

Matthew R. Bernier
ASSOCIATE GENERAL COUNSEL

April 28, 2021

VIA ELECTRONIC FILING

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

Re: Duke Energy Florida, LLC's Demand Side Management Annual Report for

Calendar Year 2020; Undocketed

Dear Mr. Teitzman:

Please find enclosed for electronic filing Duke Energy Florida, LLC's Response to Staff's First Data Request (Nos. 1-11).

Thank you for your assistance in this matter. Please feel free to call me at (850) 521-1428 should you have any questions concerning this filing.

Sincerely,

/s/ Matthew R. Bernier

Matthew R. Bernier

MRB/cmk Enclosure

cc: Mike Barrett

Duke Energy Florida, LLC's Response to Staff's First Data Request Regarding Duke Energy Florida, LLC's 2020 Demand-Side Management Revised Annual Report

1. Please describe how Duke Energy Florida, LLC (DEF or Company) monitors federal energy efficiency standards and Florida Building Code requirements. Address in your response how the Company modifies existing programs to reflect changes, when necessary.

Response:

DEF's approach for monitoring any new Federal Energy Efficiency Standards and Florida Building Code requirements involves both internal and external resources. DEF stays informed about new Federal Energy Efficiency Standards and Florida Building Code requirements through participation in trade associations, industry groups and building associations. DEF also stays informed about new technologies through meetings with peer utilities and review of regulatory filings.

DEF also researches and evaluates new Demand-Side Management (DSM) technologies as they become available in the marketplace to identify potential program opportunities. This is a rigorous process that involves further analysis of both customer and company costs and benefits, projected participation levels, analysis of cost-effectiveness test results, discussion of operational considerations and customer rate.

- 2. Please answer the following regarding DEF's conservation research and development (CRD) initiatives that evaluate emerging DSM opportunities:
 - A. Identify and describe any new CRD initiatives that were launched in 2020.
 - B. Provide updates on the status of all on-going CRD initiatives that began before 2020, and if applicable, attach interim and/or final reports on work completed in 2020.

Response:

A. DEF is working on a pilot to develop software, firmware and applications for a Smart Home Gateway to evaluate the potential for a future, Home Energy Management Program and its ability to enhance the Company's future energy efficiency (EE) and demand response (DR) programs. The Smart Home Gateway currently includes processing and communications capabilities to perform on-site operations including receiving energy data from the customer's AMI meter, communications using four radios and on-site processing. This project will engage these capabilities to expand the functionality of the Smart Home Gateway to potentially engage customer awareness of how energy is being used in the home. Other capabilities will include enabling customer appliance control, allowing automatic control of devices according to the customer's preference, and enabling open-source, utility-demand response.

B. DEF continued a project to do field evaluation with Electric Power Research Institute (EPRI) and the Grid Modernization Lab Consortium (GMLC) of a utility-integrated, demand-side management solution using open standards and open source platforms. A consortium of National Labs, the Grid Modernization Lab Consortium, has developed both the software and hardware, all based on open-source technologies, to leverage DSM of residential loads to provide grid resiliency using a Home Energy Management System (HEMS). DEF plans to test the HEMS in customer homes. This project will leverage the homes and equipment installations from DEF's CTA-2045 Projects.

DEF continued a project with the University of Central Florida (UCF) to document the value of long-duration, customer-side, energy storage systems. This project is using the technology at UCF's Microgrid Control lab to directly test a long-duration energy storage system. Use cases to be investigated include study of battery performance during charging and discharging, documenting the effects of cycling on battery performance (battery degradation, efficiency, etc.), optimal operation of a battery energy storage system in a distribution system with high penetration of solar energy, control of behind-the-meter distributed energy resources to provide services including peak capacity management, demand response (consuming or generating), frequency regulation, ramping capability and voltage management.

DEF continued a project with the University of South Florida to leverage customersited solar PV and energy storage at the USF 5th Avenue Garage Microgrid. The system provides load smoothing, islanding and demand response. A publicly available dashboard that shows live data, project-specific facts, and the capability of downloading data for further study is available for the site at https://dashboards.epri.com/duke-usfsp-parking. Results of this research may be used for design of a potential cost-effective demand response program. USF continued research on microgrid operation.

DEF continued the EPRI Solar DPV project for data collection to document customer solar resources with a focus on larger PV arrays with and without energy storage. This project also provides the data stream for the dashboard mentioned above.

DEF continued participation in an EPRI project to study the potential of using customer demand response to compensate for variable loads and intermittent renewable generation resources.

DEF continued the Energy Management Circuit Breaker (EMCB) Project. This project continued to explore the potential for developing a program for customer circuit breakers that includes communication, metering and remote operation for potential applications including EE, DR and integration of distributed energy resources. The prototype EMCB hardware and software in the field pilot program have been replaced with commercial versions, and operational data is being collected from appliances in nine customer homes. This data will be used to document the operation of these breakers and assess the cost-effectiveness for potential EE and DR programs.

DEF continued a project with EPRI to assess the DR opportunities for new and existing variable capacity heat pump systems for potential future load management programs. DEF used manufacturer cloud communications to control existing, variable-capacity heat pumps at volunteer participants' homes. DR events were executed, and data showed promising results. DEF continues to recruit additional participants for this pilot. This pilot will assess the viability of cloud communications to provide triggering and impacts of DR events on variable capacity heat pumps. DEF continues to execute DR events and analyze the variable-capacity heat pumps performance. The pilot is also investigating the impacts of variable-capacity HVAC DR events on customer comfort.

DEF continued a project to gather robust data about residential customers that drive electric vehicles. The project will determine what type of hardware customers use to charge their vehicle, where they charge (at home, work or public charging station, in/out of DEF service territory, etc.) and how much power and energy are consumed by EV charging. In 2020, the project assessed the effectiveness of incentives to shift on-peak EV charging to off-peak times. The incentives for charging at off-peak were very effective at changing charging behavior. DEF is also investigating the capability of EV chargers to be a DR resource.

DEF continued a project that will provide knowledge in methods to utilize customer Wi-Fi infrastructure to develop a dedicated, durable and secure utility communication channel to connected devices. The project will also provide knowledge on the effectiveness of Wi-Fi-signal-strength-improvement technology. This technology could lead to lower costs and improved cost-effectiveness for existing and future DR and EE programs.

DEF launched a pilot to determine the viability of using precision temperature measurement and analysis to determine issues with customer HVAC systems, duct work, or building envelope that could resolve high bill complaints. Precision temperature measurements are made at several points within the home. Analysis of the temperature data and rate of change of the temperature will provide conclusions on what could be causing a customer's high energy usage. This information will be provided to the customer to resolve the high bill complaint. This could also simplify DEF auditors' attic inspections requirements since the attic duct leaks could be detected in the analysis of the temperature data.

- 3. Please answer the following regarding DEF's Low Income Programs:
 - A. Describe the conservation efforts DEF used in 2020 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 2020, compared to prior years.

B. Identify DEF's partnerships with government and non-profit agencies in 2020 designed to help identify low-income neighborhoods and educate customers on conservation opportunities.

Response:

- A. DEF uses a variety of marketing channels to promote its conservation programs to all customers including low-income customers. These channels include bill stuffers, emails, direct mail, social media and information published on the Company's website. Specific to the low-income programs, DEF works with local government agencies and other organization to ensure they are aware of the benefits available to low-income customers. DEF meets with these organizations and shares information about what is offered through the programs and what DEF can do to assist them in getting incentives through these programs. COVID-19 had a significant impact on activities in 2020 as both DEF and the low-income agencies suspended direct install of measures in customers' homes due to concerns about customer safety. The agencies have now resumed activity and have submitted some applications for rebates through the Weatherization Program. DEF is just a few weeks away from resuming in-home installs through its Neighborhood Program.
- B. DEF works with several agencies and organizations to ensure they are aware of the benefits provided through the low-income programs. These organizations include the following:
 - Pinellas County Urban League;
 - Mid-Florida Community Services;
 - Capitol Area Community Action Agency;
 - Central Florida Community Action Agency;
 - Orange County Community Development;
 - Osceola County Council on Aging;
 - Meals on Wheels;
 - Lake County Community Action Agency;
 - Tampa Hillsborough Action Plan; and
 - Seminole County Government.
- 4. In 2020, what was the Company's System Average Line Loss percentage?

| RESIDENTIAL/COMMERCIA | | | |
|-----------------------|------------|---------|-------|
| | | | |
| Residential | 22,044,424 | 52.88% | 6.43% |
| Commercial Industrial | 19,643,877 | 47.12% | 4.91% |
| Total | 41,688,301 | 100.00% | 5.72% |

- 5. As reflected on Page 1 of the report, the Company provided information on audits. Please answer the following:
 - A. The report indicates 11,558 online audits were conducted in 2020 for the residential customer class. Similar data reflects 5,596 online audits were conducted in 2019. Please describe what steps the Company took to more than double participation for online audits to the residential customer class.
 - B. The report indicates that "DEF has recently launched a new online audit tool designed to target small and medium sized commercial customers." Please provide a more detailed description of this new tool. Address in your response the program features that are tailored to small and medium sized commercial customers, compared to the online audit tool for residential class customers.

Response:

- A. Much of the increase in the number of residential online audits was driven by the fact that DEF suspended in-home, walk-through audits for the majority of 2020 due to concerns about customer safety related to COVID-19 and encouraged customers to complete either an online audit or phone-assisted audit in place of the walk-through audit.
- B. DEF's Online Commercial Energy Report (OCER) tool is designed to analyze a customer's energy usage relative to other similar facilities and provide recommendations for potential energy savings. This analysis is based on information entered by the customer into the OCER tool about the respective facility such as type of business, hours of operation, age of the facility, types of windows, HVAC systems and use, lighting, roofing and other relevant data. The tool uses an algorithm to assess energy usage relative to similar facilities and provides a report to the customer that includes energy savings tips, recommendations for low cost/no cost energy savings measures, along with information about any potential incentives that may be available to the customer through DEF's commercial DSM programs.
- 6. According to Page 5 of the report, the actual number of program participants in the Neighborhood Energy Saver program was lower than the number the Company projected for this program.
 - A. Identify the reasons why this program did not achieve the projected participation levels for 2020.
 - B. What, if any, program modifications is the Company considering or researching to ensure that this program will be able to more closely achieve projected participation levels? Please explain.

- A. The NES program did not achieve the projected participation levels due to COVID-19. This is a community-focused program that provides direct install of energy savings measures in customers' homes and due to concerns about customer safety, DEF suspended all in-home installations in March 2020; that suspension continues to date.
- B. DEF plans to resume field operations in the near future; however, due to COVID-19 and continued concern about customer safety, DEF plans to implement a few changes to the Program. Historically, this Program has relied on community engagement to drive program participation. DEF typically hosts community kick-off events and partners with local leaders to promote the benefits of the program; however, DEF is currently looking at other alternatives including virtual events to drive participation. Additionally, DEF has historically used a team of technicians to install measures in each home, but in an effort to reduce risk to the customer, DEF is planning to use only one technician per home. These changes have required re-training and re-thinking about how to achieve the targeted level of participation in these neighborhoods and how the team can most effectively and efficiently work to install measures in homes, all while ensuring the safety of the customer.
- 7. According to Page 6 of the report, the actual number of program participants in the Low-Income Weatherization Assistance program was lower than the number the Company projected for this program.
 - A. Identify the reasons why this program did not achieve the projected participation levels for 2020.
 - B. What, if any, program modifications is the Company considering or researching to ensure that this program will be able to more closely achieve projected participation levels? Please explain.

- A. The primary reason this program did not achieve the projected participation levels was because the weatherization agencies suspended direct install of measures in homes due to COVID-19.
- B. Participation in this program is dependent on the weatherization agencies. DEF reimburses the weatherization agencies for measures they install. Some weatherization agencies are currently back in the field and actively engaging with customers.
- 8. According to Page 9 of the report, the actual number of program participants in the Better Business program was lower than the number the Company projected for this program.
 - A. Identify the reasons why this program did not achieve the projected participation levels for 2020.

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

- A. DEF believes that participation in this Program was impacted by COVID-19 due to restrictions of on-site visits. It is important to note however, that although the reported participation for the Better Business Program was less than projected, the demand and energy savings from the commercial programs well-exceeded the projected savings included in the 2020 Program Plan. Because there is a wide diversity in both the types of commercial customers and the demand and energy requirements of those customers, the types of measures incentivized are often a larger driver of program achievements and cost-effectiveness than the actual number of participants. Additionally, because DEF's 2020-2024 Program Standards weren't approved until October 29, 2020, the measures in place for 2020 were the measures from the 2014 Program Plan. The new measures weren't implemented until 2021.
- B. DEF has now resumed on-site visits to customer facilities and has implemented all of the changes included in the 2020-2024 Program Plan. The Plan includes changes in targeted participation as well as changes in measures eligible for incentives and incentive levels.
- 9. Referencing Page 3 of your FEECA filing, and also Pages 1 and 3 of DEF's Revised DSM Annual Report for Calendar Year 2020, filed April 9, 2021, please answer the following questions for the Home Energy Check program in 2020.
 - A. In part, the response to Data Request Number 19 in the Company's DSM Plan docket (DN 20200054-EI) stated "The savings for the Home Energy Check program are from the kits that are provided to audit participants." Please describe how kits were provided to the 31,560 audit participants in 2020. Specifically address in your response if the delivery channel for the kits was different for each audit type (e.g., walk-through, online, phone, etc.).
 - B. Please provide a full list of the annual demand and energy savings measures that were offered in 2020 under the Home Energy Check program. Specify in the list the amount of annual achieved demand and energy savings for each measure.
 - C. Please list the full contents of kits provided to audit participants. Identify from the list which components contribute to the annual demand and energy savings results shown on Page 3, and which are considered behavioral in nature, and do not contribute to measured savings.
 - D. When kits are provided to customers, what follow-up actions by the Company, if any, are done to assess whether self-install items from the kit have, in fact, been installed? Please explain your response.

- E. What is DEF's estimate of the number of self-install kit items which were distributed in 2020 by type?
- F. Are the kits distributed as part of this program homogeneous in their contents, or are the self-install items that are included in the kits dependent upon audit results? Please explain.
- G. For each type of item included in the kit, what is DEF's estimate of the proportion actually installed of all such items distributed in 2020? How does DEF measure this?
- H. Please show the calculations to support the Program Total Summer kW Reduction (at the generator) of 5,843.
- I. Please show the calculations to support the Program Total Winter kW Reduction (at the generator) of 8,781.
- J. Please show the calculations to support the Program Total Annual kWh Reduction (at the generator) of 20,914,898.
- K. Describe why the Company believes the practice of counting substantially all of the annual demand and energy savings reductions from all 31,560 kits is appropriate.
- L. Please show the calculations to support the Cost per Installation amount of \$131.
- M. Please show the calculations to support the Total Program Cost amount of \$4.1 million dollars.

- A. Kits are mailed to customers who complete an audit, regardless of the type of audit. The delivery channel is the same for each type of audit.
- B. Please see the attached document named, "DEF Response to DR1-9B, 9C and 9E."
- C. Please see the attached document named, "DEF Response to DR1-9B, 9C and 9E." The savings from all of these measures are counted toward achieved savings; none are considered behavioral as the savings result from the physical measures included in the kits.
- D. DEF does not perform any follow-up actions to assess whether items have been installed as this would result in increased costs to customers without incremental value.
- E. Please see the attached document named "DEF Response to DR1-9B, 9C and 9E."
- F. The items in the kit are dependent upon the home type. DEF provides different kits for single family vs multi-family homes.

- G. DEF does not have an estimate of the proportion of items actually installed. Please see DEF's Response to Question 9-D.
- H. Please see the attached document named, "DEF Response to DR1-9H J and 9L M."
- I. Please see the attached document named, "DEF Response to DR1-9H J and 9L M."
- J. Please see the attached document named, "DEF Response to DR1-9H J and 9L M."
- K. DEF believes the practice of counting substantially all of the demand and energy savings reductions is appropriate because the items in the kit are relatively easy to install and the kit includes educational material that explains how to install the items and how those items can result energy savings to the customer (Please see the attached document named, "DEF Response to DR1-9K").
- L. Please see the attached document named, "DEF Response to DR1-9H J and 9L M."
- M. Please see the attached document named, "DEF Response to DR1-9H J and 9L M."
- 10. Referencing Page 4 of your FEECA filing, please answer the following questions for the Residential Incentive program in 2020.
 - A. Please list each residential incentive (or measure) offered under this program in 2020 that contributed to the annual demand and energy savings results shown on Page 4, and by what amount.
 - B. Please show the calculations to support the Program Total Summer kW Reduction (at the generator) of 6,602.
 - C. Please show the calculations to support the Program Total Winter kW Reduction (at the generator) of 12,798.
 - D. Please show the calculations to support the Program Total Annual kWh Reduction (at the generator) of 9,424,199.
 - E. Please show the calculations to support the Cost per Installation amount of \$351.
 - F. Please show the calculations to support the Total Program Cost amount of \$6.7 million dollars.
 - G. Please show the calculations to support the Net Benefits of Measures Installed amount of \$10.7 million dollars.

H. Please show the calculations and results of cost effectiveness tests applicable to this program for the year 2020.

Response:

- A. H. Please see the attached document named, "DEF Response to DR1-10A through H."
- 11. Referencing Page 10 of your FEECA filing, please answer the following questions for the Florida Custom Incentive program in 2020.
 - A. Please show the calculations to support the Cost per Installation amount of \$5,812.
 - B. Please show the calculations to support the Total Program Cost amount of \$778,000.
 - C. Please show the calculations to support the Net Benefits of Measures Installed amount of (\$991,000).

Response:

A. – C. Please see the attached document named, "DEF Response to DR1-11A through C."

DEF's Response to DR1-9B

| 2020 Home Energy Check Measures | 2020 Completions | Annual wkw savings | | | | | Total Annual kwh savings |
|---|---------------------|-----------------------|----------|------|----------|--------|-----------------------------|
| Residential Energy Efficiency Kit - Walk Through | 7,488 | 0.28 | 2,096.64 | 0.21 | 1,538.78 | 721.72 | 5,404,239 |
| Residential Energy Efficiency Kit - Phone Assisted | 9,667 | 0.28 | 2,706.76 | 0.21 | 1,986.57 | 721.72 | 6,976,867 |
| Residential Energy Efficiency Kit - Internet | 9,076 | 0.28 | 2,541.28 | 0.21 | 1,865.12 | 721.72 | 6,550,331 |
| Residential Energy Efficiency Kit-MF | 1,062 | 0.23 | 241.65 | 0.02 | 21.24 | 166.64 | 176,972 |
| Residential Energy Efficiency MF Kit - Walk Through | 753 | 0.23 | 171.34 | 0.02 | 15.06 | 166.64 | 125,480 |
| Residential Energy Efficiency MF Kit - Phone Assist | 344 | 0.23 | 78.27 | 0.02 | 6.88 | 166.64 | 57,324 |
| Residential Energy Efficiency MF Kit - Internet | 1,670 | 0.23 | 379.99 | 0.02 | 33.40 | 166.64 | 278,289 |
| | 30,060 | | 8,215.93 | | 5,467.05 | | 19,569,502 |

DEF's Response to DR1-9C

| DEF Single-Family Home Energy Check Program Energy Efficiency Kit |
|---|
| Two (2) Packets of V-Seal Adhesive Weather-strip |
| One (1) Pack of Switch & Outlet Gaskets |
| One (1) Hot Water Gauge |
| One (1) Refrigerator Thermometer |
| Two (2) 9W LED |
| Two (2) Faucet Aerators |
| One (1) Energy Efficiency Showerhead 1.5 GPM |
| |
| |
| DEF Multi-Family Home Energy Check Program Energy Efficiency Kit |
| One (1) 9W LED |
| One (1) Refrigerator Thermometer |
| One (1) Digital Wall Thermometer |
| |

DEF's Response to DR1-9E

| DEF Single-Family Home Energy Check Program Energy Efficiency Kit Content | Quantity Per Kit | Number of Kits | Total Items |
|--|---------------------|-------------------|-------------|
| Two (2) Packets of V-Seal Adhesive Weather- | | | |
| strip | 2 | 26,231 | 52,462 |
| One (1) Pack of Switch & Outlet Gaskets | | | |
| | 1 | 26,231 | 26,231 |
| One (1) Hot Water Gauge | 1 | 26,231 | 26,231 |
| One (1) Refrigerator Thermometer | 1 | 26,231 | 26,231 |
| Two (2) 9W LED | 2 | 26,231 | 52,462 |
| Two (2) Faucet Aerators | 2 | 26,231 | 52,462 |
| One (1) Energy Efficiency Showerhead 1.5 | | | |
| GPM | 1 | 26,231 | 26,231 |
| | 10 | 26,231 | 262,310 |
| | | | |
| DEF Multi-Family Home Energy Check | | | |
| Program Energy Efficiency Kit Content | Quantity Per | Number of | |
| | Kit | Kits | Total Items |
| 0 (4) 0 4 1 5 5 | 4 | 0.000 | 0.000 |

| Quantity Per | Number of | |
|---------------------|-----------|-------------------------------|
| Kit | Kits | Total Items |
| 1 | 3,829 | 3,829 |
| 1 | 3,829 | 3,829 |
| 1 | 3,829 | 3,829 |
| 3 | 3,829 | 11,487 |
| | _ | 1 3,829 1 3,829 1 3,829 |

| TOTAL | 30,060 | 273,797 |
|-------|--------|---------|

DEF Response to DR1-9H-J and 9L-M

2020 YEAR TO DATE

| | Measure | Completions | wkw | skw | kwh |
|--------|--|-------------|----------|----------|-----------|
| | 10902: Multifamily - Internet Audit | 1,777 | - | - | |
| | 10903: Multifamily - Phone Assisted Audit | 379 | - | - | - |
| | 8545: Home Energy Check No Kit | 7,486 | - | - | - |
| | 8564: Home Energy Check-Internet-No Kit | 9,781 | - | - | - |
| | 8565: Home Energy Check-Phone-No Kit | 10,098 | - | - | - |
| 0 | 8566: Home Energy Check-Multi Family-No Kit | 2,039 | - | - | - |
| E E | 8617: Res Energy Efficiency Kit - Walk Through | 7,488 | 2,096.64 | 1,538.78 | 5,404,239 |
| _ | 8618: Res Energy Efficiency Kit - Phone Assisted | 9,667 | 2,706.76 | 1,986.57 | 6,976,867 |
| | 8619: Res Energy Efficiency Kit - Internet | 9,076 | 2,541.28 | 1,865.12 | 6,550,331 |
| | 8733: Res energy Efficiency MF Kit-Multi Family | 1,062 | 241.63 | 21.24 | 176,972 |
| | 8734: Res Energy Efficiency MF Kit-Walk Through | 753 | 171.34 | 15.06 | 125,480 |
| | 8735: Res Energy Efficiency MF Kit-Phone Assist | 344 | 78.27 | 6.88 | 57,324 |
| | 8736: Res Energy Efficiency MF Kit-Internet | 1,670 | 379.99 | 33.40 | 278,289 |
| | T-4-181 | 04 500 | · | · | • |

Total Number of Audits 31,560
Total Number of Kits 30,060 8,215.91 5,467.05 19,569,502 Total impacts and participation for all program measures for the year ending 2020

Check Total 8,215.91 5,467.05 19,569,502

| Annual Demand & Energy Savings | Per Ins | stallation | Program Total | | |
|---|---------|-------------|---------------|-------------|--|
| (during the reporting period) | @ Meter | @ Generator | @ Meter | @ Generator | |
| Summer kW Reduction | 0.17 | 0.19 | 5,467 | 5,843 | |
| Winter kW Reduction | 0.26 | 0.28 | 8,216 | 8,781 | |
| Annual kWh Reduction | 622 | 665 | 19,569,502 | 20,914,898 | |
| Utility Cost per Installation: | | | | \$131 | |
| Total Program Cost of the Utility (\$000): | | | | \$4,127 | |
| Net Benefits of Measures Installed During Reporting Period (\$000): | | | | N/A | |

9-H Program Total at the Meter divided by (1- Residential Loss Factor) provides the number for skW reduction at the Generator
9-I Program Total at the Meter divided by (1-Residential Loss Factor) provides the number for wkW reduction at the Generator
9-J Program Total at the Meter divided by (1- Residential Loss Factor) provides the number for kwh's reduction at the Generator

9-L Total Program Cost divided by Completions gives you the utility cost per installation 9-M Provided in CT-2 P 2 of DEF's ECCR True Up Filing to be filed on May 3, 2021

DEF Response to Annual Report DR1-9H through 9J and 9L through 9M Page 2 of 3

| RESIDENTIAL/COMMERCIAL INDUSTRIAL LOSS FACTOR | | | | | | | | | |
|---|----------------|-------------------|-------------|--|--|--|--|--|--|
| | MWH's at Meter | % of Retail Sales | Loss Factor | | | | | | |
| Residential | 22,044,424 | 52.88% | 6.43% | | | | | | |
| Commercial Industrial | 19,643,877 | 47.12% | 4.91% | | | | | | |
| Total | 41,688,301 | 100.00% | 5.72% | | | | | | |

DEF Response to Annual Report
DR1-9H through 9J and 9L through 9M
Page 3 of 3
FPSC Docket No. 20210002-EG
Duke Energy Florida, LLC
Witness Lori J. Cross
EXHIBIT NO. 1 (LJC-1T)
SCHEDULE CT-2
PAGE 2 OF 4
May 3, 2021

DUKE ENERGY FLORIDA, LLC

ACTUAL ENERGY CONSERVATION PROGRAM COSTS PER PROGRAM FOR THE PERIOD JANUARY 2020 THROUGH DECEMBER 2020

| LINE NO. | PROGRAM | DEPRECIATION AMORTIZATION & RETURN | PAYROLL & BENEFITS | VEHICLES | OUTSIDE SERVICES | MATERIALS & SUPPLIES | ADVERTISING | INCENTIVES | OTHER | SUB-TOTAL | PROGRAM REVENUES (CREDIT) | TOTAL |
|--------------|--------------------------------------|--|-----------------------|----------|---------------------|----------------------|-------------|------------|---------|-------------|---------------------------------|-------------|
| 1 HOME ENE | ERGY CHECK | 0 | 2,736,790 | 87,030 | 450,767 | 119,416 | 298,857 | 408,330 | 25,332 | 4,126,524 | 0 | 4,126,524 |
| 2 RESIDENTIA | AL INCENTIVE PROGRAM | 0 | 1,631,101 | 46,141 | 191,566 | 23,816 | 138,601 | 4,696,872 | 13,935 | 6,742,030 | 0 | 6,742,030 |
| 3 BUSINESS E | ENERGY CHECK | 0 | 398,661 | 4,387 | 71,132 | 44,142 | 22,684 | 5,731 | 9,771 | 556,508 | 0 | 556,508 |
| 4 BETTER BU | SINESS | 0 | 1,011,002 | 3,190 | 110,520 | 2,045 | 43,915 | 2,048,670 | 13,232 | 3,232,574 | 0 | 3,232,574 |
| 5 TECHNOLO | OGY DEVELOPMENT | 0 | 224,592 | 3,513 | 218,478 | 45,784 | 0 | 0 | 4,137 | 496,504 | 0 | 496,504 |
| 6 FLORIDA CI | USTOM INCENTIVE PROGRAM | 0 | 252,583 | 72 | 235,071 | 1,258 | 32,213 | 231,211 | 25,964 | 778,371 | 0 | 778,371 |
| 7 INTERRUPT | FIBLE SERVICE | 35,636 | 210,999 | 1,806 | 0 | 837 | 0 | 40,666,513 | 15,239 | 40,931,031 | 0 | 40,931,031 |
| 8 CURTAILAB | BLE SERVICE | 0 | 40,798 | 0 | 0 | 21 | 0 | 2,027,594 | 3 | 2,068,416 | 0 | 2,068,416 |
| 9 LOAD MAN | IAGEMENT (RESIDENTIAL & COMMMERCIAL) | 13,444,103 | 1,798,055 | 42,877 | 1,914,105 | 12,361 | 186,033 | 26,699,387 | 72,106 | 44,169,027 | 0 | 44,169,027 |
| 10 LOW INCO | ME WEATHERIZATION ASSISTANCE PROGRAM | 0 | 97,834 | 0 | 30 | 189 | 16,000 | 74,553 | 4,923 | 193,529 | 0 | 193,529 |
| 11 STANDBY G | GENERATION | (40,916) | 266,423 | 6,379 | 22,527 | 229,788 | 0 | 3,838,063 | 4,268 | 4,326,532 | 0 | 4,326,532 |
| 12 QUALIFYIN | G FACILITY | 0 | 1,091,380 | 575 | 2,162,927 | 398 | 0 | 0 | 4,356 | 3,259,637 | 0 | 3,259,637 |
| 13 NEIGHBOR | HOOD ENERGY SAVER | 0 | 208,737 | 493 | 54,720 | 2,467 | 53,064 | 814,432 | 12,650 | 1,146,564 | 0 | 1,146,564 |
| 14 CONSERVA | TION PROGRAM ADMIN | 7,377 | 1,922,353 | 71 | 524,703 | 18,359 | 0 | 0 | 192,790 | 2,665,653 | 0 | 2,665,653 |
| 15 TOTAL ALL | PROGRAMS | 13,446,200 | 11,891,308 | 196,535 | 5,956,546 | 500,883 | 791,365 | 81,511,358 | 398,705 | 114,692,900 | 0 | 114,692,900 |





Dear customer,

Thank you for participating in the Home Energy Check program.

As part of this free program, you've received a personalized energy plan and a free energy efficiency starter kit to help lower your energy bill. Here's what you can do to start saving money and energy today:

- Review the personalized recommendations and tips in the Home Energy Check report to reduce your energy costs and improve the comfort and value of your home.
- Install the free energy efficiency measures included in this kit to start saving today. Simply follow the instructions on the back of this letter to get started.

Here are some other energy-saving opportunities you can take advantage of:

| Home Energy Improvement Program Rebates for upgrade projects in your home* | EnergyWise® Home A free and effortless way to reduce your monthly bill.** |
|--|--|
| DUCT REPAIR — Get up to \$150 back ATTIC INSULATION UPGRADE — Get up to \$200 back HEAT PUMP REPLACEMENT — Get up to \$800 back ENERGY-EFFICIENT WINDOWS — Get up to \$400 back | HEATING SYSTEM — Get up to \$40 a year COOLING SYSTEM — Get up to \$35 a year ELECTRIC WATER HEATER — Get up to \$42 a year POOL PUMP — Get up to \$30 a year |
| Visit duke-energy.com/HEloffers for more info | Visit duke-energy.com/GetRewards for more info |

Thanks again for participating in the Home Energy Check. Let your family and friends know that if they're Duke Energy customers, they too can benefit from this FREE program.

The Home Energy Check team

^{*}Completing a free Home Energy Check with a qualifying recommendation is a prerequisite to qualifying for all Duke Energy incentives. The Home Energy Check must be completed before any work is started and must have occurred within the past 24 months.

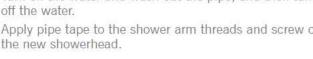
^{**}Your monthly bill credit will vary based on the options you select and your monthly energy usage.

Ready, set, install! You can do it. Just follow these easy instructions.



The energy-efficient showerhead doesn't just save water; it saves energy. You'll be using less energy because you'll be heating less water.

- 1. Remove the old showerhead from the shower arm. You may need to use two wrenches. Place a piece of cloth between the first wrench and the shower arm and the other piece of cloth between the second wrench and the showerhead you loosen.
- 2. Turn on the water and wash out the pipe, and then turn off the water.
- 3. Apply pipe tape to the shower arm threads and screw on





Faucet aerators maintain great water pressure while conserving water and energy.

- 1. Remove the old aerator from the faucet.
- 2. For inside faucet threads, place two rubber washers in the top of the aerator.
- 3. Screw on the new aerator into the inside threads of the faucet.



The hot water gauge gives an accurate reading of your hot water heater temperature.

- 1. Insert the bottom of this card into a cup of hot water from your tap. (Run water for three to five minutes.)
- 2. For most home uses, 120 F to 130 F should be adequate.
- 3. If your water temperature is higher than the above range, consider lowering it to save. For every 10 F you reduce in temperature, you can save between 3 and 5 percent on your water heating costs.



Use the thermometer to set your refrigerator and freezer at the proper temperature to keep food safe, preserve quality and nutrients and save energy.

- 1. Clean the area you wish to place the thermometer inside your refrigerator or freezer.
- 2. Place, hang or attach the thermometer in the center of a wall compartment.
- 3. Close the door. Wait 24 hours for the temperature to stabilize before you read the gauge.
- 4. The ideal temperature range for your fridge is 35 F to 38 F. Your freezer should be set at 0 F.



Seal out drafts in doors and windows with the adhesive-backed foam weatherstripping.

- 1. Clean the door frame and window sash completely and allow them to dry.
- 2. Cut the foam weatherstripping tape to the desired length.
- 3. For doors, remove backing and apply the tape to the door frames with creased side facing door on all sides. For windows, remove backing and press tape in place along the bottom of the lower sash and top of the upper sash.



Switch and outlet seals stop drafts from coming through outlets and switches on exterior walls.

- 1. Turn off the electric power to the circuit before removing the outlet wall plate.
- 2. Remove the wall plate and punch out the centers of the energy seal.
- 3. Position energy seal behind the plate cover and trim any excess so that the plate fits tight.
- 4. Use the same process for exterior wall switch plates.



LED lightbulbs last up to 25 times longer than incandescent bulbs and use up to 90 percent less electricity.

- 1. Screw the bulb into the light socket, just like an ordinary lightbulb.
- 2. These can be used with dimmer switches.

Note: A 9-watt LED bulb is equivalent to a traditional 60-watt incandescent lightbulb.



Using pipe tape is a great way to prevent leaks in shower arms, showerheads and threaded tub spouts.

- 1. Clean the pipe or faucet threads before applying tape.
- 2. Start wrapping at the very end of the pipe or faucet. Do not let the tape lap over the end.
- 3. Start with a couple of loops around the end, then wrap all the threads, overlapping half the width of the tape
- 4. As you wrap, keep tension on the tape so it is pulled into the threads.





To thank you for participating in our Home Energy Check program, please accept this **FREE energy efficiency kit**. Use the enclosed products to start saving energy and money today.



Ready, set, install!

LED – LEDs look, feel and function almost exactly like traditional incandescent bulbs. That's where the similarity ends. A 9-watt LED bulb is equivalent to a 60-watt incandescent lightbulb but lasts up to 25 times longer and uses up to 90 percent less electricity.

Wall Thermometer – Inaccurate thermostat readings can cause your heating and cooling system to waste substantial energy. Use Velcro to mount the digital thermometer on a wall near your room thermostat to check it. Recommended heat setting: 68-70 degrees. Recommended AC setting: 78-80 degrees.

Refrigerator/Freezer Thermometer – Using optimal temperatures will keep food safe, preserve quality and nutrients and save energy. Place the thermometer in the center of a wall compartment and close the door. Wait 24 hours for the temperature to stabilize before reading the gauge. Recommended fridge setting: 35-38 degrees. Recommended freezer setting: zero degrees.

Visit duke-energy.com/SaveEnergy to find other energy-saving tips and cash incentives for home improvements.



DEF Response to DR1-10A

| 2020 Residential Incentive Program | 2020 Completions | Annual wkw savings | | | | | Total Annual kwh savings |
|------------------------------------|---------------------|--------------------|--------|------|-------|--------|--------------------------|
| Duct Test | 2,265 | 0 | 0 | 0.00 | 0 | 0.00 | 0 |
| Duct Repair | 1,657 | 0.97 | 1,614 | 0.51 | 840 | 560.12 | 928,123 |
| Attic Insulation | 3,398 | 0.45 | 1,517 | 0.29 | 980 | 331.48 | 1,126,365 |
| Replacement Windows | 1,645 | 0.56 | 915 | 0.26 | 435 | 556.20 | 914,948 |
| Heat Pump | 9,951 | 0.79 | 7,868 | 0.39 | 3,866 | 564.79 | 5,620,237 |
| Energy Star | 284 | 0.21 | 61 | 0.20 | 57 | 803.85 | 228,294 |
| Total | 19,200 | | 11,975 | | 6,177 | | 8,817,967 |

| ral Damand 9 Energy Cavings | Day In | atallation | Dragram | т. |
|--|---------------|-------------|-----------|-------------|
| Annual Demand & Energy Savings | | stallation | Program | |
| \ 9 31 / | @ Meter | @ Generator | @ ivieter | @ Generator |
| Summer kW Reduction | 0.32 | 0.34 | 6,177 | 6,602 |
| Winter kW Reduction | 0.62 | 0.67 | 11,975 | 12,798 |
| Annual kWh Reduction | 459 | 491 | 8,817,967 | 9,424,199 |
| | | | | |
| Utility Cost per Installation: | | | | \$351 |
| Total Program Cost of the Utility (\$000): | | | | \$6,742 |
| Net Benefits of Measures Installed During Repo | orting Period | (\$000): | | \$10,774 |

| DEF Response to Annual Report | |
|-------------------------------|--|
| DR1-10A through 10H | |
| Page 2 of 4 | |
| | |

| RESIDENTIAL/COMMERCIAL INDUSTRIAL LOSS FACTOR | | | | | | | | | |
|---|------------|---------|-------|--|--|--|--|--|--|
| Residential | 22,044,424 | 52.88% | 6.43% | | | | | | |
| Commercial Industrial | 19,643,877 | 47.12% | 4.91% | | | | | | |
| Total | 41,688,301 | 100.00% | 5.72% | | | | | | |

FPSC Docket No. 20210002-EG Duke Energy Florida, LLC Witness Lori J. Cross EXHIBIT NO. 1 (LIC-1T) SCHEDULE CT-2 PAGE 2 0F 4 May 3, 2021

DUKE ENERGY FLORIDA, LLC

ACTUAL ENERGY CONSERVATION PROGRAM COSTS PER PROGRAM FOR THE PERIOD JANUARY 2020 THROUGH DECEMBER 2020

| LINE | | DEPRECIATION AMORTIZATION | PAYROLL & | | OUTSIDE | MATERIALS & | | | | | PROGRAM REVENUES | |
|----------|--|---------------------------|------------|-----------|-----------|-------------|----------------|------------|---------|-------------|---------------------|-------------|
| NO. | PROGRAM | & RETURN | BENEFITS | VEHICLES | SERVICES | SUPPLIES | ADVERTISING | INCENTIVES | OTHER | SUB-TOTAL | (CREDIT) | TOTAL |
| | THOUSEN. | G ILL OILL | DETTELLIO | VEITIGEES | <u> </u> | 30112123 | /ID TENTION TO | | O THER | 302 101112 | (CILEDIT) | |
| 1 HOME | E ENERGY CHECK | 0 | 2,736,790 | 87,030 | 450,767 | 119,416 | 298,857 | 408,330 | 25,332 | 4,126,524 | 0 | 4,126,524 |
| 2 RESID | ENTIAL INCENTIVE PROGRAM | 0 | 1,631,101 | 46,141 | 191,566 | 23,816 | 138,601 | 4,696,872 | 13,935 | 6,742,030 | 0 | 6,742,030 |
| 3 BUSIN | NESS ENERGY CHECK | 0 | 398,661 | 4,387 | 71,132 | 44,142 | 22,684 | 5,731 | 9,771 | 556,508 | 0 | 556,508 |
| 4 BETTE | ER BUSINESS | 0 | 1,011,002 | 3,190 | 110,520 | 2,045 | 43,915 | 2,048,670 | 13,232 | 3,232,574 | 0 | 3,232,574 |
| 5 TECHI | NOLOGY DEVELOPMENT | 0 | 224,592 | 3,513 | 218,478 | 45,784 | 0 | 0 | 4,137 | 496,504 | 0 | 496,504 |
| 6 FLORI | IDA CUSTOM INCENTIVE PROGRAM | 0 | 252,583 | 72 | 235,071 | 1,258 | 32,213 | 231,211 | 25,964 | 778,371 | 0 | 778,371 |
| 7 INTER | RRUPTIBLE SERVICE | 35,636 | 210,999 | 1,806 | 0 | 837 | 0 | 40,666,513 | 15,239 | 40,931,031 | 0 | 40,931,031 |
| 8 CURTA | AILABLE SERVICE | 0 | 40,798 | 0 | 0 | 21 | 0 | 2,027,594 | 3 | 2,068,416 | 0 | 2,068,416 |
| 9 LOAD | MANAGEMENT (RESIDENTIAL & COMMMERCIAL) | 13,444,103 | 1,798,055 | 42,877 | 1,914,105 | 12,361 | 186,033 | 26,699,387 | 72,106 | 44,169,027 | 0 | 44,169,027 |
| 10 LOW I | INCOME WEATHERIZATION ASSISTANCE PROGRAM | 0 | 97,834 | 0 | 30 | 189 | 16,000 | 74,553 | 4,923 | 193,529 | 0 | 193,529 |
| 11 STANI | DBY GENERATION | (40,916) | 266,423 | 6,379 | 22,527 | 229,788 | 0 | 3,838,063 | 4,268 | 4,326,532 | 0 | 4,326,532 |
| 12 QUAL | IFYING FACILITY | 0 | 1,091,380 | 575 | 2,162,927 | 398 | 0 | 0 | 4,356 | 3,259,637 | 0 | 3,259,637 |
| 13 NEIGH | HBORHOOD ENERGY SAVER | 0 | 208,737 | 493 | 54,720 | 2,467 | 53,064 | 814,432 | 12,650 | 1,146,564 | 0 | 1,146,564 |
| 14 CONS | ERVATION PROGRAM ADMIN | 7,377 | 1,922,353 | 71 | 524,703 | 18,359 | 0 | 0 | 192,790 | 2,665,653 | 0 | 2,665,653 |
| 15 TOTAL | L ALL PROGRAMS | 13,446,200 | 11,891,308 | 196,535 | 5,956,546 | 500,883 | 791,365 | 81,511,358 | 398,705 | 114,692,900 | 0 | 114,692,900 |

| | Cost | | | Market-Based | | |
|------------------------|-------|---------|-------|--------------|--------|---------|
| | Based | Minimum | Today | Alternate | Option | Maximum |
| Utility (PAC/UCT) Test | 4.60 | 2.78 | 3.11 | 3.11 | 2.86 | 3.62 |
| TRC Test | 14.40 | 8.71 | 9.74 | 9.74 | 8.96 | 11.32 |
| RIM Test | 1.51 | 0.95 | 1.02 | 1.02 | 0.94 | 1.17 |
| RIM (Net Fuel) | 1.51 | 0.95 | 1.02 | 1.02 | 0.94 | 1.17 |
| Societal Test | 14.40 | 8.71 | 9.74 | 9.74 | 8.96 | 11.32 |
| Participant Test | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | Price Scenarios | | | | | |
|-------------------------|-------------------|-------|------|--------------|-------|----------|
| | | Cost | | Market-Based | | |
| Usage/Weather Scenarios | Test | Based | Low | Median | High | kWh Savi |
| Mid Year | Utility (PAC/UCT) | 4.47 | 2.78 | 3.05 | 3.36 | 883603 |
| Normal Year | Utility (PAC/UCT) | 4.60 | 2.82 | 3.11 | 3.49 | 9334003 |
| Extreme Year | Utility (PAC/UCT) | 4.76 | 2.87 | 3.21 | 3.62 | 961318 |
| Mid Year | TRC | 13.98 | 8.71 | 9.53 | 10.51 | 8836031 |
| Normal Year | TRC | 14.40 | 8.82 | 9.72 | 10.91 | 9334003 |
| Extreme Year | TRC | 14.89 | 8.97 | 10.03 | 11.32 | 961318 |
| Mid Year | RIM | 1.48 | 0.91 | 1.00 | 1.11 | 8836031 |
| Normal Year | RIM | 1.51 | 0.93 | 1.02 | 1.15 | 933400 |
| Extreme Year | RIM | 1.54 | 0.96 | 1.06 | 1.22 | 961318 |
| Mid Year | Societal | 13.98 | 8.71 | 9.53 | 10.51 | 8836031 |
| Normal Year | Societal | 14.40 | 8.82 | 9.72 | 10.91 | 9334003 |
| Extreme Year | Societal | 14.89 | 8.97 | 10.03 | 11.32 | 961318 |
| Mid Year | Participant | 0.00 | 0.00 | 0.00 | 0.00 | 883603 |
| Normal Year | Participant | 0.00 | 0.00 | 0.00 | 0.00 | 9334003 |
| Extreme Year | Participant | 0.00 | 0.00 | 0.00 | 0.00 | 961318 |

| 100% Allocation | Nominal | Levelized | % Allocation |
|---------------------------------------|-----------|-----------------|--------------|
| Total Costs / kW Savings | \$21.1311 | \$21.1311 | 100.00% |
| Total Cost / kWh Savings | \$0.0435 | \$0.0435 | 100.00% |
| Total Costs / CCF Savings | \$0.0000 | \$0.0000 | 100.00% |
| Allocated By Cost-Based Avoided Costs | | | |
| Allocated Costs / kW Savings | \$15.0108 | \$15.0108 | 71.04% |
| Allocated Costs / kWh Savings | \$0.0126 | \$0.0126 | 28.96% |
| Allocated Costs / CCF Savings | \$0.0000 | \$0.0000 | 0.00% |
| User Allocated (see K11:K13 inputs) | | | |
| Allocated Costs / kW Savings | \$12.6787 | \$12.6787 | 60.00% |
| Allocated Costs / kWh Savings | \$0.0174 | \$0.0174 | 40.00% |
| Allocated Costs / CCF Savings | \$0.0000 | \$0.0000 | 0.00% |
| | | User-Input Sum: | 100.00% |

| Avoided Electric Production Adders Avoided Electric Capathy Avoided Electric TAD Avoided Electric TAD Avoided Electric TAD Avoided Class Production Avoided Class Production Avoided Class Explanty Avoided Class Explanty Avoided Class Capathy Avoided Class Advantage Advantage Advantage Ingiencetation Production Open Control Ingiencetation Production | Per Test Cost Based \$4,187,183.73 \$0.00 \$10,269,719.98 \$17,298,279.52 \$0.00 | Minimum \$1,910,767.52 \$0.00 | Today | Market-Based Alternate | Option | Maximum | Discount Rate Used | | | Cost Based | Minimum | Today | Market-Based Alternate | Option | Maximun |
|--|---|-------------------------------------|---------------------------|---------------------------|---------------------------|---------------------------|-----------------------|--|-------------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|-----------------------|
| Utility (PAC/UCT) Test Avaided Electric Production Avaided Electric Production Avaided Electric Production Address Avaided Electric Production Address Avaided Claim Production Avaided Claim Production Avaided Claim Production Avaided Claim Capacity Total Administration Claim Implementation Prefrequency Costs Coher / Manaclasmach Claim Describes | Cost Based \$4,187,183.73 \$0.00 \$10,269,719.98 \$17,298,279.52 | \$1,910,767.52 | | | Option | Maximum | | | | | Minimum | Today | | Onton | Mariana |
| Avoided Electic Production Avoided Electic Production Avoided Electic Production Avoided Electic Production Avoided Electic Capacity Avoided Electic Tab 0 Avoided Electic Tab 0 Avoided Electic Avoilary Avoided Clas Production Avoided Clas Production Avoided Clas Capacity Avoided Class Clas | \$4,187,183.73 \$0.00 \$10,269,719.98 \$17,298,279.52 | \$1,910,767.52 | | Alternate | Option | Maximum | Pate Head | | | Based | Minimum | Today | Alternate | Onton | Marriagon |
| Avoided Beache Production Avoided Pediction Production Avoided Pediction Production Avoided Selectic Production Avoided Selectic Tab.D 3 Avoided Selection Tab.D 3 Avoided Selection Tab.D 3 Avoided Selection Avo | \$0.00 \$10,269,719.98 \$17,298,279.52 | | | | | | | | | | | | | | |
| Avoided Electric Production Adders Avoided Electric Capacity Avoided Electric TAD Avoided Electric TAD Avoided Electric TAD Avoided Clas Production Avoided Clas Production Avoided Clas Production Avoided Clas Expacity Total Administration Costs Implementation / Participation Costs Unifer / Massellamous Costs Cotter / Massellamous Costs Total | \$0.00 \$10,269,719.98 \$17,298,279.52 | | | | | | | Utility (PAC/UCT) Test | | | | | | | |
| Avoided Electric Capacity Avoided Electric TAD Avoided Electric TAD Avoided Electric Avoider Avoided Class Production Avoided Class Production Avoided Class Production Advanced Class Inglammentation American Commentation Com | \$10,269,719.98 \$17,298,279.52 | | \$4,187,183.73 \$0.00 | \$4,187,183.73 \$0.00 | \$2,454,931.70 \$0.00 | \$7,676,292.27 \$0.00 | 7.10% 7.10% | | Net Benefits Levelized Cost (kW) | \$24,852,728.45 \$21,1311 | \$12,306,592.25 \$21,1311 | \$14,583,008.47 \$21,1311 | \$14,583,008.47 \$21,1311 | \$12,850,756.44 \$21,1311 | \$18,072,1 \$21.13 |
| Avoided Electric T&D Avoided Flester, Ancillary Avoided Gas Production Avoided Gas Production Avoided Gas Capacity Total Administration Costs Implementation / Participation Costs Cotter / Miscellaneous Costs Incentives Total | \$17,298,279.52 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | evelized Cost (kWh) | \$0.0435 | \$0.0460 | \$0.0435 | \$0.0435 | \$0.0435 | \$0.04 |
| Avoided Electric Ancillary Avoided Gas Capacity Avoided Gas Capacity Total \$ Administration Costs Implementation Participation Costs Other I Miscellaneous Costs Incentives Total | | \$17,298,279.52 | \$17,298,279.52 | \$17,298,279.52 | \$17,298,279.52 | \$17,298,279.52 | 7.10% | | evelized Cost (CCF) | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 | \$0.00 |
| Avoided Gas Capacity Total Administration Costs Implementation / Participation Costs Other / Miscellaneous Costs Incentives Total | | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Total S Administration Costs Implementation / Participation Costs Other / Miscellaneous Costs Incentives Total | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Administration Costs Implementation / Participation Costs Other / Miscellaneous Costs Incentives Total | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Implementation / Participation Costs Other / Miscellaneous Costs Incentives Total | \$31,755,183.23 \$0.00 | \$19,209,047.03 \$0.00 | \$21,485,463.25 \$0.00 | \$21,485,463.25 \$0.00 | \$19,753,211.22 \$0.00 | \$24,974,571.79 | 7 10% | | | | | | | | |
| Other / Miscellaneous Costs Incentives Total | \$2.205.583.17 | \$2.205.583.17 | \$2.205.583.17 | \$2.205.583.17 | \$2.205.583.17 | \$2.205.583.17 | 7.10% | | | | | | | | |
| Incentives Total | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| | \$4,696,871.61 | \$4,696,871.61 | \$4,696,871.61 | \$4,696,871.61 | \$4,696,871.61 | \$4,696,871.61 | 7.10% | | | | | | | | |
| | \$6,902,454.78 | \$6,902,454.78 | \$6,902,454.78 | \$6,902,454.78 | \$6,902,454.78 | \$6,902,454.78 | | | | | | | | | |
| | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Test Results TRC Test | 4.60 | 2.78 | 3.11 | 3.11 | 2.86 | 3.62 | | TRC Test | | | | | | | |
| Avoided Electric Production | \$4,187,183.73 | \$1,910,767.52 | \$4,187,183.73 | \$4,187,183.73 | \$2,454,931.70 | \$7,676,292.27 | 7.10% | IRC lest | Net Benefits | \$29 549 600 06 | \$17 003 463 86 | \$19 279 880 08 | \$19 279 880 08 | \$17 547 628 05 | \$22.768 |
| Avoided Electric Production Adders | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | Levelized Cost (kW) | \$6.7521 | \$6.7521 | \$6.7521 | \$6.7521 | \$6.7521 | \$6.75 |
| Avoided Electric Capacity S | \$10,269,719.98 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | Li | evelized Cost (kWh) | \$0.0139 | \$0.0147 | \$0.0139 | \$0.0139 | \$0.0139 | \$0.01 |
| | \$17,298,279.52 | \$17,298,279.52 | \$17,298,279.52 | \$17,298,279.52 | \$17,298,279.52 | \$17,298,279.52 | 7.10% | Li | evelized Cost (CCF) | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 | \$0.00 |
| Avoided Electric Ancillary | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Avoided Gas Production Avoided Gas Congrity | \$0.00 \$0.00 | \$0.00 \$0.00 | \$0.00 \$0.00 | \$0.00 \$0.00 | \$0.00 \$0.00 | \$0.00 \$0.00 | 7.10% 7.10% | | | | | | | | |
| | \$0.00 | \$19,209,047.03 | \$0.00 | \$0.00 | \$0.00 \$19,753,211.22 | \$0.00 | 7.10% | | | | | | | | |
| Total Administration Costs | \$0.00 | \$19,209,047.03 | \$21,485,463.25 | \$21,485,463.25 | \$19,753,211.22 | \$24,974,571.79 | 7.10% | 1 | | | | | | | |
| | \$2.205.583.17 | \$2.205.583.17 | \$2.205.583.17 | \$2.205.583.17 | \$2.205.583.17 | \$2.205.583.17 | 7.10% | | | | | | | | |
| Other / Miscellaneous Costs | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Incentives | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 0.00% | | | | | | | | |
| Total : | \$2,205,583.17 | \$2,205,583.17 | \$2,205,583.17 | \$2,205,583.17 | \$2,205,583.17 | \$2,205,583.17 | | | | | | | | | |
| Reduced Arrears | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | 1 | | | | | | | |
| Participant or Unit Costs (Net) | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% |] | | | | | | | |
| Participant or Unit Tax Credits (Net) | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Environmental Benefits | \$0.00 \$0.00 | \$0.00 \$0.00 | \$0.00 \$0.00 | \$0.00 \$0.00 | \$0.00 \$0.00 | \$0.00 \$0.00 | 7.10% 7.10% | | | | | | | | |
| Other Benefits Total | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Test Results | 14.40 | 8.71 | 9.74 | 9.74 | 8.96 | 11.32 | | | | | | | | | |
| RIM Test | 14.40 | 0.71 | 0.14 | 5.14 | 0.50 | 11.02 | | RIM Test | | | | | | | |
| | \$4,187,183.73 | \$1,910,767.52 | \$4,187,183.73 | \$4,187,183.73 | \$2,454,931.70 | \$7,676,292.27 | 7.10% | | Net Benefits | \$10,773,854.33 | -\$1,021,179.90 | \$504,134.35 | | -\$1,228,117.68 | |
| Avoided Electric Production Adders | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | Net | et Benefits (Net Fuel) | \$10,773,854.33 | -\$1,021,179.90 | \$504,134.35 | \$504,134.35 | -\$1,228,117.68 | \$3,572,1 |
| | \$10,269,719.98 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | • | | | | |
| | \$17,298,279.52 | \$17,298,279.52 | \$17,298,279.52 | \$17,298,279.52 | \$17,298,279.52 | \$17,298,279.52 | 7.10% | RESPONSE 10G | | | | | | | |
| Avoided Electric Ancillary Avoided Gas Production | \$0.00 \$0.00 | \$0.00 \$0.00 | \$0.00 \$0.00 | \$0.00 \$0.00 | \$0.00 \$0.00 | \$0.00 \$0.00 | 7.10% 7.10% | NPV Avoided Costs Total PV of Program Costs | | \$31,755,183.23 | | | | | |
| Avoided Gas Production Avoided Gas Capacity | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | NPV Lost Revenue | | -\$14.078.874.12 | | | | | |
| | \$31,755,183.23 | \$19,209,047.03 | \$21,485,463.25 | \$21,485,463.25 | \$19,753,211.22 | \$24,974,571.79 | 7.1070 | RIM Net Benefits | | \$10 773 854 33 | | | | | |
| Administration Costs | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | 4.001010000 | 1 | | | | |
| Implementation / Participation Costs | \$2,205,583.17 | \$2,205,583.17 | \$2,205,583.17 | \$2,205,583.17 | \$2,205,583.17 | \$2,205,583.17 | 7.10% | | | | | | | | |
| Other / Miscellaneous Costs | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| | \$4,696,871.61 | \$4,696,871.61 | \$4,696,871.61 | \$4,696,871.61 | \$4,696,871.61 | \$4,696,871.61 | 7.10% | | | | | | | | |
| | \$6,902,454.78 | \$6,902,454.78 | \$6,902,454.78 | \$6,902,454.78 | \$6,902,454.78 | \$6,902,454.78 | | | | | | | | | |
| Reduced Arrears Electric Lost Revenue | \$0.00 \$14,078,874.12 | \$0.00 \$13,327,772.16 | \$0.00 \$14,078,874.12 | \$0.00 \$14,078,874.12 | \$0.00 \$14,078,874.12 | \$0.00 \$14,499,980.38 | 7.10% 7.10% | | | | | | | | |
| Gas Lost Revenue | \$14,076,874.12 | \$13,327,772.10 | \$14,076,674.12 | \$0.00 | \$14,076,674.12 | \$0.00 | 7.10% | | | | | | | | |
| | \$14.078.874.12 | \$13.327.772.16 | \$14.078.874.12 | \$14.078.874.12 | \$14.078.874.12 | \$14.499.980.38 | 7.1070 | | | | | | | | |
| Electric Lost Revenue (Net Fuel) | \$14,078,874.12 | \$13,327,772.16 | \$14,078,874.12 | \$14,078,874.12 | \$14,078,874.12 | \$14,499,980.38 | 7.10% | 1 | | | | | | | |
| Gas Lost Revenue (Net Fuel) | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| | \$14,078,874.12 | \$13,327,772.16 | \$14,078,874.12 | \$14,078,874.12 | \$14,078,874.12 | \$14,499,980.38 | | 1 | | | | | | | |
| Test Results | 1.51 | 0.95 | 1.02 | 1.02 | 0.94 | 1.17 | | | | | | | | | |
| Societal Test Avoided Electric Production | 1.51 \$4,187,183.73 | 0.95 \$1,910,767.52 | 1.02 \$4.187.183.73 | 1.02 \$4.187.183.73 | 0.94 \$2.454.931.70 | 1.17 \$7,676,292.27 | 7.10% | Societal Test | Net Benefits | \$29,549,600.06 | \$17.003.463.86 | \$19,279,880.08 | \$19,279,880.08 | \$17 547 629 00 | \$22.760 |
| Avoided Electric Production Adders | \$4,167,163.73 | \$0.00 | \$0.00 | \$0.00 | \$2,454,931.70 | \$0.00 | 7.10% | | Levelized Cost (kW) | \$6.7521 | \$6.7521 | \$6.7521 | \$6.7521 | \$6.7521 | \$6.75 |
| | \$10.269.719.98 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | evelized Cost (kWh) | \$0.7521 | \$0.7521 | \$0.7521 | \$0.7521 | \$0.0139 | \$0.75 |
| | \$17,298,279.52 | \$17,298,279.52 | \$17,298,279.52 | \$17.298.279.52 | \$17.298.279.52 | \$17,298,279.52 | 7.10% | | evelized Cost (CCF) | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 | \$0.00 |
| Avoided Electric Ancillary | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Avoided Gas Production | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Avoided Gas Capacity | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| | \$31,755,183.23 | \$19,209,047.03 | \$21,485,463.25 | \$21,485,463.25 | \$19,753,211.22 | \$24,974,571.79 | | 4 | | | | | | | |
| Administration Costs Implementation / Participation Costs | \$0.00 \$2,205,583.17 | \$0.00 \$2,205,583.17 | \$0.00 \$2.205.583.17 | \$0.00 \$2,205,583.17 | \$0.00 \$2,205,583.17 | \$0.00 \$2,205,583.17 | 7.10% 7.10% | | | | | | | | |
| Implementation / Participation Costs Other / Miscellaneous Costs | \$2,205,583.17 | \$2,205,583.17 | \$2,205,583.17 | \$2,205,583.17 | \$2,205,583.17 | \$2,205,583.17 | 7.10% | | | | | | | | |
| | \$2.205.583.17 | \$2.205.583.17 | \$2 205 583 17 | \$2 205 583 17 | \$2 205 583 17 | \$2 205 583 17 | 7.1070 | | | | | | | | |
| Reduced Arrears | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | 1 | | | | | | | |
| Participant or Unit Costs (Net) | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | 1 | | | | | | | |
| Environmental Benefits | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | 1 | | | | | | | |
| Other Benefits | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Total | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | | 1 | | | | | | | |
| Test Results | 14.40 | 8.71 | 9.74 | 9.74 | 8.96 | 11.32 | | L | | | | | | | |
| Participant Test | \$4 696 871 61 | \$4 696 871 61 | \$4 696 871 61 | \$4 696 871 61 | \$4 696 871 61 | \$4 696 871 61 | 7 10% | Participant Test | Not Booche | \$18.775.745.73 | \$18 024 642 77 | \$18 775 74F 72 | \$18 775 7AF 79 | \$18 775 745 79 | \$ \$10 10c |
| Participant or Unit Costs (Gross) | \$4,090,071.01 | \$4,090,071.01 | \$4,090,071.01 | \$4,090,071.01 | \$4,090,071.01 | \$4,090,071.01 | 7.10% | | rvet Benefits | 010,770,745.73 | \$10,024,043.77 | \$10,770,740.73 | \$10,773,745.73 | \$10,110,145.13 | 918,190, |
| Participant of Unit Tax Credits (Gross) | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | 1 | | | | | | | |
| Electric Bill Savings (Gross) | \$14,078,874.12 | \$13,327,772.16 | \$14,078,874.12 | \$14,078,874.12 | \$14,078,874.12 | \$14,499,980.38 | 7.10% | 1 | | | | | | | |
| Gas Bill Savings (Gross) | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Total | \$14,078,874.12 | \$13,327,772.16 | \$14,078,874.12 | \$14,078,874.12 | \$14,078,874.12 | \$14,499,980.38 | | | | | | | | | |

| Present Values (PVs) of Impacts | | | | | | | | | | | |
|---------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------|--|--|--|--|
| | Cost | | | Market-Based | | | Discount | | | | |
| | Based | Minimum | Today | Alternate | Option | Maximum | Rate Used | | | | |
| kW (Discounted) | 326649.3465 | 326649.3465 | 326649.3465 | 326649.3465 | 326649.3465 | 326649.3465 | 0.00% | | | | |
| kWh (Discounted) | 158678067.0093 | 150212659.4253 | 158678067.0093 | 158678067.0093 | 158678067.0093 | 163424208.3597 | 0.00% | | | | |
| CCF (Discounted) | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.00% | | | | |
| kW (Undiscounted) | | 326649.3465 | 326649.3465 | 326649.3465 | 326649.3465 | 326649.3465 | N/A | | | | |
| kWh (Undiscounted) | 158678067.0093 | 150212659.4253 | 158678067.0093 | 158678067.0093 | 158678067.0093 | 163424208.3597 | N/A | | | | |
| CCF (Undiscounted) | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | N/A | | | | |

DEF Response to DR1-11 a and b

| 2020 Florida Custom Incentive | 2020 Completions | | Total Annual wkw savings | | | | |
|-------------------------------|---------------------|----------|--------------------------|----------|-------|-----------|------------|
| Custom | 134 | 12.65783 | 1,695 | 31.58776 | 4,230 | 92506.187 | 12,388,429 |

| Annual Demand & Energy Savings | Per Ir | nstallation | Progran | n Total | |
|--|-----------------|-------------|------------|-------------|--|
| (during the reporting period) | @ Meter | @ Generator | @ Meter | @ Generator | |
| Summer kW Reduction | 31.6 | 33.2 | 4,233 | 4,451 | Program Total at the Meter divided by 1-Commercial Loss Factor equals skW reduction at the Generator |
| Winter kW Reduction | 12.7 | 13.3 | 1,696 | 1,784 | Program Total at the Meter divided by 1-Commercial Loss Factor equals wkW reduction at the Generator |
| Annual kWh Reduction | 92,559 | 97,339 | 12,395,829 | 13,036,015 | Program Total at the Meter divided by 1- Commercial Loss Factor equals kWh at the Generator |
| Utility Cost per Installation: | | | | \$5,812 | 11A -Total Program Cost divided by Completions = utility cost per installation |
| Total Program Cost of the Utility (\$000): | | | | \$778 | 11B - See tab Resp 11b CT-2-P2. This schedule will be provided as part of the ECCR True Up Filing to be filed on May 3, 2021 |
| Net Benefits of Measures Installed During Re | eporting Period | l (\$000): | | -\$991 | 11C - See Tab Test Results within this document |

5808.738806

| RESIDENTIAL/COMMERCIA | RESIDENTIAL/COMMERCIAL INDUSTRIAL LOSS FACTOR | | | | | | | | | | |
|-----------------------|---|---------|-------|--|--|--|--|--|--|--|--|
| Residential | 22,044,424 | 52.88% | 6.43% | | | | | | | | |
| Commercial Industrial | 19,643,877 | 47.12% | 4.91% | | | | | | | | |
| Total | 41,688,301 | 100.00% | 5.72% | | | | | | | | |

DEF Response to Annual Report
DR1-11A through 11C
Page 2 of 4

FPSC Docket No. 20210002-EG
Duke Energy Florida, LLC
Witness Lori J. Cross
EXHIBIT NO. 1 (LIC-1T)
SCHEDULE CT-2
PAGE 2 OF 4
May 3, 2021

DUKE ENERGY FLORIDA, LLC

ACTUAL ENERGY CONSERVATION PROGRAM COSTS PER PROGRAM FOR THE PERIOD JANUARY 2020 THROUGH DECEMBER 2020

| | | DEPRECIATION | | | | | | | | | PROGRAM | |
|------|--|--------------|------------|----------|-----------|-------------|-------------|------------|---------|-------------|----------|-------------|
| LINE | | AMORTIZATION | PAYROLL & | | OUTSIDE | MATERIALS & | | | | | REVENUES | |
| NO. | PROGRAM | & RETURN | BENEFITS | VEHICLES | SERVICES | SUPPLIES | ADVERTISING | INCENTIVES | OTHER | SUB-TOTAL | (CREDIT) | TOTAL |
| | | | | | | | | | | | | |
| 1 | HOME ENERGY CHECK | 0 | 2,736,790 | 87,030 | 450,767 | 119,416 | 298,857 | 408,330 | 25,332 | 4,126,524 | 0 | 4,126,524 |
| 2 | RESIDENTIAL INCENTIVE PROGRAM | 0 | 1,631,101 | 46,141 | 191,566 | 23,816 | 138,601 | 4,696,872 | 13,935 | 6,742,030 | 0 | 6,742,030 |
| 3 | BUSINESS ENERGY CHECK | 0 | 398,661 | 4,387 | 71,132 | 44,142 | 22,684 | 5,731 | 9,771 | 556,508 | 0 | 556,508 |
| 4 | BETTER BUSINESS | 0 | 1,011,002 | 3,190 | 110,520 | 2,045 | 43,915 | 2,048,670 | 13,232 | 3,232,574 | 0 | 3,232,574 |
| 5 | TECHNOLOGY DEVELOPMENT | 0 | 224,592 | 3,513 | 218,478 | 45,784 | 0 | 0 | 4,137 | 496,504 | 0 | 496,504 |
| 6 | FLORIDA CUSTOM INCENTIVE PROGRAM | 0 | 252,583 | 72 | 235,071 | 1,258 | 32,213 | 231,211 | 25,964 | 778,371 | 0 | 778,371 |
| 7 | INTERRUPTIBLE SERVICE | 35,636 | 210,999 | 1,806 | 0 | 837 | 0 | 40,666,513 | 15,239 | 40,931,031 | Ō | 40,931,031 |
| 8 | CURTAILABLE SERVICE | Ō | 40,798 | Ō | 0 | 21 | 0 | 2,027,594 | 3 | 2,068,416 | Ō | 2,068,416 |
| 9 | LOAD MANAGEMENT (RESIDENTIAL & COMMMERCIAL) | 13,444,103 | 1,798,055 | 42,877 | 1,914,105 | 12,361 | 186,033 | 26,699,387 | 72,106 | 44,169,027 | 0 | 44,169,027 |
| 10 | LOW INCOME WEATHERIZATION ASSISTANCE PROGRAM | 0 | 97,834 | 0 | 30 | 189 | 16,000 | 74,553 | 4,923 | 193,529 | 0 | 193,529 |
| 11 | STANDBY GENERATION | (40,916) | 266,423 | 6,379 | 22,527 | 229,788 | 0 | 3,838,063 | 4,268 | 4,326,532 | 0 | 4,326,532 |
| 12 | QUALIFYING FACILITY | Ō | 1,091,380 | 575 | 2,162,927 | 398 | 0 | 0 | 4,356 | 3,259,637 | Ō | 3,259,637 |
| 13 | NEIGHBORHOOD ENERGY SAVER | Ō | 208,737 | 493 | 54,720 | 2,467 | 53,064 | 814,432 | 12,650 | 1,146,564 | Ō | 1,146,564 |
| 14 | CONSERVATION PROGRAM ADMIN | 7,377 | 1,922,353 | 71 | 524,703 | 18,359 | 0 | 0 | 192,790 | 2,665,653 | Ō | 2,665,653 |
| | | | | | | | | | | | | |
| 15 | TOTAL ALL PROGRAMS | 13,446,200 | 11,891,308 | 196,535 | 5,956,546 | 500,883 | 791,365 | 81,511,358 | 398,705 | 114,692,900 | 0 | 114,692,900 |

| | Cost | Market-Based | | | | | | | | | |
|------------------------|-------|--------------|-------|-----------|--------|---------|--|--|--|--|--|
| | Based | Minimum | Today | Alternate | Option | Maximum | | | | | |
| Utility (PAC/UCT) Test | 17.04 | 10.28 | 13.14 | 13.14 | 10.96 | 17.66 | | | | | |
| TRC Test | 24.01 | 14.48 | 18.51 | 18.51 | 15.44 | 24.87 | | | | | |
| RIM Test | 0.93 | 0.57 | 0.72 | 0.72 | 0.60 | 0.95 | | | | | |
| RIM (Net Fuel) | 0.93 | 0.57 | 0.72 | 0.72 | 0.60 | 0.95 | | | | | |
| Societal Test | 24.01 | 14.48 | 18.51 | 18.51 | 15.44 | 24.87 | | | | | |
| Participant Test | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | | | |

| / Benefit Test Matrix By Weather | / Price Scenarios | | | | | |
|----------------------------------|-------------------|-------|-------|--------|-------|------------|
| | | Cost | | | | |
| Usage/Weather Scenarios | Test | Based | Low | Median | High | kWh Saving |
| Mid Year | Utility (PAC/UCT) | 16.16 | 10.28 | 12.47 | 15.16 | 12912639 |
| Normal Year | Utility (PAC/UCT) | 17.04 | 10.59 | 13.01 | 16.27 | 13121246 |
| Extreme Year | Utility (PAC/UCT) | 17.92 | 11.11 | 13.62 | 17.66 | 13313074 |
| Mid Year | TRC | 22.77 | 14.48 | 17.56 | 21.36 | 12912639 |
| Normal Year | TRC | 24.01 | 14.92 | 18.33 | 22.91 | 13121246 |
| Extreme Year | TRC | 25.24 | 15.66 | 19.18 | 24.87 | 13313074 |
| Mild Year | RIM | 0.90 | 0.56 | 0.69 | 0.84 | 12912639 |
| Normal Year | RIM | 0.93 | 0.58 | 0.71 | 0.89 | 13121246 |
| Extreme Year | RIM | 0.99 | 0.61 | 0.75 | 0.97 | 13313074 |
| Mild Year | Societal | 22.77 | 14.48 | 17.56 | 21.36 | 12912639 |
| Normal Year | Societal | 24.01 | 14.92 | 18.33 | 22.91 | 13121246 |
| Extreme Year | Societal | 25.24 | 15.66 | 19.18 | 24.87 | 13313074 |
| Mid Year | Participant | 0.00 | 0.00 | 0.00 | 0.00 | 12912639 |
| Normal Year | Participant | 0.00 | 0.00 | 0.00 | 0.00 | 13121246 |
| Extreme Year | Participant | 0.00 | 0.00 | 0.00 | 0.00 | 13313074 |

| Nominal | Levelzed | % Allocation |
|----------|--|--|
| \$8.4651 | \$8.4651 | 100.00% |
| \$0.0040 | \$0.0040 | 100.00% |
| \$0.0000 | \$0.0000 | 100.00% |
| | | |
| \$3.5103 | \$3.5103 | 41.47% |
| \$0.0024 | \$0.0024 | 58.53% |
| \$0.0000 | \$0.0000 | 0.00% |
| | | |
| \$5.0791 | \$5.0791 | 60.00% |
| \$0.0016 | \$0.0016 | 40.00% |
| \$0.0000 | \$0.0000 | 0.00% |
| | \$8.4651 \$0.0040 \$0.0000 \$3.5103 \$0.0024 \$0.0000 \$5.0791 \$0.0016 | \$8.4651 \$0.0040 \$0.0000 \$0.0000 \$3.5103 \$0.0024 \$0.0000 \$5.0791 \$0.0016 \$0.0016 |

| Extreme Year | Participant | 0.00 | 0.00 | 0.00 | 0.00 | 13313074.6 | ļ | | | | | | | | |
|---|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|----------------|------------------------|-------------------------|-----------------|-----------------|-----------------|------------------------------------|-----------------|----------------|
| | | | | | | | | | | | | | | | |
| Present Values (PVs) of Costs and Bene | | | | | | | | | | | | | | | |
| | Cost | | | Market-Based | | | Discount | | | Cost | | | Market-Based | | |
| Utility (PAC/UCT) Test | Based | Minimum | Today | Alternate | Option | Maximum | Rate Used | Utility (PAC/UCT) Test | | Based | Minimum | Today | Alternate | Option | Maximum |
| Avoided Flectric Production | \$4 393 275 08 | \$2,116,455,95 | \$4 393 275 08 | \$4 393 275 08 | \$2 655 849 53 | \$7 993 674 50 | 7.10% | Utility (FAC/UCT) Test | Net Renefits | \$12 785 807 23 | \$7 396 584 28 | \$9 673 403 41 | \$9 673 403 41 | \$7 935 977 86 | \$13 273 802 8 |
| Avoided Electric Production Adders | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | Levelized Cost (kW) | \$8,4651 | \$8.4651 | \$8,4651 | \$8,4651 | \$8.4651 | \$8.4651 |
| Avoided Electric Capacity | \$3,112,403.83 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | Levelized Cost (kWh) | \$0.0040 | \$0.0041 | \$0.0040 | \$0.0040 | \$0.0040 | \$0,0040 |
| Avoided Electric T&D | \$6.077.020.18 | \$6.077.020.18 | \$6.077.020.18 | \$6.077.020.18 | \$6.077.020.18 | \$6.077.020.18 | 7.10% | | Levelzed Cost (CCF) | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 |
| Avoided Electric Ancillary | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | • | | |
| Avoided Gas Production | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Avoided Gas Capacity | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Total | \$13,582,699.08 | \$8,193,476.13 | \$10,470,295.25 | \$10,470,295.25 | \$8,732,869.71 | \$14,070,694.68 | | | | | | | | | |
| Administration Costs | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Implementation / Participation Costs | \$565,680.70 | \$565,680.70 | \$565,680.70 | \$565,680.70 | \$565,680.70 | \$565,680.70 | 7.10% | | | | | | | | |
| Other / Miscellaneous Costs | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Incentives | \$231,211.15 | \$231,211.15 | \$231,211.15 | \$231,211.15 | \$231,211.15 | \$231,211.15 | 7.10% | | | | | | | | |
| Total Reduced Arrears | \$796,891.85 \$0.00 | \$796,891.85 \$0.00 | \$796,891.85 \$0.00 | \$796,891.85 \$0.00 | \$796,891.85 \$0.00 | \$796,891.85 \$0.00 | 7.10% | | | | | | | | |
| Reduced Arrears Test Results | 17.04 | 10.28 | 13.14 | 13.14 | 10.96 | 17.66 | 7.10% | - | | | | | | | |
| TRC Test | 17.04 | 10.20 | 13.14 | 13.14 | 10.50 | 17.00 | | TRC Test | | | | | | | |
| Avoided Electric Production | \$4.393.275.08 | \$2,116,455,95 | \$4.393.275.08 | \$4,393,275.08 | \$2.655.849.53 | \$7.993.674.50 | 7.10% | ING TOST | Net Benefits | \$13 017 018 38 | \$7.627.795.43 | \$9.904.614.56 | \$9.904.614.56 | \$8 167 189 01 | \$13 505 013 9 |
| Avoided Electric Production Adders | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | Levelized Cost (kW) | \$6.0091 | \$6,0091 | \$6,0091 | \$6,0091 | \$6.0091 | \$6.0091 |
| Avoided Electric Capacity | \$3,112,403,83 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | Levelized Cost (kWh) | \$0.0029 | \$0.0029 | \$0.0029 | \$0.0029 | \$0.0029 | \$0.0028 |
| Avoided Electric T&D | \$6,077,020.18 | \$6,077,020.18 | \$6,077,020.18 | \$6,077,020.18 | \$6,077,020.18 | \$6,077,020.18 | 7.10% | | Levelized Cost (CCF) | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 |
| Avoided Electric Ancillary | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | • | | |
| Avoided Gas Production | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Avoided Gas Capacity | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Total | \$13,582,699.08 | \$8,193,476.13 | \$10,470,295.25 | \$10,470,295.25 | \$8,732,869.71 | \$14,070,694.68 | | 1 | | | | | | | |
| Administration Costs | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Implementation / Participation Costs | \$565,680.70 | \$565,680.70 | \$565,680.70 | \$565,680.70 | \$565,680.70 | \$565,680.70 | 7.10% | | | | | | | | |
| Other / Miscellaneous Costs | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Incentives Total | \$0.00 \$565,680.70 | \$0.00 \$565,680.70 | \$0.00 \$565,680.70 | \$0.00 \$565,680.70 | \$0.00 \$565,680.70 | \$0.00 \$565,680.70 | 0.00% | | | | | | | | |
| Total Reduced Arrears | \$565,680.70 | \$565,680.70 | \$565,680.70 | \$565,680.70 | \$565,680.70 | \$0.00 | 7 10% | | | | | | | | |
| Participant or Unit Costs (Net) | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Participant or Unit Tax Credits (Net) | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Environmental Benefits | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | 1 | | | | | | | |
| Other Benefits | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Total | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | | | | | | | | | |
| Test Results | 24.01 | 14.48 | 18.51 | 18.51 | 15.44 | 24.87 | | | | | | | | | |
| RIM Test | | | | | | | | RIM Test | | | | | | | |
| Avoided Electric Production | \$4,393,275.08 | \$2,116,455.95 | \$4,393,275.08 | \$4,393,275.08 | \$2,655,849.53 | \$7,993,674.50 | 7.10% | | Net Benefits | -\$991,298.76 | -\$6,161,487.68 | -\$4,103,702.58 | -\$4,103,702.58 -\$4,103,702.58 | -\$5,841,128.13 | -\$704,719.57 |
| Avoided Electric Production Adders | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | Net Benefits (Net Fuel) | -\$991,298.76 | -\$6,161,487.68 | -\$4,103,702.58 | -\$4,103,702.58 | -\$5,841,128.13 | -\$704,719.57 |
| Avoided Electric Capacity | \$3,112,403.83 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Avoided Electric T&D | \$6,077,020.18 | \$6,077,020.18 | \$6,077,020.18 | \$6,077,020.18 | \$6,077,020.18 | \$6,077,020.18 | 7.10% | | | | | | | | |
| Avoided Electric Ancillary Avoided Gas Production | \$0.00 \$0.00 | \$0.00 \$0.00 | \$0.00 \$0.00 | \$0.00 \$0.00 | \$0.00 \$0.00 | \$0.00 \$0.00 | 7.10% | | | -\$991,298.76 | | | | | |
| Avoided Gas Capacity Avoided Gas Capacity | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% 7.10% | | | | | | | | |
| Avoided Gas Capacity Total | \$13,582,699.08 | \$8,193,476.13 | \$10,470,295.25 | \$10,470,295.25 | \$8,732,869.71 | \$14,070,694.68 | 7.10% | | | | | | | | |
| Administration Costs | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0,732,009.71 | \$0.00 | 7.10% | | | | | | | | |
| Implementation / Participation Costs | \$565,680,70 | \$565,680,70 | \$565,680,70 | \$565,680,70 | \$565,680,70 | \$565.680.70 | 7.10% | | | | | | | | |
| Other / Miscellaneous Costs | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Incentives | \$231,211.15 | \$231,211.15 | \$231,211,15 | \$231,211.15 | \$231,211,15 | \$231,211.15 | 7.10% | | | | | | | | |
| Total | \$796,891.85 | \$796,891.85 | \$796,891.85 | \$796,891.85 | \$796,891.85 | \$796,891.85 | | | | | | | | | |
| Reduced Arrears | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | 1 | | | | | | | |
| Electric Lost Revenue | \$13,777,105.99 | \$13,558,071.96 | \$13,777,105.99 | \$13,777,105.99 | \$13,777,105.99 | \$13,978,522.40 | 7.10% | | | | | | | | |
| Gas Lost Revenue | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Total | \$13,777,105.99 | \$13,558,071.96 | \$13,777,105.99 | \$13,777,105.99 | \$13,777,105.99 | \$13,978,522.40 | | 1 | | | | | | | |
| Electric Lost Revenue (Net Fuel) | \$13,777,105.99 | \$13,558,071.96 | \$13,777,105.99 | \$13,777,105.99 | \$13,777,105.99 | \$13,978,522.40 | 7.10% | | | | | | | | |
| Gas Lost Revenue (Net Fuel) | \$0.00 \$13,777,105,99 | \$0.00 \$13 558 071 96 | \$0.00 \$13,777,105,99 | \$0.00 \$13.777.105.99 | \$0.00 \$13 777 105 99 | \$0.00 \$13 978 522 40 | 7.10% | | | | | | | | |
| Total Test Results | \$13,777,105.99 0.93 | \$13,558,071.96 0.57 | \$13,777,105.99 0.72 | \$13,777,105.99 0.72 | \$13,777,105.99 0.60 | \$13,978,522.40 | | 4 | | | | | | | |
| Societal Test | -991298 76 | 0.57 | 0.72 | 0.72 | 0.60 | 0.95 | | Societal Test | | | | | | | |
| Avoided Electric Production | \$4,393,275.08 | \$2,116,455.95 | \$4,393,275.08 | \$4,393,275.08 | \$2 655 849 53 | \$7,993,674.50 | 7.10% | OUNTAL TEST | Net Benefits | \$13 017 018 38 | \$7.627.795.43 | \$9 904 614 56 | \$9 904 614 56 | \$8 167 189 01 | \$13 505 013 9 |
| Avoided Electric Production Adders | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | Levelized Cost (kW) | \$6.0091 | \$6.0091 | \$6,0091 | \$6,0091 | \$6.0091 | \$6.0091 |
| Avoided Electric Production Adders | \$3,112,403.83 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | Levelized Cost (kWh) | \$0.0029 | \$0.0029 | \$0.0029 | \$0.0029 | \$0.0029 | \$0.0028 |
| Avoided Electric T&D | \$6,077,020.18 | \$6,077,020.18 | \$6,077,020.18 | \$6,077,020.18 | \$6,077,020.18 | \$6,077,020.18 | 7.10% | | Levelized Cost (CCF) | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 | \$0.0000 |
| Avoided Electric Ancillary | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | ,==-, | | | | | | |
| Avoided Gas Production | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Avoided Gas Capacity | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Total | \$13,582,699.08 | \$8,193,476.13 | \$10,470,295.25 | \$10,470,295.25 | \$8,732,869.71 | \$14,070,694.68 | | | | | | | | | |
| Administration Costs | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Implementation / Participation Costs | \$565,680.70 | \$565,680.70 | \$565,680.70 | \$565,680.70 | \$565,680.70 | \$565,680.70 | 7.10% | | | | | | | | |
| Other / Miscellaneous Costs | \$0.00 \$565,680,70 | \$0.00 \$565,680,70 | \$0.00 | \$0.00 | \$0.00 | \$0.00 \$565 680 70 | 7.10% | | | | | | | | |
| Total Reduced Arrears | \$565,680.70 \$0.00 | \$565,680.70 \$0.00 | \$565,680.70 \$0.00 | \$565,680.70 \$0.00 | \$565,680.70 \$0.00 | \$565,680.70 \$0.00 | 7.10% | 4 | | | | | | | |
| | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | 4 | | | | | | | |
| Participant or Unit Costs (Net) Environmental Benefits | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | 1 | | | | | | | |
| Environmental Benefits Other Benefits | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Other Benefits Total | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.1076 | | | | | | | | |
| Test Results | 24.01 | 14.48 | 18.51 | 18.51 | 15.44 | 24.87 | | 1 | | | | | | | |
| Participant Test | | | | | | | | Participant Test | | | | | | | |
| Incentives | \$231,211.15 | \$231,211.15 | \$231,211.15 | \$231,211.15 | \$231,211.15 | \$231,211.15 | 7.10% | | Net Benefits | \$14,008,317.14 | \$13,789,283.11 | \$14,008,317.14 | \$14,008,317.14 | \$14,008,317.14 | \$14,209,733.5 |
| Participant or Unit Costs (Gross) | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Participant or Unit Tax Credits (Gross) | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Electric Bill Savings (Gross) | \$13,777,105.99 | \$13,558,071.96 | \$13,777,105.99 | \$13,777,105.99 | \$13,777,105.99 | \$13,978,522.40 | 7.10% | | | | | | | | |
| Gas Bill Savings (Gross) | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | \$0.00 | 7.10% | | | | | | | | |
| Total | \$13,777,105.99 | \$13,558,071.96 | \$13,777,105.99 | \$13,777,105.99 | \$13,777,105.99 | \$13,978,522.40 | | 1 | | | | | | | |
| | | | | | | | | | | | | | | | |

| Present Values (PVs) of impacts | | | | | | | | | | | |
|---------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------|--|--|--|--|
| | Cost | | Market-Based | | | | | | | | |
| | Based | Minimum | Today | Alternate | Option | Maximum | Rate Used | | | | |
| kW (Discounted) | | 94138.0930 | 94138.0930 | 94138.0930 | 94138.0930 | 94138.0930 | 0.00% | | | | |
| kWh (Discounted) | 196818699.9407 | 193689596.3206 | | 196818699.9407 | 196818699.9407 | 199696119.6793 | 0.00% | | | | |
| CCF (Discounted) | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.00% | | | | |
| kW (Undiscounted) | 94138.0930 | 94138.0930 | 94138.0930 | 94138.0930 | 94138.0930 | 94138.0930 | N/A | | | | |
| kWh (Undiscounted) | 196818699.9407 | 193689596.3206 | 196818699.9407 | 196818699.9407 | 196818699.9407 | 199696119.6793 | N/A | | | | |
| CCF (Undiscounted) | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | N/A | | | | |