



Matthew R. Bernier
ASSOCIATE GENERAL COUNSEL

April 7, 2020

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 Petition for Approval of Proposed Demand-Side Management Plan*; Docket No. 20200054-EG

Dear Mr. Teitzman:

Please find enclosed for electronic filing Duke Energy Florida, LLC's Response to Staff's First Data Request (Nos. 1-22).

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: Orlando Wooten

**Duke Energy Florida, LLC's Response to
Staff's First Data Request regarding Duke Energy Florida, LLC's
Petition for Approval of Proposed Demand-Side Management Plan**

Docket No. 20200054-EG

1. For all Residential Programs please fill out the following table by providing the Rate Impact Measure (RIM), Total Resource Cost (TRC), and Participants Test (PCT) values on an individual program basis. Please provide this response in electronic (Excel) format.

Response:

Please see attached Excel File DR1 Q1_Q2 Final.xlsx

2. For all Commercial/Industrial and Demand Response Programs please fill out the following table by providing the RIM, TRC and PCT values on an individual program basis. Please provide this response in electronic (Excel) format.

Response:

Please see attached Excel File DR1 Q1_Q2 Final.xlsx.

3. Please refer to DEF's 2015 DSM Program Plan and 2020 DSM Program Plan. Please fill out the table below indicating the relevant Program Status for individual measures. Please provide this response in electronic (Excel) format.

Response:

Please see attached Excel File DR1 Q3_Q4_Q5 Final.xlsx

4. Please refer to DEF's 2015 DSM Program Plan and 2020 DSM Program Plan. Please delineate all programs. Please provide this response in electronic (Excel) format.

Response:

Please see attached Excel File DR1 Q3_Q4_Q5 Final.xlsx

5. Please provide a table identifying the projected program participation for each residential, commercial/industrial and demand response program in DEF's 2015 and 2020 DSM plan filings for the years 2020 through 2024.
 - a. Please explain any differences between the projected program participation for the specified time period in these filings.

Response:

Please see attached Excel File DR1 Q3_Q4_Q5 Final.xlsx

6. Please provide a table identifying the projected program savings for each residential, commercial/industrial and demand response program in DEF's 2015 and 2020 DSM plan filings for the years 2020 through 2024.
 - a. Please explain any differences between the projected program savings for the specified time period in these filings.

Response:

Please see attached Excel File DR1 Q6_Final.xlsx

7. Please provide a table identifying the projected customer incentives for each residential, commercial/industrial and demand response program in DEF's 2015 and 2020 DSM plan filings for the years 2020 through 2024.
 - a. Please explain any differences between the projected customer incentives for the specified time period in these filings.

Response:

Please see attached Excel File DR1 Q7_Q8_Q9_Final.xlsx

8. Please provide the total projected annual bill impact (at 1,000 kilowatt-hours (kWh) and 1,200 kWh) on the general body of customers' monthly bills for each of the proposed residential, commercial/industrial and demand response DSM programs.

Response:

Please see attached Excel File DR1 Q7_Q8_Q9_Final.xlsx

9. Please provide the total projected annual program costs for each of the proposed residential, commercial/industrial and demand response DSM programs.

Response:

Please see attached Excel File DR1 Q7_Q8_Q9_Final.xlsx

10. Please provide a table identifying the projected annual program savings that will contribute to the Commission-approved DSM goals for each of the proposed residential, commercial/industrial and demand response DSM programs.

Response:

Please see Response to Q6.

11. Please refer to DEF's Better Business Program, Neighborhood Energy Saver Program and Low Income Weatherization Assistance Program. These programs specifically mention that incentive levels for each measure promoted in this program will be presented in the Program Participation Standard.

- a. Please explain what values were used in DEF's calculations.

Response:

The level of incentive for each measure in the Better Business Program represents the estimated portion of incremental cost that DEF believes is necessary to encourage customer adoption of the measure and achieve the projected level of participation. The incremental cost of each measure is estimated based on the results of the Economic Potential Study that supported the 2019 Goals filing.

The level of incentive for each measure in the Neighborhood Energy Saver Program and the Low Income Weatherization Assistance Program assumes that DEF subsidizes 100% of the cost of the measure.

- b. Please explain what maximum values DEF anticipates for these incentive levels.

Response:

For the Better Business program, the maximum value is the estimated value required to encourage program participation and adoption of efficient measures.

For the Neighborhood Energy Saver Program and the Low Income Weatherization Assistance Program, the maximum value is 100% of incremental cost of the measure.

12. Please refer to DEF's Residential Incentive Program.

- a. Please explain how DEF determined the annual projected participation for each measure.

Response:

The projected participation for each measure was determined based on analysis of several factors which include the results of the Achievable Potential that supported the 2019 goals filing, review of historical experience and participation levels, consultation with trade allies, and consideration of the incremental cost of the more efficient equipment to the participant and how much of that cost could be covered by program incentives.

- b. Please explain how the Per Customer kWh Reduction values were calculated. As a part of this response, please provide these calculations in electronic (Excel) format. These calculations should include all individual measures for the years 2020 through 2024.

Response:

The per measure kWh reduction values are based on the results of the Technical Potential Study that supported the 2019 Goals filing. **Please see attached Excel file DR 1 Q12(b)_Final.xlsx** for per customer kWh savings for each measure.

13. Please refer to DEF's Better Business Program.

- a. Please explain how DEF determined the annual projected participation for each measure.

Response:

The projected participation for each measure was determined based on analysis of several factors which include the results of the Achievable Potential that supported the 2019 goals filing, review of historical experience and participation levels in similar measures, consultation with trade allies, and consideration of the incremental cost of the more efficient equipment to the participant and how much of that cost could be covered by program incentives

- b. Please explain how DEF determined the estimated individual measure savings. Additionally, please provide the individual measure savings.

Response:

The individual measure savings are based on the results of the Technical Potential Study that supported the 2019 Goals Docket.

- c. Please explain how the Per Customer kWh Reduction values were calculated. As a part of this response, please provide these calculations in electronic (Excel) format.

These calculations should include all individual measures for the years 2020 through 2024.

Response:

The per measure kWh reduction values are based on the average values for various building types included in the results of the Technical Potential Study that supported the 2019 Goals filing. **Please see attached Excel file DR 1 Q13(c)_Final.xlsx** for kWh savings values for the individual measures included in the Better Business Program.

14. Please refer to DEF's Business Energy Check Program.

- a. Please explain if savings attributed to energy kits assume that all measures are installed. If so, please explain why. If not, please explain how these savings are attributed.

Response:

Yes, the savings assume that all measures are installed because the kits are delivered to the customer by the commercial energy advisor and the advisor demonstrates how to install the measures.

- b. Please explain if DEF monitors the amount of energy kits installed.

Response:

No, DEF does not monitor the amount of energy kits installed.

- c. Please explain how the Per Customer kWh Reduction values were calculated. As a part of this response, please provide these calculations in electronic (excel) format. These calculations should include all individual measures for the years 2020 through 2024.

Response:

The per customer kWh reduction represents the sum of the kWh savings for each measure included in the kit. The kWh savings for each individual measure is based on the kWh savings values included in the Nexant Technical Potential Study that supported DEF's 2019 goals filing. **Please see the attached Excel file DR 1 Q14(c)_Final.xlsx** for the calculation of per customer kwh savings.

15. Please refer to page 17 of the Company's Petition for Approval of Demand Side Management Plans (DSM Plan Petition), filed on February 24, 2020. Page 17 of the

Company's DSM Plan states that the Neighborhood Energy Saver Program started in 2015.

- a. Please identify what changes, if any, were made to this program since 2015.

Response:

The Program Plan as filed is incorrect as the Program started in 2007 and was modified in 2015. The modifications in 2015 included the addition of ceiling insulation, duct repair, and heat pump tune-ups. These measures provided significant opportunity for increased savings for program participants. Then in 2018, DEF added LED lightbulbs to the Program.

- b. If applicable, please identify what changes to this program are projected to be made during this review period.

Response:

The most significant change in this review period is that DEF has increased its annual targeted participants from 4500 to 5000. DEF also eliminated CFL lightbulbs and will now only provide LED's. DEF also eliminated the follow-up delivery of Home Energy Reports and added SEER 16 Air Conditioners.

16. Please refer to page 19 of the DSM Plan Petition to answer the following questions about the Neighborhood Energy Saver Program:

- a. Please explain the methodology behind the Company's projection that it would reach 5,000 participants through direct offerings for each year from 2020 to 2024.

Response:

DEF plans to target a greater number of homes in an effort to provide greater savings to low income customers. The projected participation was determined through a review of historical data and experience along with discussions with the program management team regarding operational and resource considerations. DEF believes that 5,000 homes, which is a 10% increase from current levels is a reasonable target for 2020 through 2024 assuming the existing level of internal and external resources. DEF is concerned that targeting greater than 5,000 homes could require additional resources and program support resulting in increased overhead and administrative costs which could negatively impact the cost effectiveness of the Program.

- b. Please explain what actions the Company could take to reach more than 5,000 participants through direct offerings for each year from 2020 to 2024, and the barriers associated with taking such actions.

Response:

Although DEF could potentially complete greater than 5,000 homes, DEF is not comfortable setting targets and committing to that level due to the potential impact on internal and external resource requirements. DEF believes that reaching more than 5,000 participants would require doing more neighborhoods which could require additional resources which would negatively impact the cost effectiveness of the program.

- c. Please identify the data and assumptions the Company relied on to estimate the number of program participants for this review period.

Response:

DEF relied on historical actual data and experience over the past two years and discussions with program managers regarding the feasibility of supporting the increased level of participation from an operational and resource requirement perspective.

17. Please refer to page 21 of the Company's DSM Plan Petition, which states that the Low Income Weatherization Assistance Program was modified in 2018.
 - a. Please identify what changes were made to the program in 2018.

Response:

DEF modified the Low Income Weatherization Assistance Program in 2018 to align the eligibility criteria for the program with the criteria of the Agencies who provide weatherization services. These changes were intended to expand the number of agencies that DEF can work with and to provide more savings to income eligible customers. DEF also added LED lightbulbs to the Program in 2018.

- b. If applicable, please identify what changes to this program are projected to be made during this review period.

Response:

DEF added two new construction measures to the LIWAP in the 2020 Plan. DEF's Plan includes high efficiency heat pumps coupled with participation in DEF's residential demand response program for both single family and multi-family low-income new construction. These measures are intended to encourage installation of high efficiency heating and cooling in new low-income housing. These measures will provide bill savings for low-income customer in two ways – through lower

consumption and through bill credits for participation in the residential demand response program.

18. Please refer to page 21 of the DSM Plan Petition to answer the following questions about the Low Income Weatherization Assistance Program:

- a. Please explain the methodology behind the Company's projection how the Company projected that it would reach 244 participants through partnerships with local agencies for each year from 2020 to 2024.

Response:

The estimate is based on historical data and experience with input provided by the Agencies.

- b. Please explain what actions the Company could take to reach more than 244 participants through partnerships with local agencies for each year from 2020 to 2024, and the barriers associated with taking such actions.

Response:

DEF will continue to pursue additional participation through its outreach efforts which include face to face meetings with weatherization agencies and community leaders and through presentations to local conferences to ensure that the agencies are aware of the benefits available to residents of their communities through this program. The barriers to increasing participation in the program continue to be the lack of funding to the agencies. The impacts of the lack of funding are often exacerbated as contractors move to other opportunities leading to a shortage of contract resources when funding does become available.

- c. Please identify the data and assumptions the Company relied on to estimate the number of program participants for this review period.

Response:

The projected participation represents DEF's best estimate based on historical actuals.

- d. Please identify the data and assumptions the Company relied on to estimate the number of program participants for this review period.

Response:

Please see Response to Q18c.

19. Please provide the inputs for the following table, based on audit type, in Excel format for the years 2020 through 2024. (The audit types are identified on Page 10 of the DSM Plan Petition.

Response:

DEF does not claim kW and kWh savings for the audit itself. The savings for the Home Energy Check program are from the kits that are provided to audit participants. The same kit is provided regardless of the type of audit. DEF does not provide kits for HERS audits, therefore no savings are included in DEF's Plan for HERS audits. The per customer savings for the kits are provided in the table below.

DEF does not track actual administrative costs by audit type and therefore did not project costs by audit type. The average administrative costs per participant over the five-year period is presented in the table below.

	Per Customer kWh Reduction	Per Customer Winter KW Reduction	Per Customer Summer KW Reduction	Expected number of Program Participants	Administrative Cost Per Participant
Home Energy Checks	569.27	.17	.11	25,000	\$169

20. Please refer to page 29 of the DSM Plan Petition to answer the following questions about the Business Energy Check Program.

a. Please provide the administrative costs for this program for each year in the review period.

Response:

	BUSINESS ENERGY CHECK				
	2020	2021	2022	2023	2024
Administrative Costs	601,318	616,351	631,759	647,553	663,742

b. When will the online audit tool for the Business Energy Check Program be implemented and what is the expected impact it will have on demand and energy savings for each year in the review period?

Response:

DEF is planning to implement the online audit tool in 2020. Implementation of the online tool will not impact the demand and energy savings for the Business Energy Check program as, per Commission direction, the savings related to the audit itself are considered behavioral and not counted toward goals. The savings included in the Program Plan are related to kits provided to customers who complete a walk-through audit.

21. How long does the Company keep records of the Home Energy Check and Business Energy Check audits performed on file?

Response:

DEF maintains records in accordance with Rule 25-17.003 which requires the utilities to keep records for 3 years of the customer usage for the 12 months prior and the 12 months after the completion of the audit.

22. Does the Company compare energy consumption before and after the Home Energy Check and Business Energy Check audits to estimate the impact? Please explain why or why not?

Response:

No, the Company does not compare energy consumption before and after the Home Energy Check and Business Energy Check audits. This is due in part to the fact that, per Commission direction, savings related to the audits are considered behavioral, and therefore, are not counted toward achievement of the DSM goals. This is also due to the complexity and cost associated with analyzing customer usage and isolating and measuring the impact of the audit. As along with savings attributable to the audit, there are a number of other factors can have an impact a customer's level of energy consumption. These include, but are not limited to, weather, installation of more efficient equipment and appliances, financial and economic factors, changes in households, changes in business operations, and installation of customer sited renewable systems.

Docket No. 20200054-EG
DEF's Response to Staff's
DR 1 - Q1

Residential Programs						
Program Name	2020 RIM	2015 RIM	2020 PCT	2015 PCT	2020 TRC	2015 TRC
RIP	1.00	1.07	2.62	2.09	2.32	1.96
NES	1.00	1.01	4.15	4.90	3.91	3.77
LIWAP	1.00	1.03	4.16	2.03	3.70	1.92

Docket No. 20200054-EG
DEF's Response to Staff's
DR 1 - Q2

Commercial/Industrial & Demand Response Programs						
Program Name	2020 RIM	2015 RIM	2020 PCT	2015 PCT	2020 TRC	2015 TRC
BB	1.00	1.04	2.47	3.60	2.11	2.87
EW	2.02	2.76	9999.00	9999.00	3.82	8.32
IS	2.61	2.58	9999.00	9999.00	22.20	20.35
CS	4.36	3.63	9999.00	9999.00	37.93	67.67
SBG	4.76	1.47	9999.00	9999.00	34.81	3.25

DEF
 DOCKET 20200054 - 2020-2024 DSM PROGRAM PLAN
 DATA REQUEST NO 1 - QUESTION 3

2020 DSM Program Plan			
Program Name	Identical to 2015 Plan	Modified from 2015 DSM Plan	New to 2020 DSM Plan
Residential Programs			
Home Energy Check	X		
Residential Incentive Program		X	
Neighborhood Energy Saver		X	
Low Income Weatherization Assistance		X	
Energy Wise	X		
Commercial Programs			
Better Business		X	
Business Energy Check		X	
Commercial Custom	X		
Interruptible	X		
Curtable	X		
Stand-By	X		
Other Programs			
Technology Development	X		
Qualified Facilities	X		

DEF
DOCKET 20200054 - 2020-2024 DSM PROGRAM PLAN
DATA REQUEST NO 1 - QUESTION 3

2020 DSM Program Plan			
Program Name	Identical to 2015 Plan	Modified from 2015 DSM Plan	New to 2020 DSM Plan
Residential Programs			
Home Energy Check			
Self Adhesive Weather Stripping	X		
Switch and Outlet Gasket Covers	X		
Hot Water Gauge	X		
Digital Refrigerator Thermometer	X		
9W LED	X		
Faucet Aerators	X		
Energy Efficiency Showerhead	X		
Residential Incentive Program			
Duct Test		X	
Duct Repair		X	
Ceiling Insulation		X	
High Efficiency Heat Pump from base elec resis heat - Minimum SEER 14 - Multi-Family	X		
High Efficiency Heat Pump from base elec resis heat - Mimimum SEER 15- Single-Family		X	
High Efficiency Heat Pump from base elec resis heat - Minimum SEER 14 - Single-Family			X
High Efficiency Heat Pump - Minimum SEER 15		X	
High Efficiency Heat Pump from elec resis heat- Minimum SEER 17		X	
High Efficiency Heat Pump - Minimum SEER 17		X	
16 SEER Air Conditioner - Single Family			X
Energy Star Windows - Single Family		X	
Energy Star - New Home - Single Family		X	
Home Energy Management System			X
Neighborhood Energy Saver			
High Efficiency Heat Pump from base elec resis heat - Minimum SEER 14 - Single-Family			X
High Efficiency Heat Pump - Minimum SEER 15 - Single Family and Man. Homes			X
16 SEER Air Conditioner - Single Family			X
Ceiling Insulation		X	
Duct Repair - Single Family	X		
Central AC Tune-Up - Single Family	X		
Heat Pump Tune-Up - Single Family	X		
Smart Power Strip			X
Air Sealing Infiltration	X		
Water Heater Blanket	X		
Low Flow Showerhead	X		
Hot Water Pipe Insulation	X		
Faucet Aerators	X		
LED - 9W	X		
LED Specialty Lamps-5W Chandelier	X		
Energy Star Room AC			X
Low Income Weatherization Assistance			

Eliminated for Multi-Family and Manufactured Homes - not cost effective
Eliminated for Multi-Family and Manufactured Homes - not cost effective;
Increased incentive for Single Family from \$150 to \$200
Eliminated for Multi-Family and Manufactured Homes-not cost effective.
Incentive will be provided up to R38; previously incentive only provided up to R19.

Eliminated - replaced with single family minimum SEER 14 measure

Incentive decreased from \$200 to \$150 per 3 Ton Unit

Eliminated failed participant test in goals docket
Eliminated failed participant test in goals docket

Eliminated for Multi-Family and Manufactured Homes-not cost effective
Eliminated - not cost effective

Modified to provide insulation to R38 - previously up to R19

High Efficiency Heat Pump from base elec resis heat - Minimum SEER 14 - Single-Family			X
High Efficiency Heat Pump - Minimum SEER 15 - Single Family			X
16 SEER Air Conditioner - Single Family			X
Ceiling Insulation		X	
Duct Repair - Single Family	X		
Central AC Tune-Up - Single Family	X		
Heat Pump Tune-Up - Single Family	X		
Smart Power Strip			X
Air Sealing Infiltration	X		
Water Heater Blanket	X		
Low Flow Showerhead	X		
Hot Water Pipe Insulation	X		
Faucet Aerators	X		
LED - 9W	X		
LED Specialty Lamps-5W Chandelier	X		
Energy Star Room AC			X
LT_SF_Energy Star Refrigerator	X		
LT_SF_New Construction 17 SEER HP + EW			X
LT_MF_New Construction 17 SEER HP + EW			X
Commercial Programs/Industrial			
Business Energy Check			
LED Flood Light	X		
Smart Strip	X		
Faucet Aerator	X		
Better Business			
Ceiling Insulation(R2 to R38)	X		
Demand Controlled Ventilation	X		
Duct Sealing Repair	X		
Energy Recovery Ventilation System (ERV)	X		
High Efficiency Chiller	X		
High Efficiency DX	X		
High Efficiency PTAC	X		
High Efficiency PTHP	X		
Smart Thermostat	X		
Thermal Energy Storage			X
Wall Insulation			X
Cool Roof			
HVAC Tune-up		X	
HVAC Tune-up Rooftop Units		X	
Commercial Custom Program	X		
Demand Response Programs			
Residential Energy Wise	X		
Commercial Interruptible	X		
Commercial Curtailable	X		
Commercial Stand-by	X		
Other Programs			
Technology Development	X		
Qualifying Facilities	X		

Modified to provide insulation to R38 - previously up to R19

Previously considered through the Custom Program

Eliminated - not cost effective

Eliminated - not cost effective

Eliminated - not cost effective

Measures included depend on on proposed projects

DEF
DOCKET 20200054 - 2020-2024 DSM PROGRAM PLAN
DATA REQUEST NO 1 - QUESTION 5

	PROGRAM PARTICIPATION														
	2015 PLAN					2020 PLAN					DIFFERENCE				
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
RESIDENTIAL PROGRAMS															
Home Energy Check	24,184	22,030	20,420	19,319	18,607	25,000	25,000	25,000	25,000	25,000	816	2,970	4,580	5,681	6,393
Residential Incentive	6,870	4,545	2,807	1,618	871	17,350	15,933	15,136	14,379	13,660	10,480	11,388	12,329	12,761	12,789
Low Income Weatherization Assistance	500	500	500	500	500	244	244	244	244	244	(256)	(256)	(256)	(256)	(256)
Neighborhood Energy Saver	4,500	4,500	4,500	4,500	4,500	5,000	5,000	5,000	5,000	5,000	500	500	500	500	500
Total	36,054	31,575	28,227	25,937	24,478	47,594	46,177	45,380	44,623	43,904	11,540	14,602	17,153	18,686	19,426
COMMERCIAL/INDUSTRIAL PROGRAMS															
Business Energy Check	1041	687	420	250	156	400	400	400	400	400	(641)	(287)	(20)	150	244
Better Business	682	451	279	161	86	2589	2459	2336	2219	2109	1,907	2,008	2,057	2,058	2,023
Custom Incentive Program	28	25	30	25	20	200	190	181	172	163	172	165	151	147	143
Total	1,751	1,163	729	436	262	3,189	3,049	2,917	2,791	2,672	1,438	1,886	2,188	2,355	2,410
DEMAND RESPONSE PROGRAMS															
Residential - Energy Wise	8,700	8,700	8,700	8,700	8,700	2,500	2,500	2,500	2,500	2,500	(6,200)	(6,200)	(6,200)	(6,200)	(6,200)
Commercial - Interruptible	1	1	1	1	1	16	10	4	6	8	15	9	3	5	7
Commercial - Curtailable	1	0	0	1	0	1	0	1	0	1	-	-	1	(1)	1
Commercial - Stand-by Generation	10	10	10	10	10	10	10	15	15	15	-	-	5	5	5
Total	8,712	8,711	8,711	8,712	8,711	2,527	2,520	2,520	2,521	2,524	(6,185)	(6,191)	(6,191)	(6,191)	(6,187)

Explanation of Differences between Plans:

Residential Programs -

Home Energy Check - The higher projected participation in the 2020 Plan is based on recent actual experience. The 2015 Plan assumed that greater penetration of energy efficiency measures would result in fewer audits.

Residential Incentive Program - The higher projected participation in the 2020 Plan is based on recent actual experience and an evaluation of expected participation for each measure. The 2015 Plan assumed that participation would decline as the penetration of energy efficiency measures increased over time.

Low Income Weatherization Assistance - The decrease in projected participation in the 2020 Plan is based on actual recent experience. In spite of increased outreach efforts and program changes intended to increase participation levels, DEF has not been able to achieve the participation levels in the 2015 Plan.

Neighborhood Energy Saver - DEF plans to increase the targeted number of homes by 500 homes annually in an effort to achieve the 2020-2024 goals.

Commercial Programs

Business Energy Check - Participation estimates in the 2020 Plan reflect recent experience and also considers the impact of changes in program measures and incentives.

Better Business - Participation estimates are based on projected participation for each individual measure. These estimates consider historical experience and incentive levels. The 2015 Plan assumed that participation would decline over time as the the penetration of energy efficiency measures increased over time.

Custom Incentive Program - Participation estimates are based on recent experience.

Demand Response Programs

Energy Wise - Lower participation estimates in the 2020 Plan are based on recent experience. DEF has not been able to achieve the participation projected in the 2015 Plan due to market saturation issues.

Interruptible - Participation estimates reflect projects currently in the pipeline as well as actual experience.

Curtailable - Participation estimates are based on historical experience

Stand-By - Participation estimates have been updated to reflect actual experience.

2015 RESIDENTIAL SUMMARY values at generator						2020 RESIDENTIAL SUMMARY values at generator						DIFFERENCE					VARIANCE EXPLANATIONS
sMW						sMW						sMW					
2020	2021	2022	2023	2024		2020	2021	2022	2023	2024		2020	2021	2022	2023	2024	
Residential Programs	2.3	1.5	1.0	0.6	0.3	Residential Incentive Program	6.3	5.2	4.9	4.7	4.4	4.0	3.6	3.9	4.1	4.1	Increase is primarily driven by higher projected participation. Increase in projected number of home energy kits provided offset by changes in savings of measures included in kits. Impacts were updated per the Nexant Market Potential Study that supported the 2019 goals filing. Decrease in projected participation, offset in part by changes in measures and changes in measure impacts.
Home Energy Check	3.3	3.3	3.3	3.3	3.3	Home Energy Check	4.8	4.8	4.8	4.8	4.8	1.6	1.6	1.6	1.6	1.6	Increase in number of targeted homes annually from 4500 to 5000 and changes in mix of measures and measure impacts
Low Income Weatherization	0.4	0.4	0.4	0.4	0.4	Low Income Weatherization	0.8	0.4	0.4	0.4	0.4	0.4	-0.1	-0.1	-0.1	-0.1	Decrease in projected new participants due to market saturation
Neighborhood Energy Saver Energy Wise	4.6	4.6	4.6	4.6	4.6	Neighborhood Energy Saver Energy Wise	6.9	6.9	6.9	6.9	6.9	2.3	2.3	2.3	2.3	2.3	Increase in number of targeted homes annually from 4500 to 5000 and changes in mix of measures and measure impacts
Total	21.5	20.8	20.2	19.8	19.5	Total	22.4	20.9	20.6	20.4	20.1	0.9	0.1	0.4	0.6	0.6	Decrease in projected new participants due to market saturation
wMW						wMW						wMW					
Residential Programs	6.0	3.9	2.4	1.4	0.8	Residential Incentive Program	9.6	7.9	7.5	7.1	6.8	3.7	4.0	5.1	5.7	6.0	Increase is primarily driven by higher projected participation. Increase in projected number of home energy kits provided offset by changes in savings of measures included in kits. Impacts were updated per the Nexant Market Potential Study that supported the 2019 goals filing. Decrease in projected participation, offset in part by changes in measures and changes in measure impacts.
Home Energy Check	4.5	4.5	4.5	4.5	4.5	Home Energy Check	8.0	8.0	8.0	8.0	8.0	3.5	3.5	3.5	3.5	3.5	Increase in number of targeted homes annually from 4500 to 5000 and changes in mix of measures and measure impacts
Low Income Weatherization	1.0	1.0	1.0	1.0	1.0	Low Income Weatherization	1.2	0.6	0.6	0.6	0.6	0.2	-0.4	-0.4	-0.4	-0.4	Decrease in projected new participants due to market saturation
Neighborhood Energy Saver Energy Wise	6.8	6.8	6.8	6.8	6.8	Neighborhood Energy Saver Energy Wise	10.3	10.3	10.3	10.3	10.3	3.5	3.5	3.5	3.5	3.5	Decrease in projected new participants due to market saturation
Total	38.9	36.9	35.4	34.4	33.7	Total	34.1	31.8	31.4	31.1	30.7	-4.8	-5.1	-4.0	-3.3	-3.0	
gWh						gWh						gWh					
Residential Programs	3.6	2.4	1.5	0.8	0.5	Residential Incentive Program	15.2	12.6	11.9	11.3	10.8	11.6	10.2	10.5	10.5	10.3	Increase is primarily driven by higher projected participation. Increase in projected number of home energy kits provided offset by changes of savings of measures included in kits. Impacts were updated per the Nexant Market Potential Study that supported the 2019 goals filing. Decrease in projected participation, offset in part by changes in measures and changes in measure impacts.
Home Energy Check	11.5	11.5	11.5	11.5	11.5	Home Energy Check	20.7	20.7	20.7	20.7	20.7	9.2	9.2	9.2	9.2	9.2	Increase in number of targeted homes annually from 4500 to 5000 and changes in mix of measures and measure impacts
Low Income Weatherization	1.0	1.0	1.0	1.0	1.0	Low Income Weatherization	1.9	1.0	1.0	1.0	1.0	0.9	0.0	0.0	0.0	0.0	Decrease in projected new participants due to market saturation
Neighborhood Energy Saver Energy Wise	8.2	8.2	8.2	8.2	8.2	Neighborhood Energy Saver Energy Wise	18.7	18.7	18.7	18.7	18.7	10.5	10.5	10.5	10.5	10.5	
Total	24.4	23.2	22.3	21.6	21.2	Total	56.6	53.0	52.4	51.8	51.2	32.2	29.8	30.1	30.2	30.0	

DEF
DOCKET 20200054 - 2020-2024 DSM PROGRAM PLAN
DATA REQUEST NO 1 - QUESTION 6

2015 NON RESIDENTIAL SUMMARY						2020 NON RESIDENTIAL SUMMARY						DIFFERENCE					VARIANCE EXPLANATIONS
values at generator						values at generator						sMW					
sMW						sMW						sMW					
2020	2021	2022	2023	2024		2020	2021	2022	2023	2024		2020	2021	2022	2023	2024	
Comm Programs	2.2	1.5	0.9	0.5	0.3	Comm Programs	1.7	1.6	1.8	1.4	1.7	-0.6	0.1	0.9	0.9	1.4	Increase in projected participation
BEC	0.2	0.1	0.1	0.0	0.0	BEC	0.1	0.1	0.1	0.1	0.1	-0.2	-0.1	0.0	0.0	0.0	Changes in projected participation
Florida Custom	1.0	0.7	0.4	0.3	0.1	Florida Custom	0.5	0.5	0.5	0.5	0.5	-0.5	-0.2	0.1	0.3	0.4	2020 increase is driven by projects in pipeline, 2021-2022 driven by higher projected participation
Demand Response	4.8	4.6	4.6	4.8	4.6	Demand Response	66.2	7.4	5.8	6.4	7.9	61.4	2.8	1.2	1.6	3.4	
Total	8.2	6.9	6.0	5.6	5.0	Total	68.4	9.6	8.2	8.4	10.2	60.2	2.7	2.2	2.7	5.1	
wMW						wMW						wMW					
2020	2021	2022	2023	2024		2020	2021	2022	2023	2024		2020	2021	2022	2023	2024	
Comm Programs	0.4	0.3	0.2	0.1	0.0	Comm Programs	3.1	2.9	3.1	2.6	2.8	2.7	2.6	2.9	2.5	2.8	Increase in projected participation
BEC	0.2	0.1	0.1	0.0	0.0	BEC	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	0.0	0.0	0.0	Changes in projected participation
Florida Custom	0.2	0.1	0.1	0.0	0.0	Florida Custom	0.0	0.0	0.0	0.0	0.0	-0.2	-0.1	-0.1	0.0	0.0	2020 increase is driven by projects in pipeline, 2021-2022 driven by higher projected participation
Demand Response	4.9	4.6	4.6	4.9	4.6	Demand Response	65.7	7.0	4.7	4.9	6.2	60.8	2.4	0.1	0.0	1.6	
Total	5.6	5.1	4.9	5.1	4.7	Total	68.8	9.9	7.8	7.6	9.1	63.2	4.8	2.9	2.5	4.4	
gWh						gWh						gWh					
2020	2021	2022	2023	2024		2020	2021	2022	2023	2024		2020	2021	2022	2023	2024	
Comm Programs	3.7	2.4	1.5	0.9	0.5	Comm Programs	7.6	7.3	6.9	6.5	6.2	3.9	4.8	5.4	5.7	5.8	Increase in projected participation
BEC	1.1	0.7	0.4	0.3	0.2	BEC	0.3	0.3	0.3	0.3	0.3	-0.8	-0.4	-0.2	0.0	0.1	Changes in projected participation
Florida Custom	1.1	0.7	0.4	0.3	0.2	Florida Custom	1.3	1.3	1.3	1.3	1.3	0.2	0.5	0.8	1.0	1.1	2020 increase is driven by projects in pipeline, 2021-2022 driven by higher projected participation
Demand Response	0.0	0.0	0.0	0.0	0.0	Demand Response	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total	5.9	3.9	2.4	1.4	0.8	Total	9.2	8.8	8.5	8.1	7.8	3.3	4.9	6.1	6.7	7.0	

DEF 2020 PROGRAM PLAN
DOCKET 20200054
DR 1- Q7 RESPONSE

	2015 PLAN					2020 PLAN					DIFFERENCE				
	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024	2020	2021	2022	2023	2024
Home Energy Check	0.4	0.4	0.4	0.4	0.4	0.7	0.7	0.7	0.7	0.7	0.3	0.3	0.3	0.3	0.3
Residential Incentive	1.5	1.0	0.6	0.4	0.2	4.6	3.9	3.7	3.5	3.3	3.0	2.9	3.1	3.1	3.1
Low Income Weatherization	0.4	0.4	0.4	0.4	0.4	0.6	0.3	0.3	0.3	0.3	0.2	-0.1	-0.1	-0.1	-0.1
Neighborhood Energy Saver	2.5	2.5	2.5	2.5	2.5	5.0	5.0	5.0	5.0	5.0	2.4	2.4	2.4	2.4	2.4
Total Residential	4.9	4.3	3.9	3.7	3.5	10.8	9.9	9.7	9.5	9.3	5.9	5.5	5.7	5.8	5.8
BEC	0.6	0.4	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	-0.5	-0.3	-0.2	-0.1	0.0
Comm Incentive	0.3	0.2	0.1	0.1	0.0	0.7	0.7	0.7	0.6	0.7	0.4	0.4	0.6	0.5	0.6
Custom	0.4	0.4	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.2	-0.3	-0.3	-0.3	-0.3	-0.3
Total Commercial	1.4	1.1	0.8	0.7	0.6	1.0	0.9	1.0	0.9	0.9	-0.4	-0.1	0.2	0.2	0.4
Energy Wise	25.2	25.7	26.2	26.7	27.2	26.3	26.5	26.6	26.8	27.0	1.1	0.8	0.4	0.1	-0.2
Interruptible	18.3	18.3	18.3	18.3	18.3	41.2	41.6	20.7	20.9	21.0	22.9	23.3	2.4	2.5	2.7
Curtaillable	0.7	0.7	0.7	0.7	0.7	2.1	2.1	2.1	2.1	2.1	1.4	1.4	1.4	1.4	1.4
Stand-by Gen	5.0	5.2	5.5	5.7	5.9	4.4	4.5	4.5	4.6	4.7	-0.6	-0.7	-1.0	-1.1	-1.2
Total Demand Response	49.2	49.9	50.6	51.4	52.1	74.1	74.7	54.0	54.4	54.8	24.9	24.8	3.3	3.0	2.7
Total	55.4	55.3	55.4	55.7	56.2	85.8	85.5	64.6	64.7	65.0	30.4	30.2	9.2	9.0	8.8

VARIANCE EXPLANATIONS

Increase is primarily due to increased number of kits. 2015 Plan assumed kits would only be provided for walk-through audits. 2020 Plan assumes kits are provided for all audit types
Increase is driven by higher participation and more measures
Decrease driven by lower projected participation
Increase is primarily the result of 500 additional homes annually in total plus increase in level and cost of insulation installed in homes.

Variance is primarily due to changes in projected participation
Variance is primarily due to higher projected participation
Variance is due to changes in projected participation and measures

Variance in 2020 and 2021 is due to difference in incentive rates per terms of 2017 Rate Settlement Agreement and higher projected participants
Variance is due to higher projected bill credits due to customer demand
Variance is primarily due to change in SKW and WKW impacts per customer

DEF
 2020 PROGRAM PLAN DOCKET 20200054
 DATA REQUEST 1-8, 9

Program	ANNUAL PROGRAM COSTS					Program	RESIDENTIAL RATE IMPACT PER 1000 KWH'S					Program	RESIDENTIAL RATE IMPACT PER 1200 KWH'S				
	2020	2021	2022	2023	2024		2020	2021	2022	2023	2024		2020	2021	2022	2023	2024
Residential						Home Energy Check	\$ 0.13	\$ 0.13	\$ 0.13	\$ 0.14	\$ 0.14	Home Energy Check	\$ 0.16	\$ 0.16	\$ 0.16	\$ 0.16	\$ 0.17
Home Energy Check	\$ 4,683,894	\$ 4,784,621	\$ 4,887,867	\$ 4,993,694	\$ 5,102,166	Residential Incentive	0.19	0.16	0.15	0.14	0.14	Residential Incentive	0.23	0.19	0.18	0.17	0.16
Residential Incentive	6,918,732	5,840,193	5,548,183	5,270,774	5,007,235	Low Income Weatherizat	0.02	0.01	0.01	0.01	0.01	Low Income Weatherizatic	0.03	0.01	0.01	0.01	0.01
Low Income Weatherization Assi	748,920	399,123	399,123	399,123	399,123	Neighborhood Energy Sa	0.16	0.16	0.15	0.15	0.15	Neighborhood Energy Saver	0.19	0.19	0.19	0.18	0.18
Neighborhood Energy Saver	5,603,695	5,603,695	5,603,695	5,603,695	5,603,695	Total Residential	0.50	0.46	0.45	0.44	0.44	Total Residential	0.60	0.55	0.54	0.53	0.53
Total Residential	17,955,241	16,627,632	16,438,868	16,267,285	16,112,219	Business Energy Check	0.02	0.02	0.02	0.02	0.02	Business Energy Check	\$ 0.02	\$ 0.02	\$ 0.02	\$ 0.02	\$ 0.02
Business Energy Check	677,542	692,575	707,983	723,777	739,966	Commercial Incentive	0.05	0.05	0.05	0.05	0.05	Commercial Incentive	0.06	0.06	0.06	0.05	0.05
Commercial Incentive	1,927,560	1,831,182	1,829,623	1,652,642	1,660,010	Commercial Custom Ince	0.02	0.02	0.02	0.02	0.02	Commercial Custom Incenti	0.03	0.03	0.03	0.02	0.02
Commercial Custom Incentive	761,313	761,313	761,313	761,313	761,313	Total Commercial	0.09	0.09	0.09	0.09	0.09	Total Commercial	\$ 0.11	\$ 0.11	\$ 0.11	\$ 0.10	\$ 0.10
Total Commercial	3,366,415	3,285,070	3,298,920	3,137,733	3,161,289	Residential (Energy Wise)	1.26	1.27	1.28	1.29	1.30	Residential (Energy Wise)	1.52	1.52	1.54	1.55	1.56
Residential (Energy Wise)	45,227,474	45,863,015	46,510,382	47,169,873	47,841,790	Interruptible	1.16	1.17	0.58	0.58	0.59	Interruptible	1.40	1.40	0.70	0.70	0.70
Interruptible	41,672,866	42,104,673	21,243,286	21,387,928	21,577,610	Curtaillable	0.06	0.06	0.06	0.06	0.06	Curtaillable	0.07	0.07	0.07	0.07	0.07
Curtaillable	2,171,862	2,171,862	2,173,676	2,173,676	2,190,603	Stand-by Gen	0.13	0.14	0.14	0.14	0.14	Stand-by Gen	0.16	0.16	0.16	0.17	0.17
Stand-by Gen	4,830,499	4,953,786	4,937,857	5,031,347	5,124,838	Total Demand Response	2.62	2.63	2.06	2.07	2.09	Total Demand Response	3.15	3.16	2.47	2.48	2.51
Total Demand Response	93,902,700	95,093,335	74,865,201	75,762,824	76,734,841	Technology Development	0.02	0.02	0.02	0.02	0.02	Technology Development	\$ 0.03	\$ 0.03	\$ 0.03	\$ 0.03	\$ 0.03
Technology Development	800,000	800,000	800,000	800,000	800,000	Qualified Facilities	0.04	0.04	0.04	0.04	0.04	Qualified Facilities	0.04	0.04	0.04	0.05	0.05
Qualified Facilities	1,294,116	1,326,469	1,359,631	1,393,622	1,428,462	Total	\$ 3.28	\$ 3.24	\$ 2.66	\$ 2.66	\$ 2.67	Total	\$ 3.93	\$ 3.89	\$ 3.20	\$ 3.19	\$ 3.21
Total	\$ 117,318,472	\$ 117,132,507	\$ 96,762,619	\$ 97,361,464	\$ 98,236,812	Residential Allocation	58%	58%	58%	58%	58%	Residential Allocation	58%	58%	58%	58%	58%
						Residential Sales	20,770,626	20,953,913	21,061,745	21,222,712	21,315,488	Residential Sales	20,770,626	20,953,913	21,061,745	21,222,712	21,315,488

DEF
 2020-2024 PROGRAM PLAN
 DOCKET 20200054
 RESPONSE DR 1 - 11 (b)

RESIDENTIAL INCENTIVE PROGRAM - KWH IMPACTS BY MEASURE			
kWh Impact	Measure	Unit	Home Type
952.74	14 SEER ASHP from base electric resistance heating	Per 3 Ton	Single Family
581.17	14 SEER ASHP from base electric resistance heating Multi Family & Manufactured Homes	Per 2 Ton	Multi-Family & Manufactured
402.09	15 SEER Air Source Heat Pump	Per 3 Ton	Single Family
699.25	16 SEER Central AC -	Per 3 Ton	Single Family
3236.00	Ceiling Insulation(R19 to R38) -	Per Home	Single Family
843.00	Ceiling Insulation(R19 to R38)	Per Home	Single Family
426.00	Ceiling Insulation(R12 to R38)	Per Home	Single Family
794.06	Duct Repair	Per Home	Single Family
1136.94	Energy Star Windows	Per 200 SF	Single Family
697.31	Home Energy Management System	Per Unit	Single Family

DEF
 2020-2024 PROGRAM PLAN
 DOCKET 20200054
 RESPONSE DR 1 - 12 (b)

RESIDENTIAL INCENTIVE PROGRAM - KWH IMPACTS BY MEASURE			
kWh Impact	Measure	Unit	Home Type
952.74	14 SEER ASHP from base electric resistance heating	Per 3 Ton	Single Family
581.17	14 SEER ASHP from base electric resistance heating Multi Family & Manufactured Homes	Per 2 Ton	Multi-Family & Manufactured
402.09	15 SEER Air Source Heat Pump	Per 3 Ton	Single Family
699.25	16 SEER Central AC -	Per 3 Ton	Single Family
3236.00	Ceiling Insulation(R19 to R38) -	Per Home	Single Family
843.00	Ceiling Insulation(R19 to R38)	Per Home	Single Family
426.00	Ceiling Insulation(R12 to R38)	Per Home	Single Family
794.06	Duct Repair	Per Home	Single Family
1136.94	Energy Star Windows	Per 200 SF	Single Family
697.31	Home Energy Management System	Per Unit	Single Family

DEF
 2020-2024 PROGRAM PLAN
 DOCKET 20200054
 RESPONSE DR 1 - 12 (c)

BETTER BUSINESS PROGRAM		
kWh Impact	Measure	Unit
874.44	Ceiling Insulation(R2 to R38)	per 500 sq ft
1634.63	Demand Controlled Ventilation	per ton
550.75	Duct Sealing Repair	per ton
192.85	Energy Recovery Ventilation System (ERV)	per ton
142.16	High Efficiency Chiller	per ton
204.75	High Efficiency DX	unit/ton
856.31	High Efficiency PTAC	unit (1.5 ton)
871.86	High Efficiency PTHP	unit (1.5 ton)
45895.85	Smart Thermostat	unit
0.00	Thermal Energy Storage	Per 300kW TES peak move
0.95	Wall Insulation	per sq ft

DEF
 2020 - 2024 PROGRAM PLAN
 DOCKET 20200054
 DR 1 - 13 (c)

BETTER BUSINESS PROGRAM		
kWh Impact	Measure	Unit Nexant/DEF
874.44	Ceiling Insulation(R2 to R38)	per 500 sq ft
1634.63	Demand Controlled Ventilation	per ton
550.75	Duct Sealing Repair	per ton
192.85	Energy Recovery Ventilation System (ERV)	per ton
142.16	High Efficiency Chiller	per ton
204.75	High Efficiency DX	unit/ton
856.31	High Efficiency PTAC	unit (1.5 ton)
871.86	High Efficiency PTHP	unit (1.5 ton)
45895.85	Smart Thermostat	unit
0.00	Thermal Energy Storage	Per 300kW TES peak move
0.95	Wall Insulation	sq ft

DEF
 2020 PROGRAM PLAN
 DOCKET - 20200054
 DR REQ 1 - 14 (c)

Measures	kWh savings per Measure	Quantity Per Kit	<i>At Meter</i>	<i>At Generator</i>
			kWh Savings Per Participant	kWh Savings Per Participant
LED Flood Light	132.7	2	265	281
Smart Strip	225.0	1	225	238
Faucet Aerator	100.0	2	200	212
Total kWh Savings Per Participant			690	731

Notes

Measures are the same for all years - 2020-2024

Line Loss Factor - applied to gross meter savings up to generator

1.058521079