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April 27, 2022

-VIA ELECTRONIC FILING-

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

RE: **Docket No. 20220000-OT**
Florida Power & Light Company and Gulf Power Company 2021 Demand Side Management Annual Report

Dear Mr. Teitzman:

Enclosed for filing in the above-referenced docket is Florida Power & Light Company's ("FPL") response to the Florida Public Service Commission Staff's First Data Request (Nos. 1-28) pertaining to FPL and Gulf Power Company's 2021 Demand Side Management Annual Report. Please note, Attachment No. 1 to Staff's First Data Request No. 20 has been provided to Commission Staff via email to Michael Barrett.

If there are any questions regarding this transmittal, please contact me at (561) 304-5662.

Sincerely,

/s/ William P. Cox
William P. Cox
Senior Attorney
Fla. Bar No. 00093531

WPC:ec
Enclosures
cc: Michael Barrett, Economic Supervisor, mbarrett@psc.state.fl.us

QUESTION:
Please describe how FPL monitors federal energy efficiency standards and Florida Building Code requirements. Address in your response how FPL modifies existing programs to reflect changes, when necessary.

RESPONSE:
FPL monitors the progress of new federal energy efficiency standards through participation in industry organizations, collaboration with peer utilities, and by monitoring websites dedicated to appliance standards *(e.g.*, Office of Energy Efficiency and Renewable Energy, Appliance Standards Awareness Project). FPL stays abreast of proposed Florida Building Code (FBC) changes by monitoring the Florida Building Commission and attending their Technical Advisory Committee (TAC) meetings.

FPL has traditionally addressed the potential impacts from the changes in codes and standards on its DSM Program Standards during the DSM goal setting process and the associated DSM Plan. Any changes in codes and standards between plan periods that warrant revisions to FPL's Program Standards are submitted to FPSC Staff for approval to maintain standards above baseline codes.

QUESTION:
Please answer the following regarding FPL's conservation research and development (CRD) initiatives that evaluate emerging DSM opportunities:

a. Identify and describe any new CRD initiatives that were launched by Gulf or FPL in 2021.

b. Provide updates on the status of all on-going CRD initiatives that began before 2021 by Gulf or FPL, including the EPRI SHINES project referenced on Page 26 of the Report. If applicable, attach interim and/or final reports on work completed by Gulf or FPL in 2021.

RESPONSE:
a. FPL performed a review of smart thermostat programs, smart panel pilots, and demand response programs presently being administered by investor-owned utilities across the nation. Oklahoma Gas and Electric has a long-standing program for critical peak pricing that is largely based upon the use of smart thermostats. Green Mountain Power (GMP) and Public Service Electric and Gas in New York (PSEG-NY, *i.e.*, Long Island Power Authority) are presently exploring the use of smart panels as a replacement for conventional electric circuit breaker panels. GMP is focused on using smart panels to integrate customer-owned solar PV into the utility resource mix. PSEG-NY could eventually target battery and EV charger applications for their smart panels.

   In addition to the applications referenced above, FPL is evaluating the use of smart thermostats, smart panels, and smart breakers as potential supplements to the Residential On Call Program, where air conditioning, strip heating, water heating, and pool pump circuits could be targeted for monitoring and control. FPL began development of a Smart Panel Pilot as approved in the 2021 rate case to evaluate the capabilities of smart panels for Residential load control as well as optimization of electric vehicle chargers, solar PV systems, and battery storage technologies. Data collection, data management, data analysis, data application, and system security present challenges that will likely result in new initiatives to monitor and control appliance usage. The lessons learned from the Smart Panel Pilot will inform further evaluation of the On Call program.

b. EPRI SHINES is an educational tool for the public under a research project in EPRI's Integration of Distributed Energy Resources program. Gulf Power was an original sponsor of this research and provided a residential site for monitoring. Data collection at this residence was completed in late 2021, and equipment removal took place in early 2022. The SHINES dashboard displays measurements from solar energy systems, house loads, and a battery energy storage system, deployed at the residential demonstration site. Historical performance measurements are presented on interactive charts to show past energy usage and load profiles of each deployed system. Other features include a gallery of images and equivalent energy metrics. To view EPRI SHINES dashboards, please visit https://dashboards.epri.com/shines-residential.

QUESTION:
Please answer the following regarding Low Income Programs:

a. Describe the conservation efforts that Gulf or FPL used in 2021 to ensure low-income customers are aware of, and have access to, conservation programs. Address in your response whether any of these efforts were changed or modified in 2021, compared to prior years.

b. Identify the partnerships that Gulf or FPL had with government and non-profit agencies in 2021 designed to help identify low-income neighborhoods and educate customers on conservation opportunities.

RESPONSE:
a. FPL engaged in multiple efforts in 2021 to provide assistance to low-income customers. FPL specifically serves low-income customers through the Low-Income DSM program. This program provides direct installation of energy saving measures in addition to a thorough home energy survey with customer-specific recommendations for saving energy through two channels. In the Gulf territory, FPL utilizes the services of Honeywell International to deliver the Community Energy Savers program where identified neighborhoods are targeted to receive energy saving tips as well as direct install free energy efficiency measures. Honeywell markets the program via direct mail, community awareness, yard signs, and outreach to customers and community leaders. In the FPL territory, FPL utilized its own Home and Business Energy reps to target income qualified zip codes and delivers energy savings tips as well as install free energy efficiency measures. Outreach was conducted to low-income property management as well as individual customers and utilized yard signs and other marketing materials to make customers aware of the program.

b. In 2021, FPL continued its long-standing relationship with government designated Weatherization Assistance Providers (WAPS) as one of the delivery channels for the Low-Income program. As a board member of the Florida Housing Coalition, the FPL Low-Income program manager meets with regional agencies during the annual Affordability Conference to develop overall program strategies for increasing adoption of the program.

QUESTION:
In the responses to Staff's Second Data Request, dated July 2, 2021, in regards to FPL's 2020 DSM Annual Report, the Company reported that FPL and Gulf implemented the use of several technology tools or adjusted practices which allowed it to continue to offer DSM program(s) or services while still adhering to public health recommendations. Were all such tools and practices continued in 2021? Please describe any changes, additional use of technology tools, or adjusted practices made in 2021 compared to those that were launched in 2020.

RESPONSE:
In 2021, FPL continued to utilize all the online, phone, and virtual tools and practices that were implemented in 2020 to engage customers in a safe and secure manner consistent with customer preference. In addition to offering virtual in-home energy surveys through phone and even mobile video, FPL continued the adjusted practice of allowing insulation contractors to issue rebate certificates for the Residential Ceiling Insulation program without a pre-qualifying FPL in-home energy survey. With a continuing reluctance by customers to allow in-home visits, this practice was incorporated into 2022 program standard changes as a permanent optional practice. During 2021, FPL launched updates to the Energy Analyzer online energy survey and insights tool to give customers relevant and timely information on their specific energy usage and ways to save. Developed in-house, this tool will provide a more seamless digital experience for FPL customers.

QUESTION:
Please respond to the following questions regarding residential and commercial/industrial DSM programs for which FPL suspended on-site visits in 2021.

a. Discuss how FPL communicated with or responded to customers about suspended programs.

b. Discuss how, or if, FPL changed any aspect of its communication with customers to draw a distinction between suspended and non-suspended programs.

c. Describe any educational and/or promotional resources that were developed by FPL during 2021 to encourage participation in non-suspended programs.

d. For each program for which the Company suspended on-site visits, please complete the following table:

[Program Name_____] Wait List and Participation Details			
Period	Program Offered or Suspended (mark "O" or "S")	Number of Program Participants	Number of Wait- Listed Participants
January 2021			
February 2021			
March 2021			
April 2021			
May 2021			
June 2021			
July 2021			
August 2021			
September 2021			
October 2021			
November 2021			
December 2021			
January 2022			
February 2022			
March 2022 (if available)			

RESPONSE:
Not Applicable. FPL did not discontinue or suspend any DSM Programs in 2021.

QUESTION:
In 2021, what was FPL's System Average Line Loss percentage?

RESPONSE:

Summer Line Loss Factor	6.42%
Winter Line Loss Factor	6.42%
Energy Line Loss Factor	4.95%

QUESTION:
On Page 2 of the Report, the goal achievement results indicate FPL did not achieve any of its 2021 goals for the residential customer class, yet achieved its winter and summer demand goals for the Commercial/Industrial customer class. Please describe the factors that led to FPL missing its demand goals for the residential customer class. In addition, address what FPL specific actions FPL may be taking to improve its performance in order to achieve its 2022 goals for this customer class.

RESPONSE:
The COVID-19 pandemic continued to impact the delivery of many of FPL's DSM programs in 2021. Although FPL representatives, On Call installations contractors and participating independent contractors (PICs) for air conditioning and insulation programs resumed visits to customer homes to perform energy surveys and other program installations with caution, customer receptivity to in-home visits continued to reflect COVID-19 concerns. As a result, the On-Call, Ceiling Insulation, and Air Conditioning program participation fell below projections. Feedback from Air Conditioning program PICs indicated that many customers were opting for baseline efficiency units to minimize cost. FPL continued to offer and complete phone surveys as an alternative to on-site visits as a means of continuing to meet customer requests. In addition, PICs were also allowed to issue rebates without a pre-qualification energy survey, but this additional program option, while minimizing the number of on-site visits, did not overcome the declining interest.

FPL has implemented certain modifications to improve program participation in 2022. The company implemented Program Standard Changes aimed to increase participation in the Residential HVAC and Residential Ceiling Insulation programs as part of the 2021 Integrated DSM Plan. In addition, the programs' processes have been reviewed and enhanced as necessary to streamline and improve participation. The Company anticipates these activities will help achieve the 2022 goals.

QUESTION:
On Page 4 of the Report, FPL provides information reflecting that the Utility Cost per Installation of the Residential Home Energy Survey program was $160. A comparative review of the same information from the 2020 Report (Page 4) reflects the cost for this program was $115. Please explain the variance in final costs for this program between the two periods (from 2020 to 2021). Discuss in your response how FPL monitors fluctuating costs in this program.

RESPONSE:
The total cost of the Residential Home Energy Survey program in 2020 was $11,969,125, and the total number of surveys in 2020 was 103,647, resulting in a utility cost per survey of $115 ($11,969,125÷103,647).

The total cost of the Residential Home Energy Survey program in 2021 was $13,619,165, and the total number of surveys in 2021 was 84,878, resulting in a utility cost per survey of $160 ($13,619,165÷84,878).

The variance in cost per installation for the Residential Home Energy Survey program is due to higher total costs in 2021 and lower total participation. The primary driver of higher cost in 2021 is additional advertising for the survey program. FPL monitors costs and participation for each program as part of monthly program tracking and budget reconciliation. Some of these costs fluctuate directly related to program participation (*i.e.,* rebates) while some costs (*i.e.,* labor and advertising) do not fluctuate as directly with program participation. FPL ensures all costs are appropriate for the respective program and incorporate any observed trends for review in the upcoming budget cycle.

QUESTION:
According to Page 5 of the Report, the actual number of program participants in 2021 for the Residential Load Management (On Call) program was lower than the number FPL projected for this program.

a. Identify the specific reasons why this program did not achieve the projected participation levels for 2021.

b. What, if any, program modifications is FPL considering or researching to ensure that this program will be able to more closely achieve projected participation levels? Please explain.

RESPONSE:
a. COVID-19 has continued to impact and drive customers' reluctance to have outside contractors in their homes, which is required to install the On Call equipment. Additionally, we have seen a decrease in the ability to successfully contact customers interested in On Call via phone communication. We believe this is attributed to an increase of suspicious and fraudulent phone calls. After submitting an inquiry on fpl.com, customers are contacted by an FPL customer service representative who guides the customer through the enrollment process. FPL installation contractors must also contact customers via phone to schedule appointments.

b. FPL is in the process of implementing an online solution that enables a customer to self-qualify, enroll, and schedule their installation appointments. This should streamline the enrollment process and overcome issues with phone communications with customers.

QUESTION:
According to Page 7 of the report, the actual number of program participants in the Residential New Construction program exceeded FPL's projected participation levels. Please describe the reasons why this program exceeded the projected participation levels for 2021.

RESPONSE:
The Residential New Construction program leverages the standard construction processes by builders. In 2021, new home construction by participating builders was above program estimates. Additionally, FPL increased outreach to existing builders for participation in the program.

QUESTION:
According to Page 8 of the Report, the actual number of program participants in 2021 for the Residential Ceiling Insulation program was lower than the number FPL projected for this program.

a) Identify the specific reasons why this program did not achieve the projected participation levels for 2021.

b) What, if any, program modifications is FPL considering or researching to ensure that this program will be able to more closely achieve projected participation levels? Please explain.

c) Page 8 of the Report provides information reflecting that the Utility Cost per Installation of the Residential Ceiling Insulation program was $317. A comparative review of the same information from the 2020 Report (Page 8) reflects the cost for this program was $269. Please explain the variance in final costs for this program between the two periods (from 2020 to 2021). Discuss in your response how FPL monitors fluctuating costs in this program.

RESPONSE:
a) Due to the COVID-19 pandemic, customers were still reluctant to have FPL representatives or contractors enter their homes. This limited the ability to prequalify homes by FPL representatives or by contractors. In 2020, FPL implemented an additional option for insulation contractors to directly deliver the program to customers without pre-qualification during an energy survey. Even with this additional option that minimizes the number of visits to a customer's home, participation remained below projections.

b) In the recently implemented Integrated DSM Plan effective January 1, 2022, FPL modified the Residential Ceiling Insulation program standards as follows: increased the incentive amount to $220; implemented a flat incentive vs. the previous tiered structure; and allowed participating insulation contractors to qualify customers.

c) The total cost of the Residential Ceiling Insulation program in 2020 was $388,603, and the total number of participants in 2020 was 1,444, resulting in a utility cost per installation of $269 ($388,603÷1,444).

The total cost of the Residential Ceiling Insulation program in 2021 was $476,609, and the total number of participants in 2021 was 1,503, resulting in a utility cost per installation of $317 ($476,609÷1,503).

The variance in cost per installation for the Residential Ceiling Insulation program is due to higher total costs in 2021 and higher total participation. The primary driver of higher cost in 2021 is a marketing campaign to increase participation. FPL monitors costs and participation for each program as part of monthly program tracking and budget reconciliation. Some of these costs fluctuate directly related to program participation (*i.e.*, rebates) while some costs (*i.e.*, labor) do not fluctuate as directly with program participation. FPL ensures all costs are appropriate for the respective program and incorporates any observed trends for review in the upcoming budget cycle.

QUESTION:
According to Page 9 of the report, the actual number of program participants in the Residential Low Income program exceeded FPL's projected participation levels.

a. Please describe the reasons why this program exceeded the projected participation levels for 2021.

b. Page 9 of the Report provides information reflecting that the Utility Cost per Installation of the Residential Low Income program was $79. A comparative review of the same information from the 2020 Report (Page 9) reflects the cost for this program was $243. Please explain the variance in final costs for this program between the two periods (from 2020 to 2021). Discuss in your response how FPL monitors fluctuating costs in this program.

RESPONSE:
a. In addition to referring customers to the Low-Income program through FPL's customer care center, FPL proactively sought out lower income senior communities such as Century Village in West Palm Beach, Florida, to increase the population of customers reached by this program. These efforts resulted in total program participation being higher than projected for 2021.

b. The total cost of the Residential Low-Income program in 2020 was $761,439, and the total number of participants in 2020 was 3,137, resulting in a utility cost per installation of $243 ($761,439÷3,137).

The total cost of the Residential Low-Income program in 2021 was $670,478, and the total number of participants in 2021 was 8,502, resulting in a utility cost per installation of $79 ($670,478÷8,502).

The variance in cost per installation for the Residential Low-Income program is due to lower total costs in 2021 and higher total participation. The primary driver of lower cost in 2021 is lower rebate expenses. Although participation in the program was higher than in 2020, FPL utilized excess inventory of energy saving measures that had been previously purchased to satisfy some of the customer installations and reduce 2021 expenditures. FPL monitors costs and participation for each program as part of monthly program tracking and budget reconciliation. Some of these costs fluctuate directly related to program participation (*i.e.,* rebates) while some costs (*i.e.,* labor and advertising) do not fluctuate as directly with program participation. FPL ensures all costs are appropriate for the respective program and incorporate any observed trends for review in the upcoming budget cycle.

QUESTION:
According to Page 10 of the Report, the actual number of program participants in 2021 for the Business Energy Evaluation program was lower than the number FPL projected for this program.

a. Identify the specific reasons why this program did not achieve the projected participation levels for 2021.

b. What, if any, program modifications is FPL considering or researching to ensure that this program will be able to more closely achieve projected participation levels? Please explain.

c. Page 10 of the Report provides information reflecting that the Utility Cost per Installation of this program was $1,294. A comparative review of the same information from the 2020 Report (Page 10) reflects the cost for this program was $1,534. Please explain the variance in final costs for this program between the two periods (from 2020 to 2021). Discuss in your response how FPL monitors fluctuating costs in this program.

RESPONSE:
a. The decline in participation in the Business Energy Evaluation program was driven primarily by reduced participation in the online delivery of the program. The online business energy evaluation and dashboard tools were successfully accessed by customers, but approximately 66% did not proceed far enough in the process to be counted as completed surveys. The phone channel for delivery of the Business Energy Evaluation increased as some businesses remain reluctant to have FPL representatives enter their facilities to perform energy surveys.

b. FPL continues to support customers with field and phone customer service representatives, as customer inquiries are received. The company is evaluating the online survey experience to simplify the process and allow more customers to reach the end and be counted as completed surveys.

c. The total cost of the Business Energy Evaluation program in 2020 was $7,693,310, and the total number of participants in 2020 was 5,015, resulting in a utility cost per installation of $1,534 ($7,693,310÷5,015).

The total cost of the Business Energy Evaluation program in 2021 was $6,146,801, and the total number of participants in 2021 was 4,751, resulting in a utility cost per installation of $1,294 ($6,146,801÷4,751).

The variance in cost per installation for the Business Energy Evaluation program is due to lower total costs in 2021 as compared to 2020. The primary driver of lower costs in 2021 is in the Payroll and Advertising cost categories. FPL monitors costs and participation for each program as part of monthly program tracking and budget reconciliation. Some of these costs fluctuate directly related to program participation (*i.e.*, rebates) while some costs (*i.e.*, labor and advertising) do not fluctuate as directly with program participation. FPL ensures all costs are appropriate for the respective program and incorporates any observed trends for review in the upcoming budget cycle.

QUESTION:
According to Page 11 of the Report, the actual number of program participants in 2021 for the Business On Call program was lower than the number FPL projected for this program.

a. Identify the specific reasons why this program did not achieve the projected participation levels for 2021.

b. What, if any, program modifications is FPL considering or researching to ensure that this program will be able to more closely achieve projected participation levels? Please explain.

RESPONSE:
a. FPL continues to enroll interested customers in the Business on Call program through recommendations by customer advisors during energy evaluations or other account reviews. On-site field surveys are the primary channel for promoting this program. While field energy surveys increased in 2021 compared to 2020, they remain significantly lower than pre-pandemic levels. In 2019, FPL conducted 5,099 Business field surveys compared to 2,702 in 2021. Even with the reduced participation in this program, FPL achieved the overall demand reduction goals for the Commercial/Industrial sector.

b. No program modifications are being considered at this time.

QUESTION:
According to Page 12 of the report, the actual number of program participants in the Commercial/Industrial Demand Reduction program exceeded FPL's projected participation levels.

a. Please describe the reasons why this program exceeded the projected participation levels for 2021.

b. Page 12 of the Report provides information reflecting that the Utility Cost per Installation of the Commercial/Industrial Demand Reduction program was $128. A comparative review of the same information from the 2020 Report (Page 12) reflects the cost for this program was $82. Please explain the variance in final costs for this program between the two periods (from 2020 to 2021). Discuss in your response how FPL monitors fluctuating costs in this program.

RESPONSE:
a. The Commercial/Industrial Demand Reduction program exceeded projected participation levels due to participation by several major retailers continuing to add qualifying stores during 2021.

b. The total cost of the Commercial/Industrial Demand Reduction program in 2020 was $28,592,218, and the total number of active participants at year-end in 2020 was 350.3 MW, resulting in a utility cost per installation of $82 per kW ($28,592,218÷350,330).
The correct total cost of the Commercial/Industrial Demand Reduction program in 2021 was $29,525,946, and the total number of active participants at year-end in 2021 was 361.3 MW, resulting in a utility cost per installation of $82 per kW ($29,525,946÷361,278). A formula error resulted in an incorrect total cost of $43,525,152 being reported for the Commercial/Industrial Demand Reduction program in 2021.

The corrected values result in no variance in the cost per installation from 2020 to 2021. The total costs, however, are higher due to increased rebate expenditures. FPL monitors costs and participation for each program as part of monthly program tracking and budget reconciliation. Some of these costs fluctuate directly related to program participation (*i.e.*, rebates) while some costs (*i.e*., labor and advertising) do not fluctuate as directly with program participation. FPL ensures all costs are appropriate for the respective program and incorporates any observed trends for review in the upcoming budget cycle.

QUESTION:
According to Page 13 of the report, the actual number of program participants in the Business Heating, Ventilation & Air Conditioning program was lower than the number FPL projected for this program.

a. Identify the specific reasons why this program did not achieve the projected participation levels for 2021.

b. What, if any, program modifications is FPL considering or researching to ensure that this program will be able to more closely achieve projected participation levels? Please explain.

c. Page 13 of the Report provides information reflecting that the Utility Cost per Installation of the Business Heating, Ventilating, and Air Conditioning program was $529. A comparative review of the same information from the 2020 Report (Page 13) reflects the cost for this program was $722. Please explain the variance in final costs for this program between the two periods (from 2020 to 2021). Discuss in your response how FPL monitors fluctuating costs in this program.

RESPONSE:
a. The COVID-19 pandemic impacted the business HVAC program in a couple of ways in 2021. Businesses only gradually began to allow contractors to enter their premises for non-emergency repairs including program installations throughout the year delaying participation. In addition, the entire HVAC industry was impacted by supply chain issues, specifically for components used in the higher efficiency equipment. As a result, the business HVAC program ramped up participation throughout the year but fell below projections.

b. No program modifications are being considered at this time. FPL is actively evaluating different strategies to reach targeted customers through our HVAC industry network and expects the recovery in participation to continue in 2022.

c. The total cost of the Business Heating, Ventilation & Air Conditioning program in 2020 was $6,698,459, and the total number of participants in 2020 was 9,272, resulting in a utility cost per installation of $722 ($6,698,459÷9,272).

The total cost of the Business Heating, Ventilation & Air Conditioning program in 2021 was $3,846,566, and the total number of participants in 2021 was 7,271, resulting in a utility cost per installation of $529 ($3,846,566÷7,271).

The variance in cost per installation for the Business HVAC program is due to lower total costs in 2021 as compared to 2020. The primary driver of lower cost in 2021 is in the Rebates cost category. FPL monitors costs and participation for each program as part of monthly program tracking and budget reconciliation. Some of these costs fluctuate directly related to program participation (*i.e.*, rebates) while some costs (*i.e.*, labor and advertising) do not fluctuate as directly with program participation. FPL ensures all costs are appropriate for the respective program and incorporates any observed trends for review in the upcoming budget cycle.

QUESTION:
According to Page 14 of the report, the actual number of program participants in the Business Lighting program was lower than the number FPL projected for this program.

a. Identify the specific reasons why this program did not achieve the projected participation levels for 2021.

b. What, if any, program modifications is FPL considering or researching to ensure that this program will be able to more closely achieve projected participation levels? Please explain.

c. Page 14 of the Report provides information reflecting that the Utility Cost per Installation of the Business Lighting program was $146. A comparative review of the same information from the 2020 Report (Page 14) reflects the cost for this program was $112. Please explain the variance in final costs for this program between the two periods (from 2020 to 2021). Discuss in your response how FPL monitors fluctuating costs in this program.

RESPONSE:
a. During 2021, the Business Lighting Program did not reach the goal due to a lack of luminaire inventory in the market, as 94% of the LED lamp imports were affected with the closure of manufacturing facilities during the pandemic. The global chip shortage impacting numerous industries also affected domestic and abroad production of LED lamps as the chips used in LED lamps are manufactured abroad.

b. No program modification has been performed. We are expecting that the inventory situation will improve gradually during 2022.

c. The total cost of the Business Lighting program in 2020 was $417,032, and the total number of participants in 2020 was 3,729, resulting in a utility cost per installation of $112 ($417,032÷3,729).

The total cost of the Business Lighting program in 2021 was $306,955, and the total number of participants in 2021 was 2,102, resulting in a utility cost per installation of $146 ($306,955÷2,102).

The variance in cost per installation for the Business Lighting program is due to lower total costs and lower participation in 2021 as compared to 2020. The primary driver of lower cost in 2021 is in the Rebates cost category. FPL monitors costs and participation for each program as part of monthly program tracking and budget reconciliation. Some of these costs fluctuate directly related to program participation (*i.e.*, rebates) while some costs (*i.e.*, labor and advertising) do not fluctuate as directly with program participation. FPL ensures all costs are appropriate for the respective program and incorporates any observed trends for review in the upcoming budget cycle.

QUESTION:
Page 26 of the Report references that FPL engaged Quantum Energy Analytics (Quantum) for a project addressing the demand response capabilities under extreme weather conditions. Please provide a summary of any conclusions drawn from this project.

RESPONSE:
The analysis performed by Quantum was prepared to estimate the demand response capability available from the existing Residential On Call program under extreme winter weather conditions. Quantum projected the system-wide kW reduction using available information of day type, time of day, and representative weather station data for the coldest day on record for the FPL service territory combined with projected program participation and appliance mix for January 2022.

Historically, the kW impacts for On Call are reported for winter months dependent upon the prevailing weather data from the current year. A lower temperature limit of 36°F for winter months has been consistent with few exceptions over the life of the program. When projecting kW impacts for an extreme weather event, it was determined that the lowest aggregate system-wide temperature was needed. This event occurred on December 24, 1989, when it was 23°F in Daytona. The blended average temperature of the system on that day was 30°F. The analysis performed by Quantum provided reasonable projections for each of the geographic regions, *i.e.*, Daytona, Palm Beach, Broward County plus Miami-Dade County, Fort Myers, and the FPL system using this same aggregate system-wide temperature assumption.

The results can be summarized as follows:

(1) The projections were consistent with the initial expectation of a linear response of appliance usage as the temperature fell; and

(2) The projected demand reduction capability for extreme winter conditions was comparable to the higher Summer projections.

QUESTION:
Page 26 of the Report references that there were purchases from 15 facilities in 2021 for the Cogeneration & Small Power Production program, which produced summer demand savings of 264 MWs and winter demand savings of 263 MWs. Please explain why these results are over 50% lower, compared to the results from the same program in 2020 (which were 594 MWs summer demand savings, and 593 MWs winter demand savings).

RESPONSE:
The summer and winter demand values reported in 2020 included 330 MWs of generation capacity from the Indiantown Cogeneration LP (ICL) unit. The ICL unit was retired at the end of 2020. The 2021 demand savings values reflect the ICL unit being removed from the generation portfolio.

QUESTION:
Page 26 of the Report references that FPL engaged Quantum Energy Analytics (Quantum) for a project. Please produce all spreadsheet files (in Excel, or an Excel-compatible alternative, with formulas intact and the cells unlocked), and/or other work papers pertaining to the Quantum project.

RESPONSE:
Please see Attachment Nos. 1-2 to this response. Attachment No. 1 is a Microsoft Excel file, *ResidentialOnCallWinterModel_Rev2.xlxs,* and is the model. Attachment No.2 is a PDF file, *ROC Model – Table of Contents.docx*, and provides a guide to the tabs in the Excel file.

Table of Contents

Note: The Model is constructed such that the tabs at the end of this file roll-up into the worksheet at the front of the file. The table below should help navigate through the various calculations.

TAB	EXPLANATION
SystemPlanning_Rev	Worksheet of comparison of different scenarios of extreme weather. Agreement of model output to TYSP is shown. Values were calculated at the meter and at the generator. Results from four scenarios are examined, including: • Typical winter day • Extreme weather day (12/24/1989) • Extreme weather day less 4°F • Extreme weather day with all stations at 19°F
Appendix A-1 2017	Impacts based on actual 2017 program participation. Calculated peak day demand reduction by control strategy, appliance type, and participation.
System	System level MW impacts at the meter by control strategy by hour for the Extreme Winter Peak Days of December 22-25, 1989
InputTemperature	Input temperatures for days before and after Extreme Winter Peak Day of December 24, 1989 by weather station
HTCycle	System level results and geographic level results by appliance by control strategy by hour in Megawatts, kW per unit, and kW per participant
HTShed	
WHShed	
PPShed	
HTCycle – System - Win	Strip Heat Cycle gross per unit impacts by geographic region by degree (temperature) by hour for all day types in winter months
HTCycle – North - Win	
HTCycle – East - Win	
HTCycle – West - Win	
HTCycle – Broward - Win	
HTCycle – Dade - Win	
HTShed – System - Win	Strip Heat Shed gross per unit impacts by geographic region by degree (temperature) by hour for all day types in winter months
HTShed – North - Win	
HTShed – East - Win	
HTShed – West - Win	
HTShed – Broward - Win	
HTShed – Dade - Win	
WHShed – System – Win - WD	Water Heater Shed gross per unit impacts by geographic region by degree (temperature) by hour for weekdays in winter months
WHShed – North - Win - WD	
WHShed – East - Win - WD	
WHShed – West - Win - WD	
WHShed – Broward - Win - WD	
WHShed – Dade - Win - WD	
WHShed – System – Win - WEH	Water Heater Shed gross per unit impacts by geographic region by degree (temperature) by hour for week-end days in winter months
WHShed – North - Win - WEH	
WHShed – East - Win - WEH	
WHShed – West - Win - WEH	
WHShed – Broward - Win - WEH	
WHShed – Dade - Win - WEH	

PPShed – System - Win	Pool Pump Shed gross per unit impacts by degree (temperature) by hour for winter months
HT Cycle Weights	Strip Heat Cycle weights by geographic area by residential customer segment
HT Shed Weights	Strip Heat Shed weights by geographic area by residential customer segment
WH Shed Weights	Water Heater Shed weights by geographic area by residential customer segment
PP Shed Weights	Pool Pump Shed weights by geographic area by residential customer segment
Part counts – LMIS Jan2022	Participation counts by System, Region and Building Type: • Single Family Detached – High (greater than 1,613 kWh/month) • Single Family Detached – Medium (less than 1,613 kWh/month and greater than 1,067 kwh/month) • Single Family Detached – Low (greater than 1,067 kWh/month) • Single Family Attached – All • Mobile Homes – All SFD partitions shown were determined in 2017
Appliance counts – LMIS Jan2022	Appliance counts by System, Region and Building Type: • Single Family Detached – High (greater than 1,613 kWh/month) • Single Family Detached – Medium (less than 1,613 kWh/month and greater than 1,067 kwh/month) • Single Family Detached – Low (greater than 1,067 kWh/month) • Single Family Attached – All • Mobile Homes – All

QUESTION:
On Page 27 of the Report, FPL states that supply chain disruptions were encountered in 2021 which impaired its ability to offer certain conservation programs in the commercial/industrial class. Please provide a detailed response that identifies the FPL and/or Gulf program(s) that encountered supply chain disruptions, the specific challenge(s), and the responsive actions taken. If applicable, please provide the same information for any supply chain disruptions that impacted programs in the residential customer class.

RESPONSE:
On page 27 of the DSM Annual Report, FPL indicated that supply chain challenges for LED lighting fixtures and commercial HVAC equipment affected the number of participants in the programs, not FPL's ability to offer the programs. FPL understands that up to 94% of the LED lamp imports were affected with the closure of manufacturing facilities during the pandemic. The worldwide chip shortage also affected local productions of LED lamps and some Commercial HVAC components as they are manufactured abroad. These are the only two programs that FPL can directly cite as being impacted by supply chain issues, although other programs have likely been indirectly impacted by supply issues such as labor shortages for manufacturers and installation contractors. FPL responded to these issues by extending the program standard timelines for project completion.

QUESTION:
On Page 27 of the Report, FPL provides Variance Explanations for 2021. Please describe how the "ongoing impacts of the COVID-19 pandemic" resulted in lower participation in 2021 compared to 2020 in the Residential Home Energy Survey program.

RESPONSE:
FPL believes customers' continued reluctance to allow Residential Energy Advisors into their homes is a result of ongoing impacts of the COVID-19 pandemic. Despite making in-home surveys available for all of 2021, customer demand has decreased by over 50% compared to pre-pandemic levels. In 2019, FPL conducted 16,955 in-home energy surveys compared to 8,626 in 2021. In 2020, FPL completed 3,786 energy surveys while in-home visits were not suspended due to COVID-19 safety protocols.

QUESTION:
Please describe how Gulf monitored federal energy efficiency standards and Florida Building Code requirements in 2021.

RESPONSE:
Gulf Power subscribes to and monitors International Energy Conservation Code (IECC) and Florida Building Code-related publications and newsletters. Gulf also monitors various building science-related publications. In addition, Gulf maintains ongoing communications and working relationships with state and local Building Code jurisdictions in an effort to remain abreast of potential building code changes that may impact DSM program standards. Gulf has historically addressed the potential impacts from the changes in codes and standards during the DSM goal setting process and the associated DSM Plan. Any changes in codes and standards between plan periods that warrant revisions to Gulf's Program Standards are submitted to FPSC Staff for approval in order to maintain standards above baseline codes.

QUESTION:
Please respond to the following questions regarding residential and commercial/industrial DSM programs for which Gulf suspended on-site visits and/or in-home visits to customers' houses in 2021.

a. Discuss how Gulf communicated with or responded to customers about suspended programs.

b. Discuss how, or if, Gulf changed any aspect of its communication with customers to draw a distinction between suspended and non-suspended programs.

c. Describe any educational and/or promotional resources that were developed by Gulf during 2021 to encourage participation in non-suspended programs.

d. For each program that suspended on-site visits and/or in-home visits to customers' houses, please fill in the data to complete the following table (or provide a response in an electronic file with formulas intact and the cells unlocked.

[Program Name_____] Wait List and Participation Details			
Period	Program Offered or Suspended (mark "O" or "S")	Number of Program Participants	Number of Wait-Listed Participants
January 2021			
February 2021			
March 2021			
April 2021			
May 2021			
June 2021			
July 2021			
August 2021			
September 2021			
October 2021			
November 2021			
December 2021			

RESPONSE:

a. For Gulf energy survey programs, all customer requests for in-home surveys were acted on by customer advisors with offers to complete the survey via phone or FaceTime technology in lieu of making on-site visits. Care Center representatives and customer advisors informed customers of the modified program processes to keep our employees and customers safe. Although customers were offered to be placed on a wait list if they preferred an in-home survey, all customers accepted the virtual survey method. Based on the success of advisor-led virtual phone surveys, the Company continues to offer this service to customers as a more convenient, less intrusive method of completing the energy survey.

   Customer inquiries and enrollments for all other programs were managed remotely to the extent possible during the temporary suspension of field visits. In limited situations requiring the on-site attention of an advisor, FPL and Gulf employees made outdoor visits following strict masking and social distancing protocols.

b. Gulf did not change any aspects of customer communications to explicitly draw distinction between any programs. The companies did increase promotion of the Online energy survey to encourage customers to take advantage of this option for completing a thorough review of ways to save energy in their home.

c. Gulf ran a robust advertising campaign during some of the warmest 2021 summer months to encourage customers to identify more ways to save energy and money through the Online Energy Survey tool. Recommendations from this tool link to applicable programs offered by the company as well as other ways to reduce energy consumption. Program advertisements ran on local TV, digital channels, and social media channels. Gulf provided an easy to use low-cost, no-cost energy saving tips flyer that was available on the website and sent to local agencies that were assisting those in need with bill assistance so they could help educate their clients on ways to lower their bills. Customer email newsletters were sent monthly, and twice a month in March and April, to all customers to provide energy savings tips and connect customers struggling to pay with available financial assistance. The company maintained a COVID-19 online resource page that included the latest email newsletters and energy saving tips, along with links to payment arrangements and bill payment assistance.

d.

Residential Home Energy Survey - Wait List and Participation Details			
Period	Program Offered or Suspended (mark "O" or "S")	Number of Program Participants *	Number of Wait-Listed Participants
January 2021	S	1,296	0
February 2021	S	1,536	0
March 2021	S	1,001	0
April 2021	S	676	0
May 2021	O	921	0
June 2021	O	900	0
July 2021	O	1,073	0
August 2021	O	1,203	0
September 2021	O	1,425	0
October 2021	O	634	0
November 2021	O	453	0
December 2021	O	616	0

* Includes Online, Phone & In-Home Surveys

Business Energy Survey - Wait List and Participation Details			
Period	Program Offered or Suspended (mark "O" or "S")	Number of Program Participants*	Number of Wait-Listed Participants
January 2021	S	1	0
February 2021	S	40	0
March 2021	O	12	0
April 2021	O	6	0
May 2021	O	6	0
June 2021	O	4	0
July 2021	O	12	0
August 2021	O	18	0
September 2021	O	14	0
October 2021	O	13	0
November 2021	O	2	0
December 2021	O	16	0

* Includes Online, Phone & On-Site Surveys

Business HVAC - Wait List and Participation Details			
Period	Program Offered or Suspended (mark "O" or "S")	Number of Program Participants	Number of Wait-Listed Participants
January 2021	S	0	0
February 2021	S	0	0
March 2021	O	12	0
April 2021	O	0	0
May 2021	O	0	0
June 2021	O	22	0
July 2021	O	0	0
August 2021	O	0	0
September 2021	O	0	0
October 2021	O	0	0
November 2021	O	0	0
December 2021	O	0	0

Business Custom Incentive - Wait List and Participation Details			
Period	Program Offered or Suspended (mark "O" or "S")	Number of Program Participants	Number of Wait-Listed Participants
January 2021	S	0	0
February 2021	S	0	0
March 2021	O	0	0
April 2021	O	0	0
May 2021	O	0	0
June 2021	O	0	0
July 2021	O	0	0
August 2021	O	0	0
September 2021	O	0	0
October 2021	O	0	0
November 2021	O	0	0
December 2021	O	0	0

QUESTION:
In 2021, what was Gulf's System Average Line Loss percentage?

RESPONSE:

Summer Line Loss Factor	5.35%
ter Line Loss Factor	5.35%
Energy Line Loss Factor	5.38%

QUESTION:
By Order No. PSC-2021-0452-CO-EG, issued December 6, 2021, in Docket No. 20210132-EG, the Commission approved the integration of the respective DSM Plans from Gulf and FPL, effective January 1, 2022. Please provide a status report on the integration effort, and note any exceptions to the forward looking statements contained in the report.

RESPONSE:
Effective January 1, 2022, all the programs in the Integrated DSM Plan have been implemented with consistent program standards for all customers in the combined previous Gulf and FPL areas. FPL is continuing to further align systems and behind the scenes processes to provide a consistent customer experience and improve efficiencies. One significant initiative to highlight is integration of FPL's Energy Analyzer platform with the FPL NW billing system. Completion of this initiative in late 2022 will provide a unified customer experience for the Residential and Business Energy Survey programs.

QUESTION:
On Page 22 of the Report, Gulf provides information reflecting that the Utility Cost per Installation of the Business Energy Survey program was $1,724. A comparative review of the same information from the 2020 Report (Page 26) reflects the cost for this program was $16,505 in 2020. Please explain the variance in final costs for this program between the two periods (from 2020 to 2021).

RESPONSE:
The total cost of the Business Energy Survey program in 2020 was $379,624 and the total number of participants in 2020 was 23, resulting in a utility cost per installation of $16,505 ($379,624÷23).

The total cost of the Business Energy Survey program in 2021 was $248,269, and the total number of participants in 2021 was 144, resulting in a utility cost per installation of $1,724 ($248,269÷144).

The variance in cost per installation for the Business Energy Survey program is due to lower total costs and higher participation in 2021 as compared to 2020. The primary driver of lower cost in 2021 is in the Payroll & Benefits cost category.

QUESTION:
On Page 27 of the Report, Gulf provides Variance Explanations for 2021, citing that "program ramp-up challenges compounded with the ongoing impacts of the COVID-19 pandemic" were reasons for the results it achieved. Please answer the following:

a. Specifically describe how the "ongoing impacts of the COVID-19 pandemic" resulted in lower cumulative Demand Reduction Achievements in 2021, compared to 2020.

b. Specifically describe how the "ongoing impacts of the COVID-19 pandemic" resulted in lower Annual Energy Savings in 2021 in the Commercial / Industrial customer class, compared to 2020.

RESPONSE:
a. Ongoing impacts of the COVID-19 pandemic played a role in lower cumulative demand reduction achievements in 2021 due to a continued reluctance on the part of both Residential and Business customers to schedule on-site visits with Gulf energy advisors or other program representatives. In addition, the market dynamics of establishing momentum for new programs that were launched in the fall of 2020 during the period of suspended in-home or site visits naturally produce a slower ramp up and longer lead time to regain effectiveness. This lack of direct, on-site interaction both with customers and prospective Participating Independent Contractors (PICs) had a direct effect on the number of energy efficiency measures installed, thereby leading to lower demand and energy savings.

b. Ongoing impacts of the COVID-19 pandemic played a role in lower annual energy savings in 2021 by a continued reluctance on the part of both Residential and Business customers to schedule on-site visits with Gulf energy advisors or other program representatives. In addition, the market dynamics of establishing momentum for new programs that were launched in the fall of 2020 during the period of suspended in-home or site visits naturally produce a slower ramp up and longer lead time to regain effectiveness. This lack of direct, on-site interaction both with customers and prospective PICs had a direct effect on the number of energy efficiency measures installed, thereby leading to lower annual energy savings.