KyPSC Case No. 2020-00266
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Duke Energy Kentucky
Case No. 2020-00266
Staff First Set Data Requests
Date Received: September 28, 2020

STAFF-DR-01-001

REQUEST:

Refer to the application, paragraph 6. Provide the comments or feedback about Duke Kentucky's proposed changes received from the Residential Collaborative and the Commercial and Industrial Collaborative.

RESPONSE:

There were no comments or feedback about the proposed changes from the Residential Collaborative and the Commercial and Industrial Collaborative. However; there was a comment appreciating the update, a question about if the proposed changes had any impact on the statewide Home Energy Assistance program which they do not and the Office of Rate Intervention from the Office of the Attorney General stated they would attend a collaborative if one were to be held.

PERSON RESPONSIBLE: Trisha Haemmerle

Duke Energy Kentucky
Case No. 2020-00266
Staff First Set Data Requests
Date Received: September 28, 2020

STAFF-DR-01-002

REQUEST:

Refer to the application, paragraph 7. Regarding the Home Energy House Call, provide the Cost-Effectiveness Test Results for each of the proposed individual program expansions.

RESPONSE:

Please see STAFF-DR-01-002 Attachment.

PERSON RESPONSIBLE: Julie Hollingsworth

Program	Product Code	Measure I	Measure Name	UCT	TRC	RIM	PCT**
Residential Energy Assessments	HCBLRD	12872	Home Energy House Call - Assess Kit w LEDs Blower Door	1.24	0.62	0.63	14.62
Residential Energy Assessments	HCCNDL	12875	Home Energy House Call - Specialty Candelabra LED	2.52	0.23	0.76	46.29
Residential Energy Assessments	HCGLOB	12876	Home Energy House Call - Specialty Globe LED	511.80	46.52	1.09	15.61
Residential Energy Assessments	HCHHSH	12878	Home Energy House Call - Specialty Showerhead	5,591.54	508.42	0.89	11.92
Residential Energy Assessments	HCNSTE	12873	Home Energy House Call - Smart Thermostat -Elec	16.15	1.47	0.75	2.57
Residential Energy Assessments	HCNSTE	12874	Home Energy House Call - Smart Thermostat -Only CAC Fuel Htd	16.15	1.47	0.75	2.57
Residential Energy Assessments	HCRCSD	12877	Home Energy House Call - Specialty Recessed LED	157.62	14.33	1.06	21.21

Duke Energy Kentucky
Case No. 2020-00266
Staff First Set Data Requests
Date Received: September 28, 2020

STAFF-DR-01-003

REQUEST:

Refer to the application, paragraph 8. Duke Kentucky is seeking approval to increase the budget for its Smart $aver® Prescriptive program.

a. Explain if the increase is in addition to the carry-over amount of $1,396,010.

b. Provide support for the need for the additional increase and how Duke Kentucky anticipates the dollars will be spent.

RESPONSE:

a. The carry-over amount of $1,396,010 is the total requested increase.

b. The dollars will be spent primarily on Smart $aver Prescriptive & Custom customer projects that have already requested incentive reservations and/or been placed on the Smart $aver incentive waitlist for planned upcoming energy efficiency improvements. To date in 2020, the Duke Energy Kentucky Smart $aver Prescriptive & Custom programs have received prequalification applications for 22 customer projects planned for completion later this fiscal year or early next fiscal year, with total potential incentives of up to $1,739,309. The projects have all been issued tentative incentive reservations and/or been placed on the program's incentive waitlist for future projects.

PERSON RESPONSIBLE: Nathan Lewis

Duke Energy Kentucky
Case No. 2020-00266
Staff First Set Data Requests
Date Received: September 28, 2020

STAFF-DR-01-004

REQUEST:

Refer to the application, paragraph 8. Duke Kentucky anticipates increased customer demand and interest in energy efficiency as it relates to the Smart $aver® Prescriptive Program as customer operations return to pre-COVID-19 levels.

a. Provide documentation supporting the increased customer demand, such as a waiting list or call log.

b. Explain whether Duke Kentucky is anticipating having to hire more individuals to handle this anticipated uptick in customer participation.

RESPONSE:

a. Please see STAFF-DR-01-004 Attachment.

b. No additional hires are anticipated.

PERSON RESPONSIBLE: Nathan Lewis

Duke Energy Kentucky - Reservation/Waitlist Log
Smart $aver Prescriptive & Custom

Enrollment Application Number	Potential Incentive Total
EA-0000168190	$ 5,489.98
EA-0000168966	$ 906,703.60
EA-0000170615	$ 25,883.00
EA-0000170620	$ 25,913.00
EA-0000171093	$ 4,575.00
EA-0000171463	$ 150.00
EA-0000171464	$ 150.00
EA-0000171466	$ 150.00
EA-0000398734	$ 9,761.00
EA-0000399080	$ 55,957.00
EA-0000399347	$ 1,305.00
EA-0000399359	$ 5,400.00
EA-0000399795	$ 5,485.50
EA-0000399970	$ 1,650.00
EA-0000400021	$ 7,499.00
EA-0000399898	$ 800.00
CSK20-0000172363	$ 9,370.00
CSK20-0000172484	$ 462.00
CSK19-0000159553	$ 252,085.00
CSK20-0000209670	$ 878.00
CSK20-0000172214	$ 3,942.00
CSK20-0000399129	$ 415,700.00

Duke Energy Kentucky
Case No. 2020-00266
Staff First Set Data Requests
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STAFF-DR-01-005

REQUEST:

Refer to the application, paragraph 9. Duke Kentucky is requesting to carry over the unspent funds for the Peak Time Rebate Pilot Program to the July 2020 through June 2021 period. Provide support for the need for the additional dollars and how Duke Kentucky anticipates they will be spent

RESPONSE:

When originally filed, Duke Energy Kentucky anticipated an approval for this pilot program by year end 2019 with development occurring during the first part of 2020 leading to a pilot launch in mid- to late May 2020. Given uncertainty surrounding the pilot program and the Commission's approval, implementation efforts did not start in earnest until Commission approval was received on April 27, 2020. Unfortunately, complications due to the COVID-19 pandemic slowed the development of the pilot. The pilot was launched on July 27, 2020. Due to the delayed launch of the pilot, the timing of program costs shifted later into the summer and with respect to EM&V costs, needed to be rescheduled completely. The shift of the unspent funds from the period ending June 2020 ensures that enough budget dollars are available to the pilot for the July 2020 through June 2021 period. Budget categories such as customer incentives, EM&V, labor, and marketing have not been eliminated, rather the timing of those expected expenses have just been shifted out in time. If the entirety of the requested budget to be shifted are not spent, the actual amount required

to run the pilot will be addressed in the reconciliation component of future Company annual rider proceedings.

PERSON RESPONSIBLE: Bruce L. Sailers

Duke Energy Kentucky
Case No. 2020-00266
Staff First Set Data Requests
Date Received: September 28, 2020

STAFF-DR-01-006

REQUEST:

Refer to the application, Exhibit A.

a. For the Residential Energy Assessment Program, provide the individual program cost-effectiveness test results.

b. For the Smart $aver® Prescriptive Program, provide the individual program cost-effectiveness test results.

RESPONSE:

a. See STAFF-DR-01-006(a) Attachment.

b. See STAFF-DR-01-006(b) Attachment.

PERSON RESPONSIBLE: Julie Hollingsworth

Program	Product Code	Measure I	Measure Name	UCT	TRC	RIM	PCT**
Residential Energy Assessments	HCBAER	12207	Home Energy House Call - Bathroom Aerator	824.23	1.27	0.97	97.85
Residential Energy Assessments	HCBLRD	12872	Home Energy House Call - Assess Kit w LEDs Blower Door	1.24	0.62	0.63	14.62
Residential Energy Assessments	HCCNDL	12875	Home Energy House Call - Specialty Candelabra LED	2.52	0.23	0.76	46.29
Residential Energy Assessments	HCGLOB	12876	Home Energy House Call - Specialty Globe LED	511.80	46.52	1.09	15.61
Residential Energy Assessments	HCHHSH	12878	Home Energy House Call - Specialty Showerhead	5,591.54	508.42	0.89	11.92
Residential Energy Assessments	HCLED	12190	Home Energy House Call - Additional LED	31.49	2.08	0.87	5.72
Residential Energy Assessments	HCNSTE	12873	Home Energy House Call - Smart Thermostat -Elec	16.15	1.47	0.75	2.57
Residential Energy Assessments	HCNSTE	12874	Home Energy House Call - Smart Thermostat -Only CAC Fuel Htd	16.15	1.47	0.75	2.57
Residential Energy Assessments	HCPWRP	12206	Home Energy House Call - Pipe Wrap	526.72	34.04	1.03	67.12
Residential Energy Assessments	HCRCSD	12877	Home Energy House Call - Specialty Recessed LED	157.62	14.33	1.06	21.21
Residential Energy Assessments	HEHC	7103	Home Energy House Call - Kit w LEDs	1.37	0.67	0.66	45.45

Program	Product Code	Measure I	Measure Name	UCT	TRC	RIM	PCT**
Smart $aver® Prescriptive	NRFS	5660	Zero Energy Doors_Med-Temp Cooler	8.92	1.92	1.02	3.41
Smart $aver® Prescriptive	NRFS	5760	Convection Oven Full-Sized	12.75	2.75	1.46	3.41
Smart $aver® Prescriptive	NRHVAC	384	Setback Programmable Thermostat	32.22	0.25	0.72	6.78
Smart $aver® Prescriptive	NRHVAC	3001	0.5 gpm Faucet Aerator (DI) - School, public use	31.02	0.24	0.69	6.78
Smart $aver® Prescriptive	NRHVAC	5704	HVAC DX AC 65-135kBtuh 11.7 EER (Tier 0_1)	133.91	1.03	2.98	6.78
Smart $aver® Prescriptive	NRHVAC	5731	HVAC DX PTAC 12000 Btuh 10.7 EER	135.30	1.04	3.01	6.78
Smart $aver® Prescriptive	NRHVAC	10001	High Volume Low Speed Fan	74.31	0.57	1.65	6.78
Smart $aver® Prescriptive	NRLTG	352	LED Exit Signs Electronic Fixtures (Retrofit Only)	14.39	3.75	1.18	5.69
Smart $aver® Prescriptive	NRLTG	3067	LED FLD rplcng or ILO GRT 100W HAL, INCD, or HID	9.92	2.58	0.81	5.69
Smart $aver® Prescriptive	NRLTG	3069	LED Highbay replacing 251-400W HID	15.76	4.10	1.29	5.69
Smart $aver® Prescriptive	NRLTG	3070	LED Highbay replacing greater than 400W HID	15.75	4.10	1.29	5.69
Smart $aver® Prescriptive	NRLTG	3071	LED Lowbay replacing 176W-250W HID	15.17	3.95	1.25	5.69
Smart $aver® Prescriptive	NRLTG	3072	LED Lowbay replacing up to 175W HID	15.18	3.95	1.25	5.69
Smart $aver® Prescriptive	NRLTG	3073	LED Panel 1x4 replacing or in lieu of T8 FL	16.50	4.29	1.36	5.69
Smart $aver® Prescriptive	NRLTG	3075	LED Panel 2x2 replacing or in lieu of T8 FL	16.69	4.34	1.37	5.69
Smart $aver® Prescriptive	NRLTG	3077	LED Panel 2x4 replacing or in lieu of T8 FL	16.75	4.36	1.38	5.69
Smart $aver® Prescriptive	NRLTG	8850	LED 2ft Tube 1-LED, replacing or in lieu of T8 fluorescent	15.76	4.10	1.29	5.69
Smart $aver® Prescriptive	NRLTG	8851	LED 4ft Tube 1-LED, replacing or in lieu of T8 fluorescent	15.79	4.11	1.30	5.69
Smart $aver® Prescriptive	NRLTG	8852	LED A Lamps	16.76	4.36	1.38	5.69
Smart $aver® Prescriptive	NRLTG	8853	LED Decorative, Globe, 3-Way Lamps	16.84	4.38	1.38	5.69
Smart $aver® Prescriptive	NRLTG	8859	LED PAR, BR, MR Lamps	16.86	4.39	1.38	5.69
Smart $aver® Prescriptive	NRLTG	10070	LED Highbay replacing greater than 400W HID Lamp	15.45	4.02	1.27	5.69
Smart $aver® Prescriptive	NRLTG	10074	LED Highbay Fixture replacing 6-lamp 4ft T8 fixture	17.10	4.45	1.40	5.69
Smart $aver® Prescriptive	NRLTG	10075	LED Highbay Fixture replacing 2-lamp 8ft T12 fixture	17.13	4.46	1.41	5.69
Smart $aver® Prescriptive	NRLTG	10077	LED Highbay Fixture replacing 4-lamp 4ft T5HO fixture	17.11	4.45	1.40	5.69
Smart $aver® Prescriptive	NRLTG	10079	LED FLD rplcng or ILO greater than 500W HAL, INCD, or HID	8.50	2.21	0.70	5.69
Smart $aver® Prescriptive	NRP&M	1114	VFD Process Pump 1-50 HP	21.55	3.22	1.40	2.58
Smart $aver® Prescriptive	NRP&M	10098	VFD on Chilled Water Pump	24.43	3.65	1.59	2.58

Duke Energy Kentucky
Case No. 2020-00266
Staff First Set Data Requests
Date Received: September 28, 2020

STAFF-DR-01-007

REQUEST:

Refer to the application, Appendix D.

a. Refer to pages 8-9 of 100, Tables 1-1, 1-2, and 1-3.

    1) Explain why programs have a Realization Rate less than 100 percent, thus indicating that verified savings is less than the reported savings estimates.

    2) Explain whether Duke Kentucky updates the reported savings estimates inputted into the programs that determine the total savings for the custom program and thus determine the cost-effectiveness of the custom program.

b. Refer to page 10 of 100. Explain why the tracking data was missing some key information for evaluation activities and program/project tracking. Provide the impact of missing this data on the final Nexant report.

RESPONSE:

a. 1) The overall Duke Energy Kentucky Non-Residential Custom Incentive Program energy realization rate is above 100 percent, in fact 103.5 percent as indicated in Table 1-1 of Appendix D. For this evaluation, the evaluator used sample stratification within the sample design, i.e., Lighting - Large, Lighting - Small, etc.), with a realization rate reported for each stratum, which then rolls up to a program-level realization rate.

The realization rate for the Lighting – Small stratum is less than 100 percent primarily due to actual lighting hours of use being less than reported.

For the Non-Lighting – Large and Non-Lighting – Small strata, the primary reasons for realization rates being less than 100 percent were myriad reasons, including baseline and efficient values were different than reports; lower operating hours for the various non-lighting measures; and inaccurate setpoints.

2) Duke Energy Kentucky updates and applies the verified program-level realization rate and the estimated free ridership rate to determine the cost effectiveness of Non-Residential Custom program applications.

b. Customer contact information, specifically contact phone numbers and email addresses, was occasionally missing or outdated, most likely due to staff turnover at participating customer companies. In addition, the quantities of installed equipment (particularly for lighting) and some savings values associated with projects was missing or incorrect. Quantity data, however, was found in other documentation used in the evaluation. Neither missing customer contact data nor quantity data had any impact on the final Nexant report.

PERSON RESPONSIBLE: Jean Williams

Duke Energy Kentucky
Case No. 2020-00266
Staff First Set Data Requests
Date Received: September 28, 2020

STAFF-DR-01-008

REQUEST:

Refer to the application, Appendix E.

a. Refer to page 6 of 66, Tables 1 and 2. Also, refer to page 7 of 66, recommendation (1). Confirm that Duke Kentucky will update the reported savings estimates inputted into the programs that determine the total savings for the Multifamily Energy Efficiency Program, and thus update the cost-effectiveness of each customer offering.

b. Refer to pages 7 and 8 of 66. For each recommendation, explain whether or not Duke Kentucky will adopt the recommendation.

RESPONSE:

a. Duke Energy Kentucky confirms that reported savings for each measure in the Duke Energy Multifamily Energy Efficiency Program have been updated to reflect verified savings indicated in the report. This update includes cost effectiveness.

b. Responses to each of the recommendations are below:

    1. Duke Energy Kentucky will implement the ex-post, per unit energy and demand impacts.

    2. Program materials have been updated since the time period of the evaluation in question to include information about new measures. Property Managers now also receive a post-installation savings report to share with tenants that highlights the total energy and water saved by the property.

3. For properties with 250 or more units, the program vendor leaves behind a quantity of LEDs equal to 1% of the total LEDs installed. For smaller properties, the property is instructed to contact the program vendor for replacement bulbs for those that quit working. This helps control overall program cost.
4. Smart thermostats are currently under consideration for addition to the program based on property manager feedback while ensuring that the offering is cost effective for customers.
5. Since the time period of the evaluation, the Service Agreement has been updated to include language regarding Quality Assurance and EM&V follow-up activities.

PERSON RESPONSIBLE: Jean Williams
Greg Simmons

Duke Energy Kentucky
Case No. 2020-00266
Staff First Set Data Requests
Date Received: September 28, 2020

STAFF-DR-01-009

REQUEST:

Refer to the application, Appendix F, page 7 of 18, Table 1-2.

a. Explain why programs have a Realization Rate less than 100 percent, thus indicating that verified savings is less than the reported savings estimates.

b. Explain if Duke Kentucky updates the reported savings estimates inputted into the programs that determine the total savings for the Smart $aver® Prescriptive Program and thus determine the cost-effectiveness of the program.

RESPONSE:

a. Each of the technologies (i.e., Lighting, HVAC, Food Service Products, etc.) listed in the Non-Residential Prescriptive program has a respective realization rate. The only technology which has a realization rate less than 100 percent is Lighting. The Lighting technology has a realization rate less than 100 percent due to adjustments the evaluator made to correct actual hours of use and update waste heat and coincident factors.

b. Duke Energy Kentucky updated the savings estimates reflected in the report for reporting and cost-effectiveness purposes.

PERSON RESPONSIBLE: Jean Williams

Duke Energy Kentucky
Case No. 2020-00266
Staff First Set Data Requests
Date Received: September 28, 2020

STAFF-DR-01-010

REQUEST:

Refer to the application, Appendix G.

a. Also, refer to the application, paragraph 4. Regarding the Save Energy and Water Kit Program (SEWKP), explain to which demand-side management program listed in paragraph 4 the SEWKP will be part of.

b. Provide the cost-effectiveness score for the SEWKP.

c. Refer to page 5 of 83. Explain how Duke Kentucky pre-selects a household.

RESPONSE:

a. Residential Smart $aver® Energy Efficient Products Program – Sheet No. 110

b. See STAFF-DR-01-010(b) Attachment.

c. Duke Energy Kentucky uses a propensity model to determine which households are eligible for the program offering. This model evaluates a number of inputs to provide a mathematical score that reflects the likelihood that the customer has an electric water heater. If Duke Energy Kentucky provides natural gas to the customer, then due to the high correlation between the availability of natural gas and its use to heat water, it is assumed the customer has a gas water heater.

PERSON RESPONSIBLE: Trisha Haemmerle – a.
Julie Hollingsworth – b.
Greg Simmons – c.

Program	Product Code	Measure I	Measure Name	UCT	TRC	RIM	PCT**
Residential Smart $aver®	SFEEAR	2979	Faucet Aerators SF DIY 1.0 GPM - bath	30.06	9.01	0.95	33.63
Residential Smart $aver®	SFEEAR	2980	Faucet Aerators SF DIY 1.0 GPM - kitchen	30.14	9.03	0.95	33.63
Residential Smart $aver®	SFEEPW	2997	Pipe Wrap SF DIY	18.06	6.40	0.94	71.34
Residential Smart $aver®	SFEESH	2993	LF Showerhead SF DIY 1.5 GPM	16.17	4.25	0.93	31.85