4,637,676)	(\$4,694,471)	(\$4,751,266)	(\$4,808,061)	(\$5,033,140)
Net Book Value	\$33,812,838	\$36,055,202	\$38,297,564	\$40,539,927	\$42,782,289	\$44,994,651	\$47,217,013	\$49,439,375	\$51,661,737	\$53,884,099	\$56,106,461	\$58,328,823	\$60,551,185	\$60,496,112
Average Net Qualified Investment	\$34,934,020	\$37,174,678	\$39,415,336	\$41,655,994	\$43,896,652	\$46,137,310	\$48,377,968	\$50,618,626	\$52,859,284	\$55,100,942	\$57,341,600	\$59,582,258	\$61,822,916	\$59,393,688
Depreciation Rates														
Approved Depreciation Rate-Mains	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%
Approved Depreciation Rate-Services	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Approved Depreciation Rate - M&R City Gate	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Return on Average Net Qualified Investment														
Equity - Cost of Capital, Inclusive of Income Tax Gross-up	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%
Debt - Cost of Capital	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%
Equity Component - Inclusive of Income Tax Gross-up	\$181,777	\$193,436	\$205,095	\$216,754	\$228,413	\$239,972	\$251,531	\$263,090	\$274,649	\$286,208	\$297,767	\$309,326	\$320,885	\$2,946,927
Debt Component	\$39,068	\$41,374	\$43,680	\$45,986	\$48,292	\$50,598	\$52,904	\$55,210	\$57,516	\$59,822	\$62,128	\$64,434	\$66,740	\$633,338
Return Requirement	\$220,845	\$235,010	\$249,154	\$263,275	\$277,376	\$291,454	\$305,512	\$319,547	\$333,561	\$347,554	\$361,523	\$375,474	\$389,414	\$3,580,265
Investment Expenses														
Depreciation Expense - Mains	\$40,060	\$42,512	\$44,964	\$47,417	\$49,869	\$52,322	\$54,774	\$57,227	\$59,679	\$62,131	\$64,584	\$67,036	\$69,488	\$642,575
Depreciation Expense - Services	\$13,386	\$14,057	\$14,727	\$15,398	\$16,068	\$16,739	\$17,410	\$18,080	\$18,751	\$19,421	\$20,092	\$20,763	\$21,434	\$204,892
Depreciation Expense - M&R City Gate	\$3,349	\$3,636	\$3,923	\$4,211	\$4,498	\$4,786	\$5,073	\$5,360	\$5,648	\$5,935	\$6,223	\$6,510	\$6,797	\$59,152
Property Taxes	\$56,355	\$56,355	\$56,355	\$56,355	\$56,355	\$56,355	\$56,355	\$56,355	\$56,355	\$56,355	\$56,355	\$56,355	\$56,355	\$676,257
General Public Notice Expense & Customer Notice Expense	\$11,149	\$11,149	\$11,149	\$11,149	\$11,149	\$11,149	\$11,149	\$11,149	\$11,149	\$11,149	\$11,149	\$11,149	\$11,149	\$121,000
Total Expense	\$114,149	\$117,559	\$120,970	\$124,380	\$127,791	\$131,201	\$134,611	\$138,022	\$141,432	\$144,843	\$148,253	\$151,664	\$155,074	\$1,594,875
Total Revenue Requirements	\$334,994	\$352,570	\$370,123	\$387,656	\$405,166	\$422,655	\$440,123	\$457,569	\$474,993	\$492,396	\$509,778	\$527,137	\$544,461	\$5,175,161

Florida Public Utilities Company
Gas Utility Access and Replace Directive
Projection of Qualified Mains & Services Revenue Requirements
Surcharge Calculation - January 1, 2025 through December 31, 2025
Per Therm Rate

1. 11/25-12/31/25 Qualified Mains & Services Replacement Revenue Requirements		\$	5,175,161
Mains	80%	\$4,140,129	
Services	14%	\$724,523	
M&R	6%	\$310,510	
Net		<u>\$5,175,161</u>	
2. TRUE-UP from Prior Period (Over) Under Recovery Estimated thru 12/2024		\$	-
3. 2025 Qualified Mains & Services Replacement Revenue Requirements		\$	5,175,161
Mains	80%	\$4,140,129	
Services	14%	\$724,523	
M&R	6%	\$310,510	
Net		<u>\$5,175,161</u>	

RATE SCHEDULE	2023 THERMS	SERVICES COS %	MAINS COS %	M&R COS %	SERVICES REV REQ	MAINS REV REQ	M&R REV REQ	GUARD REV REQ	DOLLARS PER THERM	TAX FACTOR	GUARD FACTORS PER THERM	TYPICAL ANNUAL THERMS	ANNUAL COST	AVERAGE MONTHLY COST
RES-1	1,520,128	27.37%	1.20%	1.20%	\$198,302	\$49,809	\$3,736	\$251,847	\$0.16567	1.00503	\$0.16651	54	\$8.96	\$0.75
RES-2	5,975,749	36.49%	4.71%	4.71%	\$264,350	\$195,174	\$14,638	\$474,163	\$0.07935	1.00503	\$0.07975	159	\$12.68	\$1.06
RES-3	12,959,345	19.15%	10.05%	10.05%	\$138,714	\$415,919	\$31,195	\$585,838	\$0.04521	1.00503	\$0.04543	665	\$30.21	\$2.52
RES-SG	96,299	1.09%	0.09%	0.09%	\$7,879	\$3,874	\$291	\$12,043	\$0.12506	1.00503	\$0.12569	169	\$13.71	\$1.14
GS-1	691,956	3.10%	0.60%	0.60%	\$22,479	\$24,831	\$1,862	\$49,172	\$0.07106	1.00503	\$0.07142	322	\$23.01	\$1.92
GS-2	7,239,026	4.14%	6.03%	6.03%	\$30,024	\$249,458	\$18,769	\$298,191	\$0.04124	1.00503	\$0.04145	2,902	\$120.31	\$10.03
GS-3	11,772,698	3.40%	9.57%	9.57%	\$24,659	\$396,378	\$29,728	\$450,765	\$0.03829	1.00503	\$0.03848	7,312	\$281.39	\$23.45
GS-4	24,944,789	3.65%	19.88%	19.88%	\$26,503	\$823,124	\$61,734	\$911,361	0.03654	1.00503	0.03672	17,805	\$653.78	\$54.48
GS-5	12,549,693	0.55%	9.71%	9.71%	\$3,965	\$401,906	\$30,143	\$436,014	\$0.03474	1.00503	\$0.03492	110,084	\$3,843.92	\$320.33
GS-6	11,918,155	0.21%	9.23%	9.23%	\$1,539	\$382,134	\$28,660	\$412,333	\$0.03460	1.00503	\$0.03477	350,534	\$12,188.45	\$1,015.70
GS-7	9,260,735	0.08%	7.06%	7.06%	\$583	\$292,476	\$21,936	\$314,955	\$0.03401	1.00503	\$0.03419	771,728	\$26,381.60	\$2,194.47
GS-8 (A-D)	22,737,656	0.05%	17.26%	17.26%	\$353	\$714,611	\$53,596	\$768,559	\$0.03380	1.00503	\$0.03397	2,842,207	\$96,553.10	\$8,046.69
COM-INT	9,502,459	0.17%	3.58%	3.58%	\$1,243	\$148,133	\$11,110	\$160,486	\$0.01689	1.00503	\$0.01697	558,968	\$9,487.82	\$790.65
COM-NGV	1,469,075	0.01%	0.89%	0.89%	\$70	\$36,795	\$2,760	\$39,625	\$0.02697	1.00503	\$0.02711	340,759	\$9,237.34	\$769.78
COM-OL	99,723	0.02%	0.08%	0.08%	\$133	\$3,166	\$237	\$3,536	\$0.03546	1.00503	\$0.03564	3,439	\$122.56	\$10.21
COM-SG	62,693	0.51%	0.06%	0.06%	\$3,726	\$2,332	\$175	\$6,233	\$0.09942	1.00503	\$0.09992	207	\$20.67	\$1.72
TOTAL	132,791,034	100%	100%	100%	724,523	4,140,129	310,510	5,175,161						

Florida Public Utilities Company
Gas Utility Access and Replace Directive
Calculation of the Projected Revenue Requirements
January 1, 2026 through December 31, 2026

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
Qualified Investment														
Qualified Investment - Mains - Current Year 1010 Activity		\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$22,071,914
Qualified Investment - Mains - Closed 1070 Activity to Plant		(\$1,839,326)	(\$1,839,326)	(\$1,839,326)	(\$1,839,326)	(\$1,839,326)	(\$1,839,326)	(\$1,839,326)	(\$1,839,326)	(\$1,839,326)	(\$1,839,326)	(\$1,839,326)	(\$1,839,326)	(\$22,071,914)
Qualified Investment - Services - Current Year 1010 Activity		\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$3,862,585
Qualified Investment - Services - Closed 1070 Activity to Plant		(\$321,882)	(\$321,882)	(\$321,882)	(\$321,882)	(\$321,882)	(\$321,882)	(\$321,882)	(\$321,882)	(\$321,882)	(\$321,882)	(\$321,882)	(\$321,882)	(\$3,862,585)
Qualified Investment - M&R - Current Year 1070 Activity		\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$1,655,394
Qualified Investment - M&R - Closed 1070 Activity to Plant		(\$137,949)	(\$137,949)	(\$137,949)	(\$137,949)	(\$137,949)	(\$137,949)	(\$137,949)	(\$137,949)	(\$137,949)	(\$137,949)	(\$137,949)	(\$137,949)	(\$1,655,394)
Qualified Investment - Mains - Current 1010 Activity		\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$1,839,326	\$22,071,914
Qualified Investment - Services - Current 1010 Activity		\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$321,882	\$3,862,585
Qualified Investment - M&R - Current 1010 Activity		\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$137,949	\$1,655,394
Total Qualified Investment - Mains 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - Service 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - Mains 1010	\$52,116,542	\$53,955,868	\$55,795,194	\$57,634,520	\$59,473,847	\$61,313,173	\$63,152,499	\$64,991,825	\$66,831,151	\$68,670,478	\$70,509,804	\$72,349,130	\$74,188,456	\$74,188,456
Total Qualified Investment - M&R 1070	\$10,287,915	\$10,609,798	\$10,931,680	\$11,253,562	\$11,575,444	\$11,897,326	\$12,219,208	\$12,541,090	\$12,862,972	\$13,184,854	\$13,506,736	\$13,828,618	\$14,150,500	\$14,150,500
Total Qualified Investment - M&R 1010	\$3,124,795	\$3,262,745	\$3,400,694	\$3,538,644	\$3,676,593	\$3,814,543	\$3,952,492	\$4,090,441	\$4,228,391	\$4,366,340	\$4,504,290	\$4,642,239	\$4,780,189	\$4,780,189
Total Qualified Investment	\$65,529,252	\$67,828,410	\$70,127,568	\$72,426,726	\$74,725,883	\$77,025,041	\$79,324,199	\$81,623,357	\$83,922,514	\$86,221,672	\$88,520,830	\$90,819,988	\$93,119,145	\$93,119,145
Less: Accumulated Depreciation	(\$5,033,140)	(\$5,130,859)	(\$5,231,989)	(\$5,336,529)	(\$5,444,480)	(\$5,555,841)	(\$5,670,612)	(\$5,788,794)	(\$5,910,386)	(\$6,035,388)	(\$6,163,801)	(\$6,295,625)	(\$6,430,859)	(\$6,430,859)
Net Book Value	\$60,496,112	\$62,697,551	\$64,895,579	\$67,090,197	\$69,281,404	\$71,469,201	\$73,653,587	\$75,834,563	\$78,012,129	\$80,186,284	\$82,357,028	\$84,524,363	\$86,688,287	\$86,688,287
Average Net Qualified Investment	\$61,596,832	\$63,796,365	\$65,992,888	\$68,185,800	\$70,375,302	\$72,561,394	\$74,744,035	\$76,923,346	\$79,099,306	\$81,271,656	\$83,440,696	\$85,606,325		
Depreciation Rates														
Approved Depreciation Rate-Mains		1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%
Approved Depreciation Rate-Services		2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Approved Depreciation Rate - M&R City Gate		2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Return on Average Net Qualified Investment														
Equity - Cost of Capital, Inclusive of Income Tax Gross-up		6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%
Debt - Cost of Capital		1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%
Equity Component - Inclusive of Income Tax Gross-up	\$370,516	\$331,962	\$343,391	\$354,801	\$366,194	\$377,569	\$388,927	\$400,267	\$411,589	\$422,893	\$434,179	\$445,448	\$456,705	\$459,735
Debt Component	\$68,886	\$71,346	\$73,802	\$76,254	\$78,703	\$81,148	\$83,589	\$86,026	\$88,459	\$90,889	\$93,315	\$95,736	\$98,153	\$98,153
Return Requirement	\$389,402	\$403,308	\$417,193	\$431,056	\$444,897	\$458,717	\$472,516	\$486,293	\$500,048	\$513,822	\$527,494	\$541,184	\$554,888	\$554,888
Investment Expenses														
Depreciation Expense - Mains	\$69,449	\$71,941	\$74,394	\$76,846	\$79,298	\$81,751	\$84,203	\$86,656	\$89,108	\$91,561	\$94,013	\$96,466	\$98,918	\$99,525
Depreciation Expense - Services	\$21,433	\$22,104	\$22,774	\$23,445	\$24,116	\$24,786	\$25,457	\$26,127	\$26,798	\$27,468	\$28,139	\$28,810	\$29,481	\$30,152
Depreciation Expense - M&R City Gate	\$6,797	\$7,085	\$7,372	\$7,660	\$7,947	\$8,234	\$8,522	\$8,809	\$9,097	\$9,384	\$9,671	\$9,959	\$10,247	\$10,535
Property Taxes	\$100,827	\$100,827	\$100,827	\$100,827	\$100,827	\$100,827	\$100,827	\$100,827	\$100,827	\$100,827	\$100,827	\$100,827	\$100,827	\$1,209,922
General Public Notice Expense & Customer Notice Expense	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$12,000
Total Expense	\$199,516	\$202,957	\$206,367	\$209,777	\$213,188	\$216,598	\$220,009	\$223,419	\$226,829	\$230,239	\$233,649	\$237,059	\$240,469	\$243,879
Total Revenue Requirements	\$588,948	\$606,264	\$623,559	\$640,833	\$658,085	\$675,315	\$692,524	\$709,712	\$726,877	\$744,021	\$761,144	\$778,245	\$795,346	\$812,447

Florida Public Utilities Company
On Utility Access and Replace Directive
Projection of Qualified Mains & Services Revenue Requirements
Surcharge Calculations - January 1, 2026 through December 31, 2026
Per Therm Rate

1. 1/1/26-12/31/26 Qualified Mains & Services Replacement Revenue Requirements		\$	8,205,529
Mains	80%	\$6,564,423	
Services	14%	\$1,148,774	
M&R	6%	\$492,332	
Net		<u>\$8,205,529</u>	
2. TRUE-UP from Prior Period (Over) Under Recovery Estimated thru 12/2025		\$	-
3. 2026 Qualified Mains & Services Replacement Revenue Requirements		\$	8,205,529
Mains	80%	\$6,564,423	
Services	14%	\$1,148,774	
M&R	6%	\$492,332	
Net		<u>\$8,205,529</u>	

RATE SCHEDULE	2023 THERMS	SERVICES COS %	MAINS COS %	M&R COS %	SERVICES REV REQ	MAINS REV REQ	M&R REV REQ	GUARD REV REQ	DOLLARS PER THERM	TAX FACTOR	GUARD FACTORS PER THERM	TYPICAL ANNUAL THERMS	ANNUAL COST	AVERAGE MONTHLY COST
RES-1	1,520,128	27.37%	1.20%	1.20%	\$314,420	\$78,975	\$5,923	\$399,318	\$0.26269	1.00503	\$0.26401	51	\$14.20	\$1.18
RES-2	5,975,749	36.49%	4.71%	4.71%	\$419,143	\$309,461	\$23,210	\$751,814	\$0.12581	1.00503	\$0.12644	159	\$20.10	\$1.68
RES-3	12,959,345	19.15%	10.05%	10.05%	\$219,940	\$659,481	\$49,461	\$928,881	\$0.07168	1.00503	\$0.07204	665	\$47.90	\$3.99
RES-SG	96,299	1.09%	0.09%	0.09%	\$12,493	\$6,142	\$461	\$19,096	\$0.19830	1.00503	\$0.19929	109	\$21.73	\$1.81
GS-1	691,996	3.10%	0.60%	0.60%	\$35,641	\$39,371	\$2,953	\$77,966	\$0.11267	1.00503	\$0.11323	322	\$36.48	\$3.04
GS-2	7,230,026	3.14%	6.03%	6.03%	\$47,605	\$395,531	\$29,665	\$472,800	\$0.06539	1.00503	\$0.06572	2,902	\$190.76	\$15.90
GS-3	11,772,608	3.40%	9.57%	9.57%	\$39,099	\$628,480	\$47,136	\$714,715	\$0.06071	1.00503	\$0.06102	7,312	\$46.16	\$3.78
GS-4	24,944,789	3.69%	19.88%	19.88%	\$42,022	\$1,305,112	\$97,883	\$1,445,018	0.05793	1.00503	0.05822	17,805	\$1,036.61	\$86.38
GS-5	12,549,693	0.55%	9.71%	9.71%	\$6,286	\$637,246	\$47,793	\$691,326	\$0.05509	1.00503	\$0.05536	110,084	\$6,094.77	\$507.90
GS-6	11,918,155	0.21%	9.23%	9.23%	\$2,441	\$695,896	\$45,442	\$653,779	\$0.05486	1.00503	\$0.05513	350,534	\$19,325.51	\$1,610.46
GS-7	9,260,735	0.08%	7.06%	7.06%	\$924	\$463,739	\$34,780	\$499,443	\$0.05393	1.00503	\$0.05420	771,728	\$41,829.60	\$3,485.80
GS-8 (A-D)	22,737,656	0.05%	17.26%	17.26%	\$559	\$1,133,058	\$84,979	\$1,218,596	\$0.05359	1.00503	\$0.05386	2,842,207	\$153,090.73	\$12,757.56
COM-INT	9,502,459	0.17%	3.58%	3.58%	\$1,971	\$234,873	\$17,616	\$254,460	\$0.02678	1.00503	\$0.02691	558,968	\$15,043.50	\$1,253.63
COM-NGV	1,469,075	0.01%	0.89%	0.89%	\$111	\$59,310	\$4,376	\$62,827	\$0.04277	1.00503	\$0.04298	340,759	\$14,646.36	\$1,220.53
COM-OL	59,723	0.02%	0.08%	0.08%	\$211	\$5,019	\$376	\$5,607	\$0.05623	1.00503	\$0.05651	3,439	\$194.32	\$16.19
COM-SG	62,693	0.51%	0.06%	0.06%	\$5,908	\$3,698	\$277	\$9,883	\$0.15764	1.00503	\$0.15843	207	\$32.78	\$2.73
TOTAL	132,791,038	100%	100%	100%	1,148,774	6,564,423	492,332	8,205,529						

Florida Public Utilities Company
Gas Utility Access and Replace Directive
Calculation of the Projected Revenue Requirements
January 1, 2017 through December 31, 2027

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
Qualified Investment														
Qualified Investment - Mains - Current Year 1070 Activity		\$1,726,709	\$1,726,709	\$1,726,709	\$1,726,709	\$1,726,709	\$1,726,709	\$1,726,709	\$1,726,709	\$1,726,709	\$1,726,709	\$1,726,709	\$1,726,709	\$20,720,505
Qualified Investment - Mains - Closed 1070 Activity to Plant		(\$1,726,709)	(\$1,726,709)	(\$1,726,709)	(\$1,726,709)	(\$1,726,709)	(\$1,726,709)	(\$1,726,709)	(\$1,726,709)	(\$1,726,709)	(\$1,726,709)	(\$1,726,709)	(\$1,726,709)	(\$20,720,505)
Qualified Investment - Services - Current Year 1070 Activity		\$302,174	\$302,174	\$302,174	\$302,174	\$302,174	\$302,174	\$302,174	\$302,174	\$302,174	\$302,174	\$302,174	\$302,174	\$3,626,088
Qualified Investment - Services - Closed 1070 Activity to Plant		(\$302,174)	(\$302,174)	(\$302,174)	(\$302,174)	(\$302,174)	(\$302,174)	(\$302,174)	(\$302,174)	(\$302,174)	(\$302,174)	(\$302,174)	(\$302,174)	(\$3,626,088)
Qualified Investment - M&R - Current Year 1070 Activity		\$129,503	\$129,503	\$129,503	\$129,503	\$129,503	\$129,503	\$129,503	\$129,503	\$129,503	\$129,503	\$129,503	\$129,503	\$1,554,038
Qualified Investment - M&R - Closed 1070 Activity to Plant		(\$129,503)	(\$129,503)	(\$129,503)	(\$129,503)	(\$129,503)	(\$129,503)	(\$129,503)	(\$129,503)	(\$129,503)	(\$129,503)	(\$129,503)	(\$129,503)	(\$1,554,038)
Qualified Investment - Mains - Current 1010 Activity		\$1,726,709	\$1,726,709	\$1,726,709	\$1,726,709	\$1,726,709	\$1,726,709	\$1,726,709	\$1,726,709	\$1,726,709	\$1,726,709	\$1,726,709	\$1,726,709	\$20,720,505
Qualified Investment - Services - Current 1010 Activity		\$302,174	\$302,174	\$302,174	\$302,174	\$302,174	\$302,174	\$302,174	\$302,174	\$302,174	\$302,174	\$302,174	\$302,174	\$3,626,088
Qualified Investment - M&R - Current 1010 Activity		\$129,503	\$129,503	\$129,503	\$129,503	\$129,503	\$129,503	\$129,503	\$129,503	\$129,503	\$129,503	\$129,503	\$129,503	\$1,554,038
Total Qualified Investment - Mains 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - Service 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - M&R 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - Mains 1010	\$74,188,456	\$75,915,165	\$77,641,874	\$79,368,582	\$81,095,291	\$82,822,000	\$84,548,709	\$86,275,417	\$88,002,126	\$89,728,835	\$91,455,544	\$93,182,252	\$94,908,961	\$94,908,961
Total Qualified Investment - Service 1010	\$14,150,500	\$14,452,674	\$14,754,849	\$15,057,023	\$15,359,197	\$15,661,371	\$15,963,545	\$16,265,719	\$16,567,893	\$16,870,067	\$17,172,241	\$17,474,415	\$17,776,589	\$17,776,589
Total Qualified Investment - M&R 1010	\$4,780,189	\$4,909,692	\$5,039,195	\$5,168,698	\$5,298,201	\$5,427,705	\$5,557,208	\$5,686,711	\$5,816,214	\$5,945,717	\$6,075,220	\$6,204,723	\$6,334,227	\$6,334,227
Total Qualified Investment	\$93,119,145	\$95,277,531	\$97,435,917	\$99,594,303	\$101,752,689	\$103,911,075	\$106,069,461	\$108,227,847	\$110,386,233	\$112,544,619	\$114,703,005	\$116,861,390	\$119,019,776	\$119,019,776
Less: Accumulated Depreciation	(\$6,430,859)	(\$6,569,485)	(\$6,711,314)	(\$6,856,344)	(\$7,004,535)	(\$7,156,008)	(\$7,310,643)	(\$7,468,479)	(\$7,629,517)	(\$7,793,757)	(\$7,961,198)	(\$8,131,840)	(\$8,305,685)	(\$8,305,685)
Net Book Value	\$86,688,287	\$88,708,046	\$90,724,604	\$92,737,960	\$94,748,154	\$96,755,067	\$98,758,818	\$100,759,368	\$102,756,716	\$104,750,862	\$106,741,807	\$108,729,550	\$110,714,092	\$110,714,092
Average Net Qualified Investment	\$87,698,166	\$89,716,325	\$91,731,282	\$93,743,037	\$95,751,350	\$97,756,942	\$99,759,093	\$101,758,012	\$103,753,789	\$105,746,334	\$107,735,618	\$109,721,821		
Depreciation Rates														
Approved Depreciation on Rate-Mains	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%
Approved Depreciation Rate-Services	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Approved Depreciation Rate - M&R City Gate	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Return on Average Net Qualified Investment														
Equity - Cost of Capital, Inclusive of Income Tax Gross-up	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%
Debt - Cost of Capital	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%
Equity Component - Inclusive of Income Tax Gross-up	\$456,333	\$466,834	\$477,319	\$487,787	\$498,238	\$508,673	\$519,091	\$529,493	\$539,877	\$550,245	\$560,597	\$570,932	\$581,251	\$616,519
Debt Component	\$58,076	\$100,333	\$102,586	\$104,836	\$107,082	\$109,325	\$111,564	\$113,799	\$116,031	\$118,260	\$120,484	\$122,706	\$124,925	\$132,582
Return Requirement	\$554,409	\$567,167	\$579,905	\$592,623	\$605,321	\$618,014	\$630,698	\$643,372	\$656,039	\$668,699	\$681,353	\$694,001	\$706,644	\$749,101
Investment Expenses														
Depreciation Expense - Mains	\$98,918	\$101,220	\$103,522	\$105,825	\$108,127	\$110,429	\$112,732	\$115,034	\$117,336	\$119,638	\$121,941	\$124,243	\$126,545	\$138,966
Depreciation Expense - Services	\$29,480	\$30,110	\$30,739	\$31,369	\$31,998	\$32,628	\$33,257	\$33,887	\$34,516	\$35,146	\$35,776	\$36,405	\$37,035	\$39,311
Property Taxes	\$10,229	\$10,498	\$10,768	\$11,038	\$11,308	\$11,578	\$11,847	\$12,117	\$12,387	\$12,657	\$12,927	\$13,196	\$13,466	\$14,549
General Public Notice Expense & Customer Notice Expense	\$144,480	\$144,480	\$144,480	\$144,480	\$144,480	\$144,480	\$144,480	\$144,480	\$144,480	\$144,480	\$144,480	\$144,480	\$144,480	\$1,735,766
Total Expense	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$12,000
Total Revenue Requirements	\$838,516	\$854,476	\$870,415	\$886,335	\$902,234	\$918,113	\$933,972	\$949,810	\$965,629	\$981,427	\$997,205	\$1,012,962	\$1,028,700	\$1,111,109

Florida Public Utilities Company
Gas Utility Assets and Replace Directive
Projection of Qualified Main & Services Revenue Requirements
Surcharge Calculation - January 1, 2027 through December 31, 2027
Per Therm Rate

1. 1/1/27-12/31/27 Qualified Main & Services Replacement Revenue Requirements		\$	11,111,093
Main	80%	\$8,888,874	
Services	14%	\$1,555,553	
M&R	6%	\$666,666	
Net		<u>\$11,111,093</u>	
2. TRUE-UP from Price Period (Over) Under Recovery Estimated thru 12/2026		\$	-
3. 2027 Qualified Main & Services Replacement Revenue Requirements		\$	11,111,093
Main	80%	\$8,888,874	
Services	14%	\$1,555,553	
M&R	6%	\$666,666	
Net		<u>\$11,111,093</u>	

RATE SCHEDULE	2023 THERMS	SERVICES COS %	MAINS COS %	M&R COS %	SERVICES REV REQ	MAINS REV REQ	M&R REV REQ	GUARD REV REQ	DOLLARS PER THERM	TAX FACTOR	GUARD FACTORS PER THERM	TYPICAL ANNUAL THERMS	ANNUAL COST	AVERAGE MONTHLY COST
RES-1	1,520,128	27.37%	1.20%	1.20%	\$425,756	\$106,940	\$8,021	\$540,717	\$0.35570	1.00503	\$0.35749	54	\$19.23	\$1.60
RES-2	5,975,749	36.49%	4.71%	4.71%	\$567,561	\$419,040	\$31,428	\$1,018,030	\$0.17016	1.00503	\$0.17122	159	\$27.22	\$2.27
RES-3	12,959,345	19.15%	10.05%	10.05%	\$297,820	\$193,002	\$66,975	\$1,257,797	\$0.09706	1.00503	\$0.09755	665	\$64.86	\$5.41
RES-SG	96,299	1.09%	0.09%	0.09%	\$16,917	\$8,317	\$624	\$25,857	\$0.26851	1.00503	\$0.26986	109	\$29.43	\$2.45
GS-1	691,996	3.10%	0.60%	0.60%	\$48,262	\$53,313	\$3,998	\$105,573	\$0.15256	1.00503	\$0.15333	322	\$49.40	\$4.12
GS-2	7,230,026	4.14%	6.03%	6.03%	\$64,461	\$555,587	\$40,169	\$640,218	\$0.08855	1.00503	\$0.08900	2,902	\$258.31	\$21.53
GS-3	11,772,698	3.40%	9.57%	9.57%	\$52,944	\$851,024	\$63,827	\$967,795	\$0.08221	1.00503	\$0.08262	7,312	\$694.14	\$50.34
GS-4	24,944,789	3.66%	19.88%	19.88%	\$56,902	\$1,767,251	\$132,544	\$1,956,696	0.07844	1.00503	0.07884	17,805	\$1,403.67	\$116.97
GS-5	12,549,603	0.55%	9.71%	9.71%	\$8,512	\$62,894	\$64,717	\$936,124	\$0.07459	1.00503	\$0.07497	110,084	\$8,252.91	\$687.74
GS-6	11,918,155	0.21%	9.23%	9.23%	\$3,305	\$820,443	\$61,533	\$185,281	\$0.07428	1.00503	\$0.07465	350,534	\$26,168.65	\$2,180.72
GS-7	9,260,735	0.08%	7.06%	7.06%	\$1,251	\$627,948	\$47,096	\$676,295	\$0.07303	1.00503	\$0.07340	771,728	\$56,641.40	\$4,720.12
GS-8 (A-D)	22,737,656	0.05%	17.26%	17.26%	\$757	\$1,534,272	\$115,070	\$1,650,699	\$0.07257	1.00503	\$0.07294	2,842,207	\$207,299.91	\$17,274.99
COM-HNT	9,502,459	0.17%	3.58%	3.58%	\$2,669	\$318,042	\$23,853	\$344,563	\$0.03626	1.00503	\$0.03644	558,968	\$20,370.38	\$1,697.53
COM-NGV	1,469,075	0.01%	0.89%	0.89%	\$150	\$78,599	\$5,925	\$85,074	\$0.05791	1.00503	\$0.05820	340,759	\$19,832.61	\$1,652.72
COM-COL	92,723	0.02%	0.08%	0.08%	\$286	\$6,797	\$510	\$7,592	\$0.07614	1.00503	\$0.07652	3,439	\$263.13	\$21.93
COM-SG	62,693	0.51%	0.06%	0.06%	\$8,000	\$5,007	\$376	\$13,382	\$0.21346	1.00503	\$0.21453	207	\$44.39	\$3.70
TOTAL	132,791,038	100%	100%	100%	1,555,553	8,888,874	666,666	11,111,093						

Florida Public Utilities Company
Gas Utility Assets and Replace Directive
Calculation of the Projected Revenue Requirements
January 1, 2028 through December 31, 2028

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
Qualified Investment														
Qualified Investment - Mains - Current Year 1070 Activity		\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$19,369,874
Qualified Investment - Mains - Closed 1070 Activity to Plant		(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$19,369,874)
Qualified Investment - Services - Current Year 1070 Activity		\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$3,389,728
Qualified Investment - Services - Closed 1070 Activity to Plant		(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$3,389,728)
Qualified Investment - M&R - Current Year 1070 Activity		\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$1,452,741
Qualified Investment - M&R - Closed 1070 Activity to Plant		(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$1,452,741)
Qualified Investment - Mains - Current 1010 Activity		\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$19,369,874
Qualified Investment - Services - Current 1010 Activity		\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$3,389,728
Qualified Investment - M&R - Current 1010 Activity		\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$1,452,741
Total Qualified Investment - Mains 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - Service 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - M&R 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - Mains 1010	\$94,908,961	\$96,523,117	\$98,137,273	\$99,751,430	\$101,365,586	\$102,979,742	\$104,593,898	\$106,208,054	\$107,822,211	\$109,436,367	\$111,050,523	\$112,664,679	\$114,278,835	\$114,278,835
Total Qualified Investment - Service 1010	\$17,776,589	\$18,059,066	\$18,341,543	\$18,624,021	\$18,906,498	\$19,188,975	\$19,471,453	\$19,753,930	\$20,036,407	\$20,318,885	\$20,601,362	\$20,883,839	\$21,166,317	\$21,166,317
Total Qualified Investment - M&R 1010	\$6,334,227	\$6,455,288	\$6,576,350	\$6,697,412	\$6,818,474	\$6,939,535	\$7,060,597	\$7,181,659	\$7,302,720	\$7,423,782	\$7,544,844	\$7,665,905	\$7,786,967	\$7,786,967
Total Qualified Investment	\$119,019,776	\$121,037,472	\$123,055,167	\$125,072,862	\$127,090,557	\$129,108,253	\$131,125,948	\$133,143,643	\$135,161,338	\$137,179,034	\$139,196,729	\$141,214,424	\$143,232,119	\$143,232,119
Less: Accumulated Depreciation	(\$8,305,685)	(\$8,482,713)	(\$8,662,734)	(\$8,845,749)	(\$9,031,756)	(\$9,220,756)	(\$9,412,749)	(\$9,607,735)	(\$9,805,713)	(\$10,006,683)	(\$10,210,650)	(\$10,417,607)	(\$10,627,557)	(\$10,627,557)
Net Book Value	\$110,714,092	\$112,554,758	\$114,392,432	\$116,227,114	\$118,058,802	\$119,887,497	\$121,713,199	\$123,535,909	\$125,355,625	\$127,172,349	\$128,986,079	\$130,796,817	\$132,604,562	\$132,604,562
Average Net Qualified Investment	\$111,634,425	\$113,475,395	\$115,309,773	\$117,142,958	\$118,975,149	\$120,800,348	\$122,624,554	\$124,445,767	\$126,263,987	\$128,079,211	\$129,891,448	\$131,700,690		
Depreciation Rates														
Approved Depreciat on Rate-Mains		1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%
Approved Depreciation Rate-Services		2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Approved Depreciation Rate - M&R City Gate		2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Return on Average Net Qualified Investment														
Equity - Cost of Capital, Inclusive of Income Tax Gross-up		6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%
Debt - Cost of Capital		1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%
Equity Component - Inclusive of Income Tax Gross-up	\$59,884	\$59,454	\$60,008	\$60,547	\$61,070	\$61,578	\$62,070	\$62,547	\$63,008	\$63,453	\$63,883	\$64,298	\$64,697	\$7,598,801
Debt Component	\$124,844	\$126,901	\$128,955	\$131,005	\$133,052	\$135,095	\$137,135	\$139,172	\$141,205	\$143,235	\$145,262	\$147,285	\$149,297	\$1,633,147
Return Requirement	\$705,728	\$717,355	\$728,963	\$740,552	\$752,122	\$763,673	\$775,206	\$786,719	\$798,213	\$809,689	\$821,143	\$832,583	\$844,008	\$9,231,948
Investment Expenses														
Depreciation Expense - Mains	\$126,645	\$128,697	\$130,850	\$133,002	\$135,154	\$137,306	\$139,459	\$141,611	\$143,763	\$145,915	\$148,067	\$150,220	\$152,372	\$1,660,519
Depreciation Expense - Services	\$37,035	\$37,623	\$38,212	\$38,800	\$39,389	\$39,977	\$40,566	\$41,154	\$41,743	\$42,331	\$42,920	\$43,508	\$44,097	\$543,255
Depreciation Expense - M&R City Gate	\$13,449	\$13,701	\$13,953	\$14,205	\$14,457	\$14,710	\$14,962	\$15,214	\$15,466	\$15,718	\$15,971	\$16,223	\$16,475	\$178,028
Property Taxes	\$184,523	\$184,523	\$184,523	\$184,523	\$184,523	\$184,523	\$184,523	\$184,523	\$184,523	\$184,523	\$184,523	\$184,523	\$184,523	\$2,214,282
General Public Notice Expense & Customer Notice Expense	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$12,000
Total Expense	\$362,552	\$365,545	\$368,538	\$371,531	\$374,524	\$377,516	\$380,509	\$383,502	\$386,495	\$389,488	\$392,481	\$395,474	\$398,467	\$4,548,155
Total Revenue Requirements	\$1,068,280	\$1,082,900	\$1,097,501	\$1,112,093	\$1,126,646	\$1,141,190	\$1,155,715	\$1,170,221	\$1,184,708	\$1,199,177	\$1,213,626	\$1,228,057	\$1,242,469	\$13,780,103

Florida Public Utilities Company
Gas Utility Access and Replace Directive
Projection of Qualified Mains & Services Revenue Requirements
Surcharge Calculation - January 1, 2028 through December 31, 2028
Per Therm Rate

1. 1/1/28-12/31/28 Qualified Mains & Services Replacement Revenue Requirements		\$	13,780,103
Mains	80%	\$11,024,082	
Services	14%	\$1,929,214	
MAR	6%	\$826,806	
Net		<u>\$13,780,103</u>	
2. TRUE-UP from Prior Period (Over) Under Recovery Estimated thru 12/2027		\$	-
3. 2028 Qualified Mains & Services Replacement Revenue Requirements		\$	13,780,103
Mains	80%	\$11,024,082	
Services	14%	\$1,929,214	
MAR	6%	\$826,806	
Net		<u>\$13,780,103</u>	

RATE SCHEDULE	2023 THERMS	SERVICES COS %	MAINS COS %	M&R COS %	SERVICES REV REQ	MAINS REV REQ	M&R REV REQ	GUARD THERM	DOLLARS PER THERM	TAX FACTOR	GUARD FACTORS PER THERM	TYPICAL ANNUAL THERMS	ANNUAL COST	AVERAGE MONTHLY COST
RES-1	1,520,128	27.37%	1.20%	1.20%	\$528,027	\$132,628	\$9,947	\$670,603	\$0.44115	1.00503	\$0.44337	54	\$23.85	\$1.99
RES-2	5,975,749	36.49%	4.71%	4.71%	\$703,896	\$519,699	\$38,977	\$1,262,572	\$0.21128	1.00503	\$0.21235	159	\$33.76	\$2.81
RES-3	12,959,345	19.15%	10.05%	10.05%	\$369,360	\$1,107,511	\$83,063	\$1,559,933	\$0.12037	1.00503	\$0.12098	665	\$10.44	\$6.70
RES-SG	96,259	1.09%	0.09%	0.09%	\$20,981	\$10,314	\$774	\$32,069	\$0.33301	1.00503	\$0.33469	109	\$36.50	\$3.04
GS-1	691,956	3.10%	0.60%	0.60%	\$59,855	\$66,119	\$4,959	\$130,933	\$0.18921	1.00503	\$0.19016	322	\$61.26	\$5.11
GS-2	7,230,026	4.14%	6.03%	6.03%	\$79,946	\$664,241	\$49,818	\$794,005	\$0.10982	1.00503	\$0.11037	2,902	\$320.35	\$26.70
GS-3	11,772,608	3.40%	9.57%	9.57%	\$65,662	\$1,055,450	\$79,159	\$1,200,270	\$0.10195	1.00503	\$0.10247	7,312	\$749.26	\$62.44
GS-4	24,944,789	3.66%	19.81%	19.81%	\$70,570	\$2,191,764	\$164,382	\$2,426,717	0.09728	1.00503	0.09777	17,805	\$1,740.84	\$145.07
GS-5	12,549,603	0.55%	9.71%	9.71%	\$10,557	\$1,070,171	\$80,263	\$1,160,991	\$0.09251	1.00503	\$0.09298	110,084	\$10,235.36	\$852.95
GS-6	11,918,153	0.21%	9.23%	9.23%	\$4,099	\$1,017,522	\$76,314	\$1,097,935	\$0.09212	1.00503	\$0.09259	350,534	\$32,454.65	\$2,704.35
GS-7	9,260,735	0.08%	7.06%	7.06%	\$1,552	\$778,788	\$58,409	\$838,749	\$0.09037	1.00503	\$0.09103	771,728	\$70,247.30	\$5,853.94
GS-8 (A-D)	22,737,656	0.05%	17.26%	17.26%	\$939	\$1,502,821	\$142,712	\$2,046,472	\$0.09000	1.00503	\$0.09046	2,842,207	\$257,695.68	\$21,424.64
COM-INT	9,502,459	0.17%	3.58%	3.58%	\$3,310	\$394,439	\$29,583	\$427,331	\$0.04497	1.00503	\$0.04520	558,968	\$25,263.57	\$2,105.30
COM-NGV	1,469,073	0.01%	0.89%	0.89%	\$187	\$97,975	\$7,348	\$105,510	\$0.07182	1.00503	\$0.07218	340,759	\$24,596.63	\$2,049.72
COM-OL	99,723	0.02%	0.08%	0.08%	\$355	\$8,429	\$632	\$9,416	\$0.09442	1.00503	\$0.09490	3,439	\$326.33	\$27.19
COM-SG	62,693	0.51%	0.06%	0.06%	\$9,922	\$6,210	\$466	\$16,597	\$0.26473	1.00503	\$0.26607	207	\$55.05	\$4.59
TOTAL	132,791,038	100%	100%	100%	1,929,214	11,024,082	\$26,806	13,780,103						

Florida Public Utilities Company
Gas Utility Access and Replace Directive
Calculation of the Projected Revenue Requirements
January 1, 2019 through December 31, 2029

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
Item														
Qualified Investment														
Qualified Investment - Mains - Current Year 1070 Activity	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$19,369,874
Qualified Investment - Mains - Closed 1070 Activity to Plant	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$19,369,874)
Qualified Investment - Services - Current Year 1070 Activity	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$3,389,728
Qualified Investment - Services - Closed 1070 Activity to Plant	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$3,389,728)
Qualified Investment - M&R - Current Year 1070 Activity	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$1,452,741
Qualified Investment - M&R - Closed 1070 Activity to Plant	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$1,452,741)
Qualified Investment - Mains - Current 1010 Activity	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$19,369,874
Qualified Investment - Services - Current 1010 Activity	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$3,389,728
Qualified Investment - M&R - Current 1010 Activity	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$1,452,741
Total Qualified Investment - Mains 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - Service 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - Mains 1010	\$114,278,835	\$115,892,992	\$117,507,148	\$119,121,304	\$120,735,460	\$122,349,616	\$123,963,773	\$125,577,929	\$127,192,085	\$128,806,241	\$130,420,397	\$132,034,554	\$133,648,710	\$133,648,710
Total Qualified Investment - M&R 1070	\$21,166,317	\$21,448,794	\$21,731,271	\$22,013,749	\$22,296,226	\$22,578,703	\$22,861,181	\$23,143,658	\$23,426,136	\$23,708,613	\$23,991,090	\$24,273,568	\$24,556,045	\$24,556,045
Total Qualified Investment - M&R 1010	\$7,786,967	\$7,908,029	\$8,029,091	\$8,150,152	\$8,271,214	\$8,392,276	\$8,513,338	\$8,634,399	\$8,755,461	\$8,876,523	\$8,997,584	\$9,118,646	\$9,239,708	\$9,239,708
Total Qualified Investment	\$143,252,119	\$145,249,815	\$147,247,511	\$149,245,205	\$151,242,900	\$153,240,595	\$155,238,291	\$157,235,986	\$159,233,681	\$161,231,377	\$163,229,072	\$165,226,767	\$167,224,462	\$167,224,462
Less: Accumulated Depreciation	(\$10,627,557)	(\$10,840,501)	(\$11,056,437)	(\$11,275,366)	(\$11,497,288)	(\$11,722,203)	(\$11,950,111)	(\$12,181,012)	(\$12,414,906)	(\$12,651,792)	(\$12,891,673)	(\$13,134,544)	(\$13,380,410)	(\$13,380,410)
Net Book Value	\$132,624,562	\$134,409,314	\$136,191,073	\$138,009,839	\$139,805,612	\$141,598,392	\$143,388,180	\$145,174,974	\$146,958,776	\$148,739,584	\$150,517,400	\$152,292,223	\$154,064,053	\$154,064,053
Average Net Qualified Investment	\$133,506,938	\$135,310,193	\$137,110,456	\$138,907,726	\$140,702,002	\$142,493,286	\$144,281,577	\$146,066,875	\$147,849,180	\$149,628,492	\$151,404,811	\$153,178,138		
Depreciation Rates														
Approved Depreciation Rate-Mains	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%
Approved Depreciation Rate-Services	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Approved Depreciation Rate - M&R City Gate	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Return on Average Net Qualified Investment														
Equity - Cost of Capital, Inclusive of Income Tax Gross-up	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%
Debt - Cost of Capital	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%
Equity Component - Inclusive of Income Tax Gross-up	\$694,696	\$704,019	\$713,447	\$722,799	\$732,135	\$741,456	\$750,762	\$760,051	\$769,325	\$778,584	\$787,827	\$797,054	\$806,257	\$8,952,217
Debt Component	\$149,305	\$151,322	\$153,335	\$155,345	\$157,352	\$159,355	\$161,355	\$163,351	\$165,345	\$167,335	\$169,321	\$171,304	\$173,283	\$1,924,023
Return Requirement	\$844,002	\$855,401	\$866,782	\$878,144	\$889,487	\$900,811	\$912,116	\$923,403	\$934,670	\$945,918	\$957,148	\$968,359	\$979,541	\$10,876,242
Investment Expenses														
Depreciation Expense - Mains	\$152,372	\$154,524	\$156,676	\$158,828	\$160,981	\$163,133	\$165,285	\$167,437	\$169,589	\$171,742	\$173,894	\$176,046	\$178,198	\$1,970,507
Depreciation Expense - Services	\$44,096	\$44,685	\$45,273	\$45,862	\$46,450	\$47,039	\$47,627	\$48,216	\$48,804	\$49,393	\$49,981	\$50,570	\$51,159	\$567,999
Depreciation Expense - M&R City Gate	\$16,475	\$16,727	\$16,979	\$17,232	\$17,484	\$17,736	\$17,988	\$18,241	\$18,493	\$18,745	\$18,997	\$19,249	\$19,501	\$214,347
Property Taxes	\$221,008	\$221,008	\$221,008	\$221,008	\$221,008	\$221,008	\$221,008	\$221,008	\$221,008	\$221,008	\$221,008	\$221,008	\$221,008	\$2,652,091
General Public Notice Expense & Customer Notice Expense	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$12,000
Total Expense	\$434,951	\$437,944	\$440,937	\$443,930	\$446,923	\$449,916	\$452,908	\$455,901	\$458,894	\$461,887	\$464,880	\$467,873	\$470,866	\$5,416,944
Total Revenue Requirements	\$1,278,952	\$1,293,315	\$1,307,719	\$1,322,074	\$1,336,410	\$1,350,727	\$1,365,025	\$1,379,304	\$1,393,564	\$1,407,806	\$1,422,028	\$1,436,232	\$1,450,426	\$16,293,185

Florida Public Utilities Company
On Utility Access and Replace Directive
Projection of Qualified Mains & Services Revenue Requirements
Surcharge Calculation - January 1, 2019 through December 31, 2019
Per Therm Rate

1. 1/1/29-12/31/29 Qualified Mains & Services Replacement Revenue Requirements		\$	16,293,185
Mains	80%	\$13,034,548	
Services	14%	\$2,281,046	
M&R	6%	\$977,591	
Net		<u>\$16,293,185</u>	
2. TRUE-UP from Prior Period (Over) Under Recovery Estimated thru 12/2018		\$	-
3. 2019 Qualified Mains & Services Replacement Revenue Requirements		\$	16,293,185
Mains	80%	\$13,034,548	
Services	14%	\$2,281,046	
M&R	6%	\$977,591	
Net		<u>\$16,293,185</u>	

RATE SCHEDULE	2023 THERMS	SERVICES COS %	MAINS COS %	M&R COS %	SERVICES REV REQ	MAINS REV REQ	M&R REV REQ	GUARD REV REQ	DOLLARS PER THERM	TAX FACTOR	GUARD FACTORS PER THERM	TYPICAL ANNUAL THERMS	ANNUAL COST	AVERAGE MONTHLY COST
RES-1	1,520,128	27.37%	1.20%	1.20%	\$624,324	\$156,816	\$11,761	\$792,901	\$0.52160	1.00503	\$0.52422	54	\$28.20	\$2.35
RES-2	5,975,749	36.49%	4.71%	4.71%	\$832,365	\$614,476	\$46,086	\$1,492,827	\$0.24981	1.00503	\$0.25107	159	\$39.92	\$3.33
RES-3	12,959,345	19.15%	10.05%	10.05%	\$436,720	\$1,309,488	\$98,212	\$1,844,419	\$0.14232	1.00503	\$0.14304	665	\$95.11	\$7.93
RES-SG	96,299	1.09%	0.09%	0.09%	\$24,807	\$12,195	\$915	\$37,917	\$0.39374	1.00503	\$0.39572	109	\$43.16	\$3.60
GS-1	691,996	3.10%	0.60%	0.60%	\$70,771	\$78,177	\$5,863	\$154,811	\$0.22372	1.00503	\$0.22484	322	\$72.43	\$6.04
GS-2	7,230,026	4.14%	6.03%	6.03%	\$94,526	\$785,379	\$38,903	\$938,808	\$0.12985	1.00503	\$0.13050	2,902	\$378.78	\$31.56
GS-3	11,772,601	3.40%	9.57%	9.57%	\$77,636	\$1,247,933	\$93,595	\$1,419,164	\$0.12055	1.00503	\$0.12115	7,312	\$895.90	\$73.83
GS-4	24,944,789	3.66%	19.88%	19.88%	\$83,440	\$2,591,477	\$194,361	\$2,869,278	0.11503	1.00503	0.11560	17,805	\$2,058.32	\$171.53
GS-5	12,549,603	0.55%	9.71%	9.71%	\$12,482	\$1,265,339	\$94,900	\$1,372,721	\$0.10938	1.00503	\$0.10993	110,084	\$12,101.08	\$1,006.50
GS-6	11,918,155	0.21%	9.23%	9.23%	\$4,846	\$1,203,088	\$90,232	\$1,298,166	\$0.10892	1.00503	\$0.10947	350,534	\$38,373.42	\$3,197.78
GS-7	9,260,735	0.08%	7.06%	7.06%	\$1,835	\$920,816	\$69,061	\$991,712	\$0.10709	1.00503	\$0.10763	771,728	\$83,058.32	\$6,921.53
GS-8 (A-D)	22,737,656	0.05%	17.26%	17.26%	\$1,110	\$2,249,840	\$168,738	\$2,419,688	\$0.10642	1.00503	\$0.10695	2,842,207	\$303,942.32	\$25,331.86
COM-MNT	9,502,459	0.17%	3.58%	3.58%	\$3,913	\$466,373	\$34,978	\$505,264	\$0.05317	1.00503	\$0.05344	58,968	\$29,870.90	\$2,489.24
COM-NGV	1,469,075	0.01%	0.89%	0.89%	\$221	\$115,843	\$8,688	\$124,752	\$0.08492	1.00503	\$0.08535	340,759	\$29,082.32	\$2,423.53
COM-OL	99,723	0.02%	0.08%	0.08%	\$420	\$9,966	\$747	\$11,134	\$0.11164	1.00503	\$0.11221	3,439	\$385.85	\$32.15
COM-SG	62,693	0.51%	0.06%	0.06%	\$11,731	\$7,342	\$551	\$19,624	\$0.31301	1.00503	\$0.31459	207	\$65.09	\$5.42
TOTAL	132,791,038	100%	100%	100%	2,281,046	13,034,548	977,591	16,293,185						

Florida Public Utilities Company
Gas Utility Access and Replace Directive
Calculation of the Projected Revenue Requirements
January 1, 2010 through December 31, 2010

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
Qualified Investment														
Qualified Investment - Mains - Current Year 1070 Activity	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$19,369,874
Qualified Investment - Mains - Closed 1070 Activity to Plant	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$19,369,874)
Qualified Investment - Services - Current Year 1070 Activity	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$3,389,728
Qualified Investment - Services - Closed 1070 Activity to Plant	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$3,389,728)
Qualified Investment - M&R - Current Year 1070 Activity	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$1,452,741
Qualified Investment - M&R - Closed 1070 Activity to Plant	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$1,452,741)
Qualified Investment - Mains - Current 1010 Activity	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$19,369,874
Qualified Investment - Services - Current 1010 Activity	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$3,389,728
Qualified Investment - M&R - Current 1010 Activity	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$1,452,741
Total Qualified Investment - Mains 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - Service 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - M&R 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - Mains 1010	\$133,648,710	\$133,262,866	\$136,877,022	\$138,491,178	\$140,105,335	\$141,719,491	\$143,333,647	\$144,947,803	\$146,561,959	\$148,176,116	\$149,790,272	\$151,404,428	\$153,018,584	\$153,018,584
Total Qualified Investment - Service 1010	\$24,556,045	\$24,838,522	\$25,121,000	\$25,403,477	\$25,685,954	\$25,968,432	\$26,250,909	\$26,533,386	\$26,815,864	\$27,098,341	\$27,380,818	\$27,663,296	\$27,945,773	\$27,945,773
Total Qualified Investment - M&R 1010	\$9,239,708	\$9,360,770	\$9,481,831	\$9,602,893	\$9,723,955	\$9,845,016	\$9,966,078	\$10,087,140	\$10,208,202	\$10,329,263	\$10,450,325	\$10,571,387	\$10,692,448	\$10,692,448
Total Qualified Investment	\$167,444,463	\$169,462,158	\$171,479,853	\$173,497,548	\$175,515,243	\$177,532,938	\$179,550,634	\$181,568,329	\$183,586,024	\$185,603,720	\$187,621,415	\$189,639,110	\$191,656,805	\$191,656,805
Less: Accumulated Depreciation	(\$13,310,410)	(\$13,629,263)	(\$13,881,119)	(\$14,135,061)	(\$14,393,801)	(\$14,654,631)	(\$14,918,453)	(\$15,185,269)	(\$15,455,078)	(\$15,727,880)	(\$16,003,674)	(\$16,282,463)	(\$16,564,242)	(\$16,564,242)
Net Book Value	\$154,064,053	\$155,832,895	\$157,598,734	\$159,361,585	\$161,121,443	\$162,878,308	\$164,632,180	\$166,383,060	\$168,130,946	\$169,875,840	\$171,617,741	\$173,356,649	\$175,092,563	\$175,092,563
Average Net Qualified Investment	\$154,948,471	\$156,715,812	\$158,480,159	\$160,241,514	\$161,999,875	\$163,755,244	\$165,507,620	\$167,257,003	\$169,003,393	\$170,746,790	\$172,487,195	\$174,224,606		
Depreciation Rates														
Approved Depreciation Rate - Mains	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%
Approved Depreciation Rate - Services	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Approved Depreciation Rate - M&R City Gate	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Return on Average Net Qualified Investment														
Equity - Cost of Capital, Inclusive of Income Tax Gross-up	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%
Debt - Cost of Capital	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%
Equity Component - Inclusive of Income Tax Gross-up	\$506,266	\$515,462	\$524,643	\$533,808	\$542,958	\$552,092	\$561,210	\$570,313	\$579,400	\$588,478	\$597,548	\$606,599	\$615,639	\$10,278,721
Debt Component	\$173,284	\$175,261	\$177,234	\$179,203	\$181,170	\$183,133	\$185,093	\$187,049	\$189,002	\$190,952	\$192,898	\$194,841	\$196,781	\$2,202,170
Return Requirement	\$979,550	\$990,723	\$1,001,877	\$1,013,012	\$1,024,128	\$1,035,225	\$1,046,303	\$1,057,362	\$1,068,402	\$1,079,424	\$1,090,426	\$1,101,410	\$1,112,371	\$12,480,891
Investment Expenses														
Depreciation Expense - Mains	\$178,198	\$180,350	\$182,503	\$184,655	\$186,807	\$188,959	\$191,112	\$193,264	\$195,416	\$197,568	\$199,720	\$201,873	\$22,280,425	
Depreciation Expense - Services	\$91,158	\$91,747	\$92,335	\$92,924	\$93,512	\$94,101	\$94,689	\$95,278	\$95,866	\$96,455	\$97,043	\$97,632	\$572,742	
Depreciation Expense - M&R City Gate	\$19,502	\$19,754	\$20,006	\$20,258	\$20,510	\$20,763	\$21,015	\$21,267	\$21,519	\$21,772	\$22,024	\$22,276	\$230,665	
Property Taxes	\$356,773	\$356,773	\$356,773	\$356,773	\$356,773	\$356,773	\$356,773	\$356,773	\$356,773	\$356,773	\$356,773	\$356,773	\$356,773	
General Public Notice Expense & Customer Notice Expense	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	
Total Expense	\$506,632	\$509,623	\$512,618	\$515,610	\$518,603	\$521,595	\$524,589	\$527,582	\$530,575	\$533,568	\$536,561	\$539,554	\$6,277,113	
Total Revenue Requirements	\$1,486,182	\$1,500,348	\$1,514,491	\$1,528,622	\$1,542,731	\$1,556,821	\$1,570,892	\$1,584,944	\$1,598,977	\$1,612,992	\$1,626,987	\$1,640,963	\$18,764,954	

Florida Public Utilities Company
Gas Utility Access and Replace Directive
Projection of Qualified Mains & Services Revenue Requirements
Surcharge Calculation - January 1, 2030 through December 31, 2030
Per Therm Rate

1. 1/1/30-12/31/30 Qualified Mains & Services Replacement Revenue Requirements		\$	18,764,954
Mains	80%	\$15,011,963	
Services	14%	\$2,627,094	
M&R	6%	\$1,125,897	
Net		<u>\$18,764,954</u>	
2. TRUE-UP from Prior Period (Over) Under Recovery Estimated thru 12/2019		\$	-
3. -2019 Qualified Mains & Services Replacement Revenue Requirements		\$	18,764,954
Mains	80%	\$15,011,963	
Services	14%	\$2,627,094	
M&R	6%	\$1,125,897	
Net		<u>\$18,764,954</u>	

RATE SCHEDULE	2023 THERMS	SERVICES COS %	MAINS COS %	M&R COS %	SERVICES REV REQ	MAINS REV REQ	M&R REV REQ	GUARD REV REQ	DOLLARS PER THERM	TAX FACTOR	GUARD FACTORS PER THERM	TYPICAL ANNUAL THERMS	ANNUAL COST	AVERAGE MONTHLY COST
RES-1	1,520,128	27.37%	1.20%	1.20%	\$719,037	\$180,606	\$13,545	\$913,188	\$0.66073	1.00503	\$0.60375	54	\$32.48	\$2.71
RES-2	5,975,749	36.45%	4.71%	4.71%	\$958,525	\$707,696	\$53,077	\$1,719,298	\$0.28771	1.00503	\$0.28916	159	\$45.97	\$3.83
RES-3	12,959,345	19.15%	10.05%	10.05%	\$502,973	\$1,503,144	\$113,111	\$2,124,228	\$0.16391	1.00503	\$0.16474	665	\$109.54	\$9.13
RES-SG	96,299	1.09%	0.09%	0.09%	\$28,570	\$14,045	\$1,053	\$43,669	\$0.45348	1.00503	\$0.45576	109	\$49.70	\$4.14
GS-1	691,956	3.10%	0.60%	0.60%	\$81,507	\$90,037	\$6,753	\$178,297	\$0.25766	1.00503	\$0.25895	322	\$83.42	\$6.95
GS-2	7,230,026	4.14%	6.03%	6.03%	\$108,866	\$904,526	\$67,839	\$1,081,231	\$0.14955	1.00503	\$0.15020	2,902	\$436.24	\$36.35
GS-3	11,772,608	3.40%	9.57%	9.57%	\$89,414	\$1,437,251	\$107,794	\$1,634,459	\$0.13884	1.00503	\$0.13953	7,312	\$1,020.30	\$85.02
GS-4	24,944,789	3.66%	19.88%	19.88%	\$96,099	\$2,984,619	\$223,846	\$3,304,564	0.13248	1.00503	0.13314	17,805	\$2,370.58	\$197.55
GS-5	12,549,603	0.55%	9.71%	9.71%	\$14,376	\$1,457,298	\$109,297	\$1,580,971	\$0.12598	1.00503	\$0.12661	110,084	\$13,937.92	\$1,161.49
GS-6	11,918,155	0.21%	9.23%	9.23%	\$5,382	\$1,385,604	\$103,920	\$1,495,106	\$0.12545	1.00503	\$0.12608	350,534	\$44,194.88	\$3,682.91
GS-7	9,260,735	0.04%	7.06%	7.06%	\$2,113	\$1,060,509	\$79,538	\$1,142,160	\$0.12333	1.00503	\$0.12395	771,728	\$95,658.74	\$7,971.56
GS-8 (A-D)	22,737,656	0.05%	17.26%	17.26%	\$1,278	\$2,591,153	\$194,336	\$2,786,768	\$0.12256	1.00503	\$0.12318	2,842,207	\$350,098.16	\$29,174.85
COM-INT	9,502,459	0.17%	3.58%	3.58%	\$4,507	\$537,124	\$40,284	\$581,915	\$0.06124	1.00503	\$0.06155	558,968	\$34,402.49	\$2,866.87
COM-NGV	1,469,075	0.01%	0.89%	0.89%	\$254	\$133,417	\$10,006	\$143,677	\$0.09780	1.00503	\$0.09829	340,759	\$33,494.28	\$2,794.19
COM-OL	99,723	0.02%	0.08%	0.08%	\$483	\$11,478	\$861	\$12,823	\$0.12858	1.00503	\$0.12923	3,439	\$444.38	\$37.03
COM-SG	62,493	0.51%	0.06%	0.06%	\$13,511	\$8,426	\$634	\$22,601	\$0.36050	1.00503	\$0.36231	207	\$74.97	\$6.25
TOTAL	132,791,038	100%	100%	100%	2,627,094	15,011,963	1,125,897	18,764,954						

Florida Public Utilities Company
Gas Utility Assets and Replace Directive
Calculation of the Projected Revenue Requirements
January 1, 2031 through December 31, 2031

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
Qualified Investment														
Qualified Investment - Mains - Current Year 1070 Activity	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$19,369,874
Qualified Investment - Mains - Closed 1070 Activity to Plant	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$1,614,156)	(\$19,369,874)
Qualified Investment - Services - Current Year 1070 Activity	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$3,389,728
Qualified Investment - Services - Closed 1070 Activity to Plant	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$282,477)	(\$3,389,728)
Qualified Investment - M&R - Current Year 1070 Activity	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$1,452,741
Qualified Investment - M&R - Closed 1070 Activity to Plant	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$121,062)	(\$1,452,741)
Qualified Investment - Mains - Current 1010 Activity	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$1,614,156	\$19,369,874
Qualified Investment - Services - Current 1010 Activity	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$282,477	\$3,389,728
Qualified Investment - M&R - Current 1010 Activity	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$121,062	\$1,452,741
Total Qualified Investment - Mains 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - Service 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - M&R 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - Mains 1010	\$153,018,584	\$154,632,740	\$156,246,897	\$157,861,053	\$159,475,209	\$161,089,365	\$162,703,521	\$164,317,678	\$165,931,834	\$167,545,990	\$169,160,146	\$170,774,302	\$172,388,459	\$172,388,459
Total Qualified Investment - Service 1010	\$27,945,773	\$28,228,210	\$28,510,728	\$28,793,205	\$29,075,682	\$29,358,160	\$29,640,637	\$29,923,114	\$30,205,592	\$30,488,069	\$30,770,546	\$31,053,024	\$31,335,501	\$31,335,501
Total Qualified Investment - M&R 1010	\$10,692,448	\$10,813,510	\$10,934,572	\$11,055,634	\$11,176,695	\$11,297,757	\$11,418,819	\$11,539,880	\$11,660,942	\$11,782,004	\$11,903,066	\$12,024,127	\$12,145,189	\$12,145,189
Total Qualified Investment	\$191,656,805	\$193,654,460	\$195,652,116	\$197,649,771	\$199,647,426	\$201,645,081	\$203,642,736	\$205,640,391	\$207,638,046	\$209,635,701	\$211,633,356	\$213,631,011	\$215,628,666	\$215,628,666
Less: Accumulated Depreciation	(\$16,564,242)	(\$16,849,015)	(\$17,133,788)	(\$17,418,561)	(\$17,703,334)	(\$17,988,107)	(\$18,272,880)	(\$18,557,653)	(\$18,842,426)	(\$19,127,199)	(\$19,411,972)	(\$19,696,745)	(\$19,981,518)	(\$19,981,518)
Net Book Value	\$175,092,563	\$176,805,445	\$178,518,327	\$180,231,209	\$181,944,091	\$183,656,973	\$185,369,855	\$187,082,737	\$188,795,619	\$190,508,501	\$192,221,383	\$193,934,265	\$195,647,147	\$195,647,147
Average Net Qualified Investment	\$175,939,024	\$177,690,450	\$179,441,876	\$181,193,302	\$182,944,728	\$184,696,154	\$186,447,580	\$188,199,006	\$189,950,432	\$191,701,858	\$193,453,284	\$195,204,710	\$196,956,136	\$194,800,095
Depreciation Rates														
Approved Depreciation Rate - Mains	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%
Approved Depreciation Rate - Services	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Approved Depreciation Rate - M&R City Gate	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Return on Average Net Qualified Investment														
Equity - Cost of Capital, Inclusive of Income Tax Gross-up	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%
Debt - Cost of Capital	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%
Equity Component - Inclusive of Income Tax Gross-up	\$915,593	\$924,603	\$933,613	\$942,623	\$951,633	\$960,643	\$969,653	\$978,663	\$987,673	\$996,683	\$1,005,693	\$1,014,703	\$1,023,713	\$11,578,315
Debt Component	\$196,781	\$198,717	\$200,653	\$202,589	\$204,525	\$206,461	\$208,397	\$210,333	\$212,269	\$214,205	\$216,141	\$218,077	\$219,993	\$2,488,430
Return Requirement	\$1,112,374	\$1,123,320	\$1,134,267	\$1,145,213	\$1,156,159	\$1,167,105	\$1,178,051	\$1,188,997	\$1,199,943	\$1,210,889	\$1,221,835	\$1,232,781	\$1,243,727	\$14,066,745
Investment Expenses														
Depreciation Expense - Mains	\$204,025	\$206,177	\$208,329	\$210,481	\$212,633	\$214,785	\$216,937	\$219,089	\$221,241	\$223,393	\$225,545	\$227,697	\$229,849	\$2,590,343
Depreciation Expense - Services	\$58,220	\$58,809	\$59,397	\$59,986	\$60,574	\$61,163	\$61,751	\$62,340	\$62,928	\$63,517	\$64,105	\$64,694	\$65,282	\$737,485
Depreciation Expense - M&R City Gate	\$22,528	\$22,740	\$22,953	\$23,165	\$23,377	\$23,589	\$23,801	\$24,013	\$24,225	\$24,437	\$24,649	\$24,861	\$25,073	\$286,984
Property Taxes	\$291,821	\$291,821	\$291,821	\$291,821	\$291,821	\$291,821	\$291,821	\$291,821	\$291,821	\$291,821	\$291,821	\$291,821	\$291,821	\$3,501,851
General Public Notice Expense & Customer Notice Expense	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$12,000
Total Expense	\$577,594	\$580,587	\$583,580	\$586,573	\$589,566	\$592,559	\$595,552	\$598,545	\$601,538	\$604,531	\$607,524	\$610,517	\$613,510	\$7,128,663
Total Revenue Requirements	\$1,689,969	\$1,703,907	\$1,717,845	\$1,731,783	\$1,745,721	\$1,759,659	\$1,773,597	\$1,787,535	\$1,801,473	\$1,815,411	\$1,829,349	\$1,843,287	\$1,857,225	\$21,195,408

Florida Public Utilities Company
Gas Utility Access and Replace Directive
Projection of Qualified Mains & Services Revenue Requirements
Surcharge Calculation - January 1, 2031 through December 31, 2031
Per Therm Rate

1. 1/1/31-12/31/31 Qualified Mains & Services Replacement Revenue Requirements		\$	21,195,408
Mains	80%	\$16,956,326	
Services	14%	\$2,967,357	
M&R	6%	\$1,271,724	
Net		<u>\$21,195,408</u>	
2. TRUE-UP from Prior Period (Over) Under Recovery Estimated thru 12/2030		\$	-
3. 2031 Qualified Mains & Services Replacement Revenue Requirements		\$	21,195,408
Mains	80%	\$16,956,326	
Services	14%	\$2,967,357	
M&R	6%	\$1,271,724	
Net		<u>\$21,195,408</u>	

RATE SCHEDULE	2023 THERMS	SERVICES COS %	MAINS COS %	M&R COS %	SERVICES REV REQ	MAINS REV REQ	M&R REV REQ	GUARD REV REQ	DOLLARS PER THERM	TAX FACTOR	GUARD FACTORS PER THERM	TYPICAL ANNUAL THERMS	ANNUAL COST	AVERAGE MONTHLY COST
RES-1	1,520,128	27.37%	1.20%	1.20%	\$812,167	\$203,998	\$15,300	\$1,031,465	\$0.67851	1.00503	\$0.68195	54	\$36.69	\$3.06
RES-2	5,975,749	36.49%	4.71%	4.71%	\$1,082,674	\$759,357	\$59,952	\$1,941,983	\$0.32498	1.00503	\$0.32661	159	\$51.92	\$4.33
RES-3	12,959,345	19.15%	10.05%	10.05%	\$568,118	\$1,703,481	\$127,761	\$2,399,360	\$0.18515	1.00503	\$0.18608	665	\$123.73	\$10.31
RES-SG	96,299	1.09%	0.09%	0.09%	\$32,271	\$15,865	\$1,190	\$49,325	\$0.51221	1.00503	\$0.51479	109	\$56.14	\$4.68
GS-1	691,996	3.10%	0.60%	0.60%	\$92,064	\$101,699	\$7,627	\$201,390	\$0.29103	1.00503	\$0.29249	322	\$94.23	\$7.85
GS-2	7,230,026	4.14%	6.03%	6.03%	\$122,966	\$1,021,681	\$76,626	\$1,221,273	\$0.16892	1.00503	\$0.16977	2,902	\$492.74	\$41.06
GS-3	11,772,698	3.40%	9.57%	9.57%	\$100,995	\$1,623,405	\$121,753	\$1,846,156	\$0.15682	1.00503	\$0.15761	7,312	\$1,152.45	\$96.04
GS-4	24,944,789	3.60%	19.88%	19.88%	\$108,545	\$3,371,189	\$252,839	\$3,732,574	0.14963	1.00503	0.15039	17,895	\$2,677.62	\$223.14
GS-5	12,549,603	0.55%	9.71%	9.71%	\$16,238	\$1,646,049	\$123,454	\$1,785,740	\$0.14229	1.00503	\$0.14301	110,084	\$15,743.18	\$1,311.93
GS-6	11,918,155	0.21%	9.23%	9.23%	\$6,304	\$1,565,068	\$117,380	\$1,688,753	\$0.14170	1.00503	\$0.14241	350,534	\$49,919.04	\$4,159.92
GS-7	9,260,735	0.08%	7.06%	7.06%	\$2,387	\$1,197,867	\$39,840	\$1,290,093	\$0.13931	1.00503	\$0.14001	771,728	\$108,048.55	\$9,004.05
GS-8 (A-D)	22,737,656	0.05%	17.26%	17.26%	\$1,444	\$2,926,762	\$219,507	\$3,147,713	\$0.13844	1.00503	\$0.13913	2,842,207	\$395,443.20	\$32,953.60
COM-INT	9,502,459	0.17%	3.58%	3.58%	\$5,090	\$606,693	\$45,502	\$657,285	\$0.06917	1.00503	\$0.06952	558,968	\$38,858.33	\$3,238.19
COM-NGV	1,469,075	0.01%	0.89%	0.89%	\$287	\$150,697	\$11,302	\$162,286	\$0.11047	1.00503	\$0.11102	340,759	\$37,832.49	\$3,152.71
COM-OL	59,723	0.02%	0.08%	0.08%	\$546	\$12,965	\$972	\$14,483	\$0.14524	1.00503	\$0.14597	3,439	\$501.94	\$41.83
COM-SG	62,693	0.51%	0.06%	0.06%	\$15,261	\$9,551	\$716	\$25,528	\$0.40719	1.00503	\$0.40924	207	\$84.68	\$7.06
TOTAL	132,791,038	100%	100%	100%	2,967,357	16,956,326	1,271,724	21,195,408						

Florida Public Utilities Company
Gas Utility Assets and Replace Directive
Calculation of the Projected Revenue Requirements
January 1, 2032 through December 31, 2032

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
Qualified Investment														
Qualified Investment - Mains - Current Year 1070 Activity	\$323,981	\$323,981	\$323,981	\$323,981	\$323,981	\$323,981	\$323,981	\$323,981	\$323,981	\$323,981	\$323,981	\$323,981	\$323,981	\$3,887,774
Qualified Investment - Mains - Closed 1070 Activity to Plant	(\$323,981)	(\$323,981)	(\$323,981)	(\$323,981)	(\$323,981)	(\$323,981)	(\$323,981)	(\$323,981)	(\$323,981)	(\$323,981)	(\$323,981)	(\$323,981)	(\$323,981)	(\$3,887,774)
Qualified Investment - Services - Current Year 1070 Activity	\$56,697	\$56,697	\$56,697	\$56,697	\$56,697	\$56,697	\$56,697	\$56,697	\$56,697	\$56,697	\$56,697	\$56,697	\$56,697	\$680,360
Qualified Investment - Services - Closed 1070 Activity to Plant	(\$56,697)	(\$56,697)	(\$56,697)	(\$56,697)	(\$56,697)	(\$56,697)	(\$56,697)	(\$56,697)	(\$56,697)	(\$56,697)	(\$56,697)	(\$56,697)	(\$56,697)	(\$680,360)
Qualified Investment - M&R - Current Year 1070 Activity	\$24,299	\$24,299	\$24,299	\$24,299	\$24,299	\$24,299	\$24,299	\$24,299	\$24,299	\$24,299	\$24,299	\$24,299	\$24,299	\$291,583
Qualified Investment - M&R - Closed 1070 Activity to Plant	(\$24,299)	(\$24,299)	(\$24,299)	(\$24,299)	(\$24,299)	(\$24,299)	(\$24,299)	(\$24,299)	(\$24,299)	(\$24,299)	(\$24,299)	(\$24,299)	(\$24,299)	(\$291,583)
Qualified Investment - Mains - Current 1010 Activity	\$323,981	\$323,981	\$323,981	\$323,981	\$323,981	\$323,981	\$323,981	\$323,981	\$323,981	\$323,981	\$323,981	\$323,981	\$323,981	\$3,887,774
Qualified Investment - Services - Current 1010 Activity	\$56,697	\$56,697	\$56,697	\$56,697	\$56,697	\$56,697	\$56,697	\$56,697	\$56,697	\$56,697	\$56,697	\$56,697	\$56,697	\$680,360
Qualified Investment - M&R - Current 1010 Activity	\$24,299	\$24,299	\$24,299	\$24,299	\$24,299	\$24,299	\$24,299	\$24,299	\$24,299	\$24,299	\$24,299	\$24,299	\$24,299	\$291,583
Total Qualified Investment - Mains 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - Service 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - M&R 1070	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Qualified Investment - Mains 1010	\$172,381,459	\$172,712,440	\$173,036,421	\$173,360,402	\$173,684,383	\$174,008,364	\$174,332,345	\$174,656,327	\$174,980,308	\$175,304,289	\$175,628,270	\$175,952,251	\$176,276,232	\$176,276,232
Total Qualified Investment - Service 1010	\$31,335,501	\$31,392,198	\$31,448,894	\$31,505,591	\$31,562,288	\$31,618,984	\$31,675,681	\$31,732,378	\$31,789,074	\$31,845,771	\$31,902,468	\$31,959,165	\$32,015,861	\$32,015,861
Total Qualified Investment - M&R 1010	\$12,145,189	\$12,169,488	\$12,193,786	\$12,218,085	\$12,242,383	\$12,266,682	\$12,290,980	\$12,315,279	\$12,339,578	\$12,363,876	\$12,388,175	\$12,412,473	\$12,436,772	\$12,436,772
Total Qualified Investment	\$215,862,148	\$216,274,125	\$216,679,101	\$217,084,078	\$217,489,054	\$217,894,030	\$218,299,007	\$218,703,983	\$219,108,960	\$219,513,936	\$219,918,913	\$203,923,839	\$203,923,839	\$203,923,839
Less: Accumulated Depreciation	(\$20,179,054)	(\$20,499,540)	(\$20,820,628)	(\$21,142,316)	(\$21,464,605)	(\$21,787,494)	(\$22,110,984)	(\$22,435,075)	(\$22,759,767)	(\$23,085,060)	(\$23,410,953)	(\$23,737,446)	(\$24,064,541)	(\$24,064,541)
Net Book Value	\$195,683,094	\$195,774,585	\$195,858,473	\$195,941,762	\$196,024,449	\$196,106,536	\$196,188,022	\$196,269,908	\$196,351,193	\$196,432,877	\$196,514,960	\$196,597,467	\$196,679,298	\$196,661,324
Average Net Qualified Investment	\$195,732,310	\$195,816,529	\$195,900,118	\$195,983,106	\$196,065,493	\$196,147,279	\$196,228,465	\$196,309,050	\$196,389,035	\$196,468,418	\$196,547,201	\$196,625,384		
Depreciation Rates														
Approved Depreciation Rate - Mains	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%
Approved Depreciation Rate - Services	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Approved Depreciation Rate - M&R City Gate	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Return on Average Net Qualified Investment														
Equity - Cost of Capital, Inclusive of Income Tax Gross-up	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%	6.24%
Debt - Cost of Capital	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%	1.34%
Equity Component - Inclusive of Income Tax Gross-up	\$1,018,483	\$1,018,921	\$1,019,356	\$1,019,788	\$1,020,216	\$1,020,642	\$1,021,064	\$1,021,484	\$1,021,900	\$1,022,313	\$1,022,723	\$1,023,130	\$1,023,534	\$12,250,020
Debt Component	\$218,894	\$218,988	\$219,082	\$219,174	\$219,267	\$219,358	\$219,449	\$219,539	\$219,628	\$219,717	\$219,805	\$219,893	\$219,980	\$2,632,794
Return Requirement	\$1,237,377	\$1,237,909	\$1,238,438	\$1,238,962	\$1,239,483	\$1,240,000	\$1,240,513	\$1,241,023	\$1,241,528	\$1,242,030	\$1,242,528	\$1,243,023	\$1,243,514	\$14,882,814
Investment Expenses														
Depreciation Expense - Mains	\$229,851	\$230,283	\$230,715	\$231,147	\$231,579	\$232,011	\$232,443	\$232,875	\$233,307	\$233,739	\$234,171	\$234,603	\$235,035	\$2,786,726
Depreciation Expense - Services	\$65,282	\$65,400	\$65,519	\$65,637	\$65,755	\$65,873	\$65,991	\$66,109	\$66,227	\$66,345	\$66,463	\$66,582	\$66,700	\$791,183
Depreciation Expense - M&R City Gate	\$25,353	\$25,404	\$25,454	\$25,505	\$25,556	\$25,606	\$25,657	\$25,707	\$25,758	\$25,809	\$25,859	\$25,910	\$25,960	\$307,578
Property Taxes	\$326,150	\$326,150	\$326,150	\$326,150	\$326,150	\$326,150	\$326,150	\$326,150	\$326,150	\$326,150	\$326,150	\$326,150	\$326,150	\$3,913,802
General Public Notice Expense & Customer Notice Expense	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$12,000
Total Expense	\$647,637	\$648,238	\$648,838	\$649,439	\$650,040	\$650,640	\$651,241	\$651,842	\$652,443	\$653,043	\$653,644	\$654,245	\$654,846	\$7,811,289
Total Revenue Requirements	\$1,885,014	\$1,886,147	\$1,887,276	\$1,888,401	\$1,889,523	\$1,890,640	\$1,891,753	\$1,892,865	\$1,893,971	\$1,895,073	\$1,896,172	\$1,897,267	\$1,898,361	\$22,694,103

Florida Public Utilities Company
Gas Utility Access and Replace Directive
Projection of Qualified Mains & Services Revenue Requirements
Surcharge Calculation - January 1, 2032 through December 31, 2032
Per Therm Rate

1. 1/1/32-12/31/32 Qualified Mains & Services Replacement Revenue Requirements		\$ 22,694,103
Mains	80%	\$18,155,282
Services	14%	\$3,177,174
M&R	6%	\$1,361,646
Net		<u>\$22,694,103</u>
2. TRUE-UP from Prior Period (Over) Under Recovery Estimated thru 12/2031		\$ -
3. 2032 Qualified Mains & Services Replacement Revenue Requirements		\$ 22,694,103
Mains	80%	\$18,155,282
Services	14%	\$3,177,174
M&R	6%	\$1,361,646
Net		<u>\$22,694,103</u>

RATE SCHEDULE	2032 THERMS	SERVICES COS %	MAINS COS %	M&R COS %	SERVICES REV REQ	MAINS REV REQ	M&R REV REQ	GUARD REV REQ	DOLLARS PER THERM	TAX FACTOR	GUARD FACTORS PER THERM	TYPICAL ANNUAL THERMS	ANNUAL COST	AVERAGE MONTHLY COST
RES-1	1,520,128	27.37%	1.20%	1.20%	\$869,595	\$218,422	\$16,382	\$1,104,399	\$0.72652	1.00503	\$0.73017	54	\$39.28	\$3.27
RES-2	5,975,749	36.49%	4.71%	4.71%	\$1,159,228	\$855,879	\$64,191	\$2,079,297	\$0.34796	1.00503	\$0.34971	159	\$55.60	\$4.63
RES-3	12,559,343	19.15%	10.05%	10.05%	\$608,289	\$1,823,931	\$136,795	\$2,569,015	\$0.19824	1.00503	\$0.19923	665	\$132.47	\$11.04
RES-SG	96,259	1.09%	0.09%	0.09%	\$34,553	\$16,916	\$1,274	\$52,813	\$0.54843	1.00503	\$0.55119	109	\$60.11	\$5.01
GS-1	691,996	3.10%	0.60%	0.60%	\$98,573	\$108,890	\$8,167	\$215,630	\$0.31161	1.00503	\$0.31317	322	\$100.89	\$8.41
GS-2	7,220,026	4.14%	6.03%	6.03%	\$131,661	\$1,093,922	\$82,044	\$1,307,627	\$0.18086	1.00503	\$0.18177	2,902	\$527.58	\$43.97
GS-3	11,772,608	3.40%	9.57%	9.57%	\$108,116	\$1,738,194	\$130,365	\$1,976,695	\$0.16791	1.00503	\$0.16875	7,312	\$1,233.94	\$102.83
GS-4	24,944,789	3.66%	19.88%	19.88%	\$116,221	\$3,609,561	\$270,717	\$3,996,498	0.16021	1.00503	0.16102	17,005	\$2,866.95	\$238.91
GS-5	12,519,603	0.55%	9.71%	9.71%	\$17,316	\$1,762,438	\$132,183	\$1,912,007	\$0.15236	1.00503	\$0.15312	110,084	\$16,856.35	\$1,404.70
GS-6	11,918,155	0.21%	9.23%	9.23%	\$6,750	\$1,675,732	\$125,680	\$1,808,162	\$0.15171	1.00503	\$0.15248	350,534	\$53,448.74	\$4,454.06
GS-7	9,260,735	0.08%	7.06%	7.06%	\$2,556	\$1,282,566	\$96,192	\$1,381,314	\$0.14916	1.00503	\$0.14991	771,728	\$115,698.50	\$9,610.71
GS-8 (A-D)	22,737,656	0.05%	17.26%	17.26%	\$1,516	\$3,133,708	\$235,028	\$3,370,283	\$0.14822	1.00503	\$0.14897	2,842,207	\$423,044.39	\$35,283.70
COM-INT	9,502,459	0.17%	3.58%	3.58%	\$5,450	\$649,591	\$48,719	\$703,761	\$0.07406	1.00503	\$0.07443	558,968	\$41,605.94	\$3,467.16
COM-NGV	1,469,075	0.01%	0.89%	0.89%	\$307	\$161,353	\$12,101	\$173,761	\$0.11828	1.00503	\$0.11887	340,759	\$40,507.56	\$3,375.63
COM-OL	59,723	0.02%	0.01%	0.01%	\$84	\$13,882	\$1,041	\$15,507	\$0.15551	1.00503	\$0.15629	3,439	\$537.43	\$44.79
COM-SG	62,693	0.51%	0.06%	0.06%	\$16,310	\$10,227	\$767	\$27,333	\$0.43599	1.00503	\$0.43818	207	\$90.66	\$7.56
TOTAL	132,791,038	100%	10%	10%	3,177,174	18,155,282	1,361,646	22,694,103						