

KYPSC CASE NO. 2019-00277
AG 1ST SET DATA REQUESTS
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VERIFICATION

STATE OF OHIO)
) SS:
COUNTY OF HAMILTON)

The undersigned, Tom Wiles, Director Analysis, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the data request and that it is true and correct to the best of his knowledge, information and belief.



Tom Wiles Affiant

Subscribed and sworn to before me by Tom Wiles on this 24th day of October, 2019.



NOTARY PUBLIC

My Commission Expires: July 8, 2022



E. MINNA ROLFES-ADKINS
Notary Public, State of Ohio
My Commission Expires
July 8, 2022

VERIFICATION

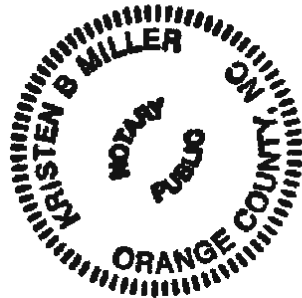
STATE OF NORTH CAROLINA)
)
COUNTY OF *Orange*) **SS:**

The undersigned, Jean P. Williams, Manager DSM Analytics, being duly sworn, deposes and says that she has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of her knowledge, information and belief.

Jean P. Williams

Jean P. Williams Affiant

Subscribed and sworn to before me by Jean P. Williams on this 21st day of October, 2019.



Kristen B. Miller

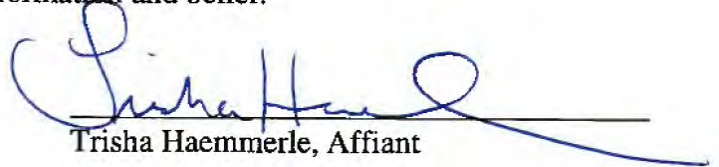
NOTARY PUBLIC

My Commission Expires: 11/29/2024

VERIFICATION

STATE OF OHIO)
) **SS:**
COUNTY OF HAMILTON)

The undersigned, Trisha Haemmerle, Senior Strategy & Collaboration Manager, being duly sworn, deposes and says that she has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of her knowledge, information and belief.


Trisha Haemmerle, Affiant

Subscribed and sworn to before me by Trisha Haemmerle on this 15th day of October, 2019.


NOTARY PUBLIC

My Commission Expires: July 8, 2022



E. MINNA ROLFES-ADKINS
Notary Public, State of Ohio
My Commission Expires
July 8, 2022

VERIFICATION

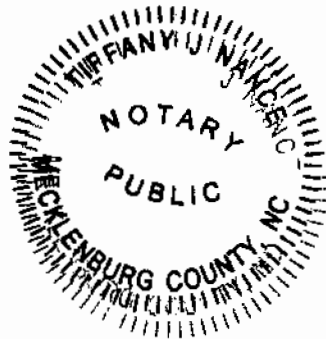
STATE OF NORTH CAROLINA)
) **SS:**
COUNTY OF MECKLENBURG)

The undersigned, Lari Granger, Manager Products & Services, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of her knowledge, information and belief.

Lari Granger

Lari Granger Affiant

Subscribed and sworn to before me by Lari Granger on this 16th day of October, 2019.



Tiffany J. Nam

NOTARY PUBLIC

My Commission Expires: February 1, 2023

VERIFICATION

STATE OF OHIO)
)
COUNTY OF HAMILTON) SS:

The undersigned, Bruce L. Sailers, Pricing and Regulatory Solutions Manager, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing post-hearing data requests and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

Bruce L. Sailers
Bruce L. Sailers, Affiant

Subscribed and sworn to before me by Bruce L. Sailers, on this 14TH day of December, 2019.



ADELE M. FRISCH
Notary Public, State of Ohio
My Commission Expires 01-06-2024

Adele M. Frisch
NOTARY PUBLIC

My Commission Expires: 1/5/2024

VERIFICATION

STATE OF OHIO)
) **SS:**
COUNTY OF HAMILTON)

The undersigned, Rose Stoeckle, Manager DSM Analytics being duly sworn, deposes and says that she has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of her knowledge, information and belief.

Rose Stoeckle
Rose Stoeckle, Affiant

Subscribed and sworn to before me by Rose Stoeckle on this 14TH day of OCTOBER, 2019.



ADELE M. FRISCH
Notary Public, State of Ohio
My Commission Expires 01-05-2024

Adele M. Frisch
NOTARY PUBLIC

My Commission Expires: 1/5/2024

Duke Energy Kentucky
Case No. 2019-00277
Attorney General's First Set Data Requests
Date Received: October 11, 2019

AG-DR-01-001

REQUEST:

Refer to the Application, page 6, paragraph 6. Provide a detailed explanation as to what degree the Residential Collaborative and Commercial and Industrial Collaborative were involved in the formulation of the Company's proposed changes. The explanation should include the timelines when collaborative members were provided information, the length of time afforded for feedback, the degree to which DEK considered and included feedback and the level of detail of the proposals provided to collaborative members at each stage of interaction.

RESPONSE:

The Residential Collaborative and Commercial and Industrial Collaborative is emailed about the changes to be filed in the amendment filing. An email was sent on August 7, 2019 and feedback was requested by August 12, 2019.

The Peak Time Rebate program was originally presented at the 2017 collaborative meeting on October 30, 2017. Collaborative members were informed about the program and feedback was requested for any questions or comments. The program was presented again at the 2018 collaborative meeting on November 1, 2018 with the same opportunity to provide questions or comments about the program.

The Non-Residential Smart Saver program requests are for measures that were previously approved and offered prior to the programs being suspended and are just being reinstated upon Commission approval.

The My Home Energy report is making changes to amend the program according to the Order received in Case No. 2017-00427 on September 13, 2018.

The new measures to be included in the Residential Smart Saver program would have previously been updated and approved by a letter informing the Commission of the changes. However, once the programs were suspended in 2018, the automatic approval with Commission notification was not assumed so they were filed as part of this proceeding.

Feedback was not received by any collaborative member concerning any changes to be filed as part of the amendment filing.

PERSON RESPONSIBLE: Trish Haemmerle

REQUEST:

Refer to the Application, pages 5-6. In regards to the Online Saving Store, provide a narrative explanation of how customers interact with it, including how they purchase items, how incentives and purchase limits are shown, and how incentive amounts are provided. Along with the narrative explanation, provide screen grabs of the website that reflect each step, including those reflecting incentives as noted above.

RESPONSE:

In regards to the Online Saving Store, the customer may learn about the program through a campaign offer (i.e. Direct Mail or Email) or browsing the Duke Energy public website. The customer would navigate to the product page and authenticate to check eligibility to shop for incentivized products offered on the Online Saving Store. Once authenticated the customer would transition to the Online Store home page and begin their shopping experience. The customer may search for products by clicking on the featured product tiles, drop-down menu, or search for an item on the home page. Each product offered on the store can be viewed at the product level to see more information specifically about the product (i.e. type, hours, temperature, lumens, application etc.). The retail price, Duke Energy rebate and final customer price is available at multiple levels; the category pages or detailed product pages. Customer may also add product to their wish list or comparison list. Purchase limits are applied based on purchase history as only 36 bulbs are available per individual account. Customers may add products to their shopping cart and begin the

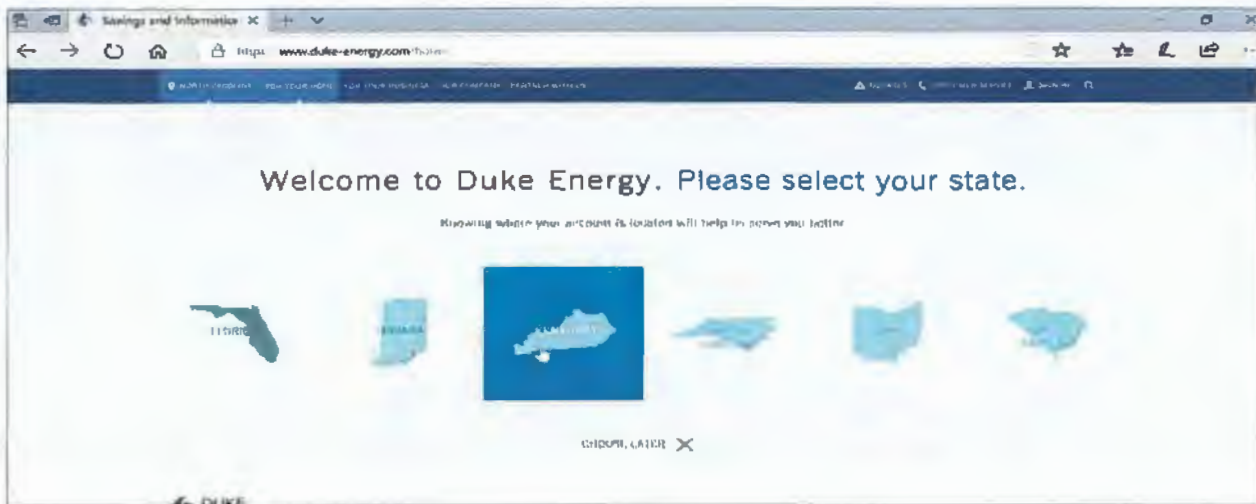
checkout process. The flowchart includes screenshots for the customers shopping experience.

Please see AG-DR-01-002 Attachment.

PERSON RESPONSIBLE: Lari Granger

DEK Online Shopping Experience

1. Customer goes to Duke Energy website and selects state



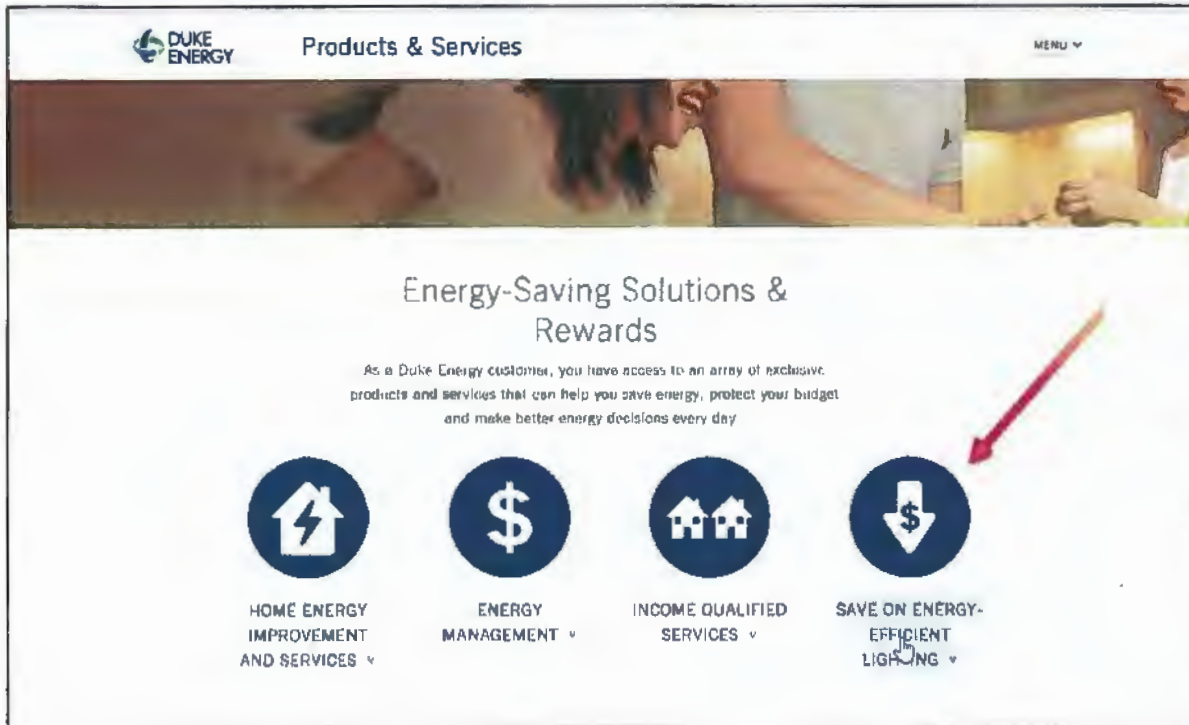
2. Customer navigates to the "For Your Home" page and chooses Products & Service

- a. Customer may also receive a direct mail campaign with a unique URL directing them to the program page.

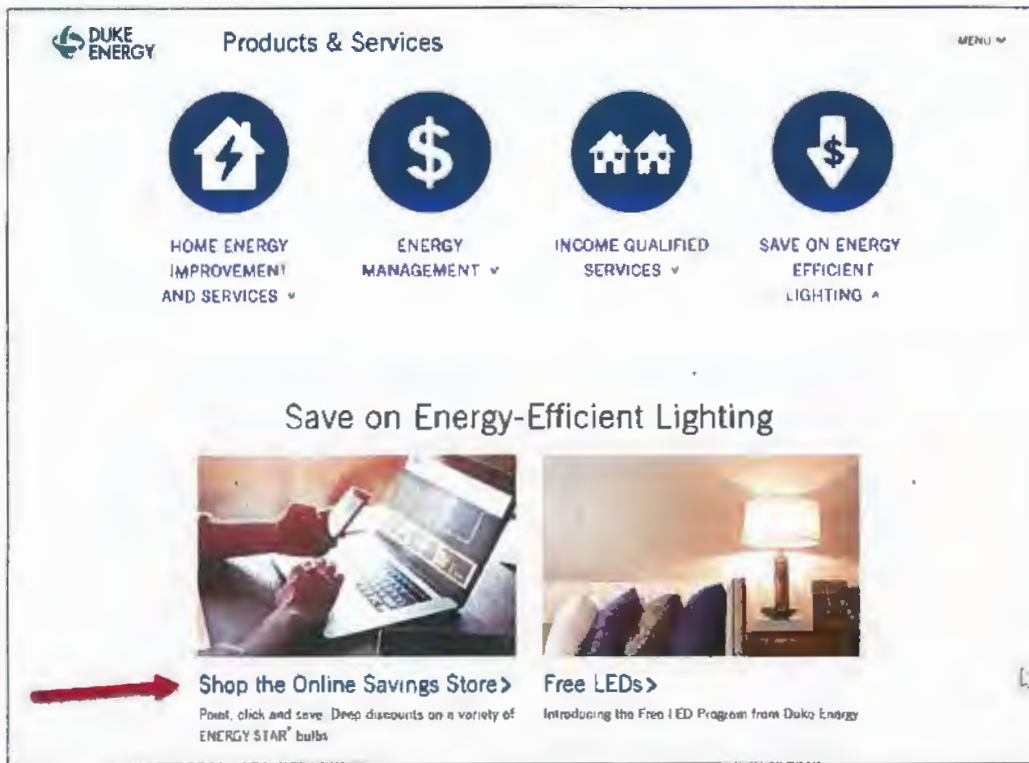


DEK Online Shopping Experience

3. On the Products & Services page, the customer would choose "Save on Energy Efficient Lighting".

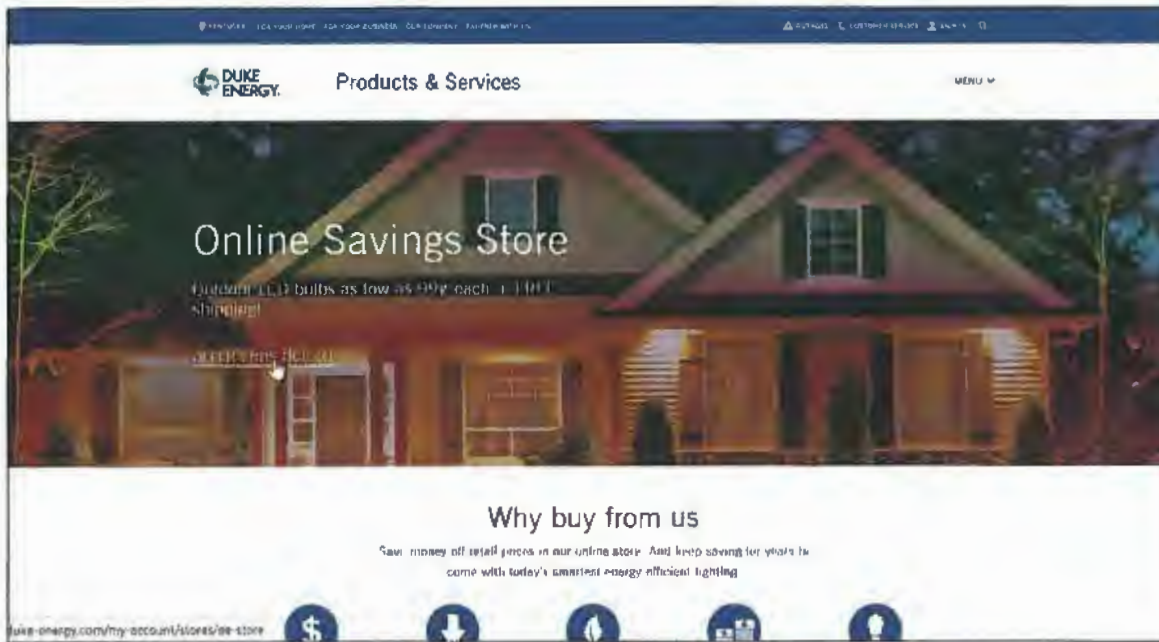


4. Customer would see the "Shop the Online Saving Store and click the link to navigate to the program page.

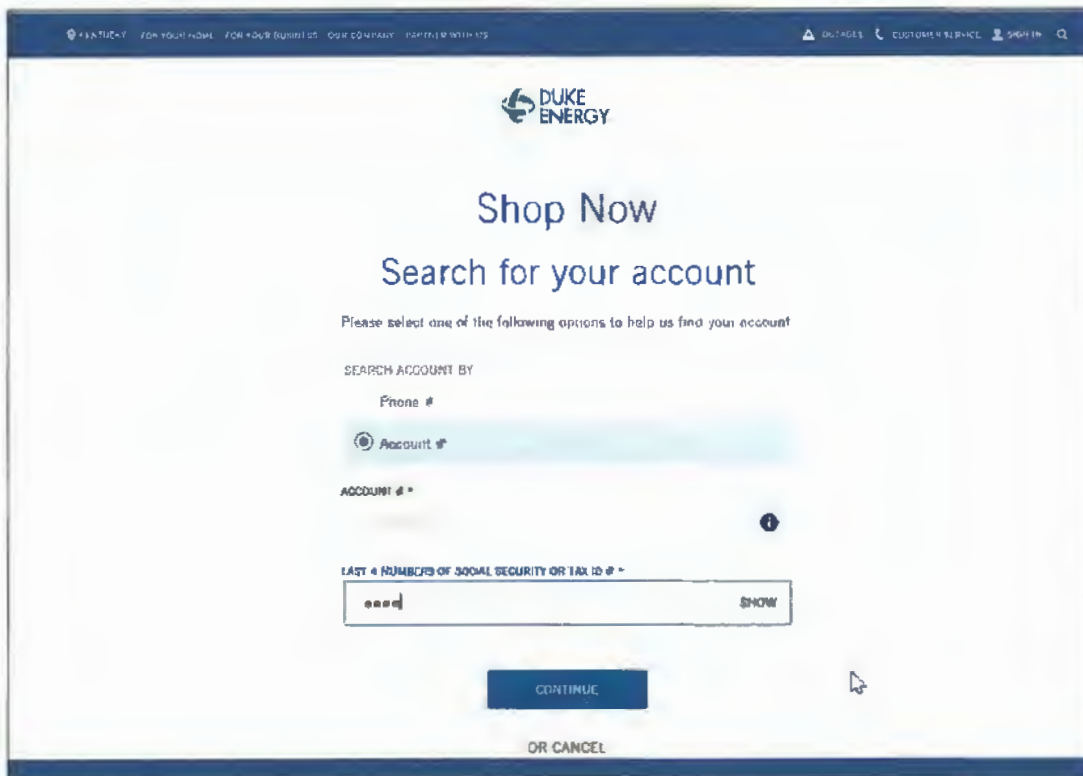


DEK Online Shopping Experience

5. On the program page, the customer can learn about the program and click to begin the authentication process.

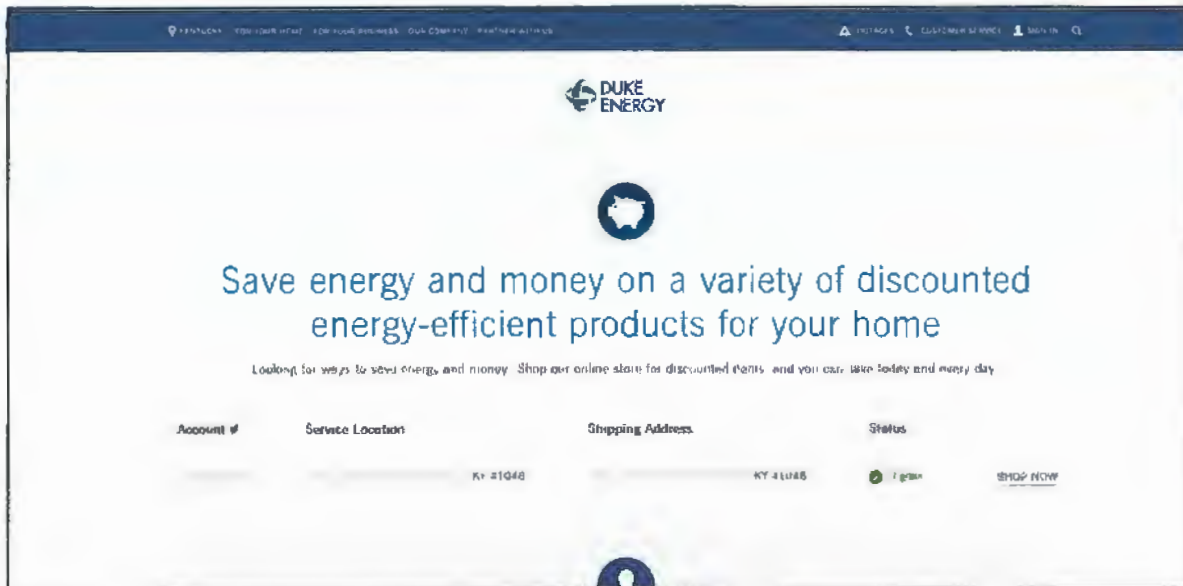


6. Customer may enter phone or account number plus last 4 digits of SSN



DEK Online Shopping Experience

7. Customer will be presented with eligibility status and shop now link to navigate to the online store.



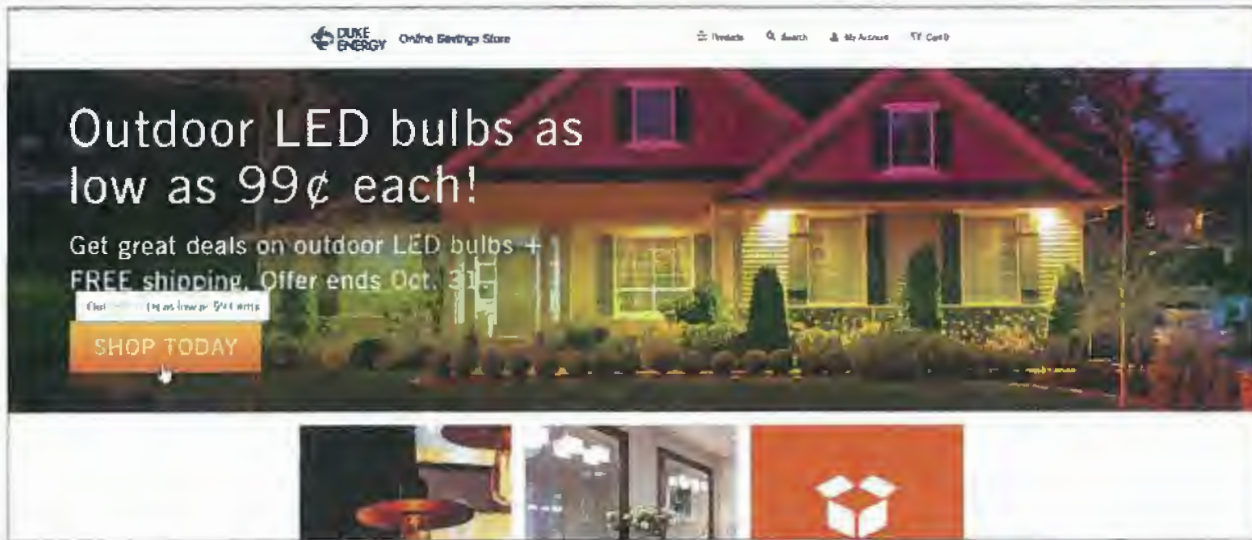
8. Clicking the "Shop Now" link will open the DEK online marketplace.

a. Note the consistency with the campaign imagery similar to the Duke Energy website.



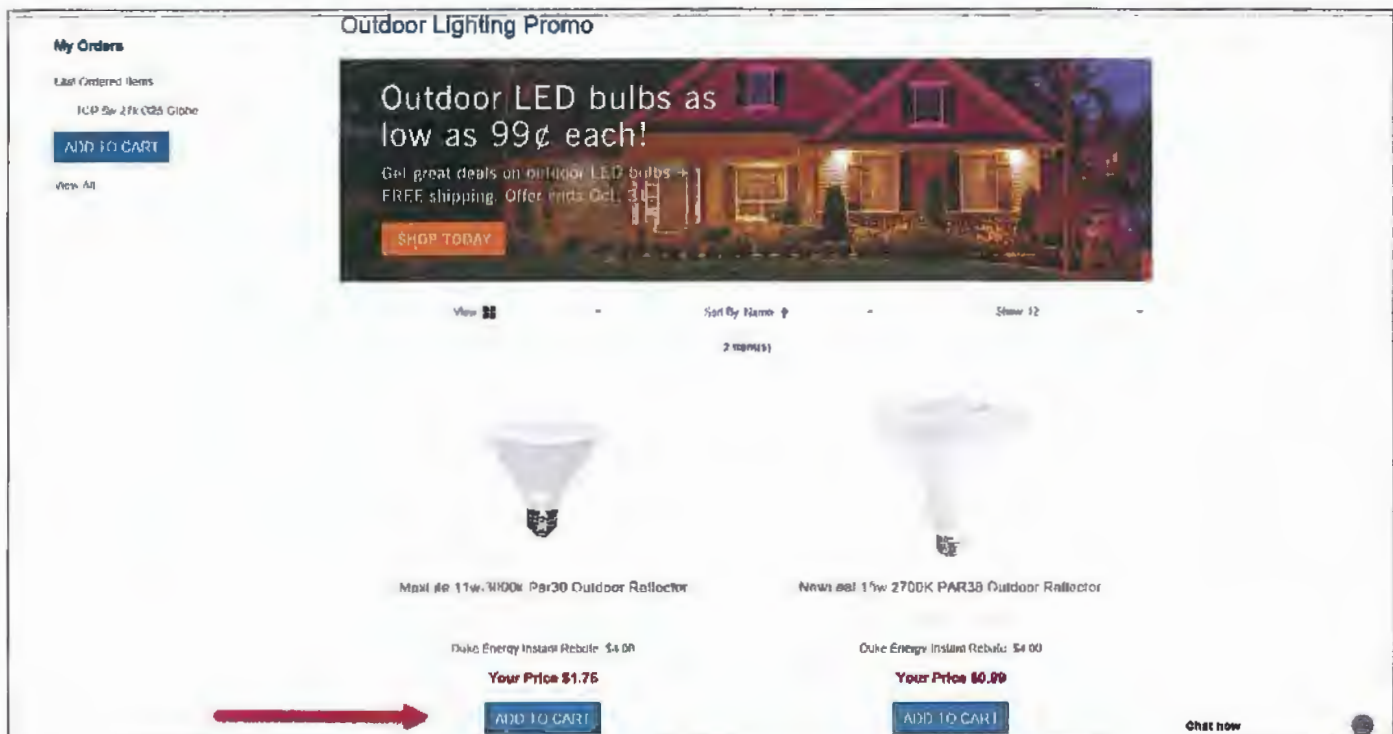
DEK Online Shopping Experience

9. Customer can click to see the special for the LED bulbs



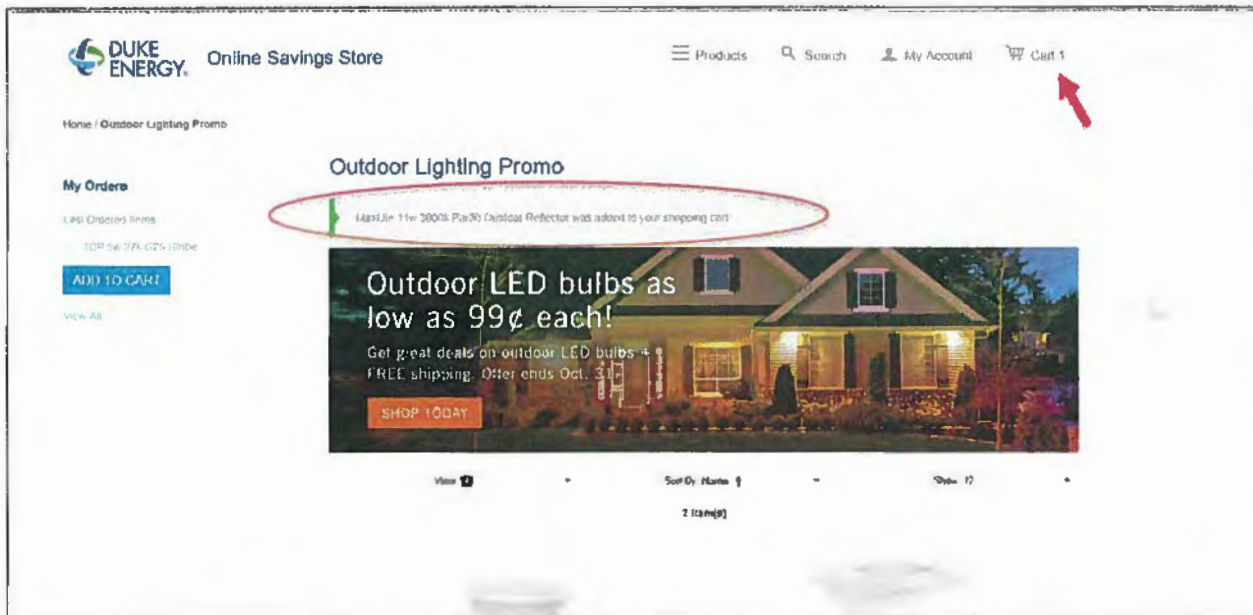
10. Product page for specials will show bulb available for the offer. Retail price, Duke Energy Rebate and customer price is shown for each product.

a. You may click on the item for more information on the product or simply "add to cart"

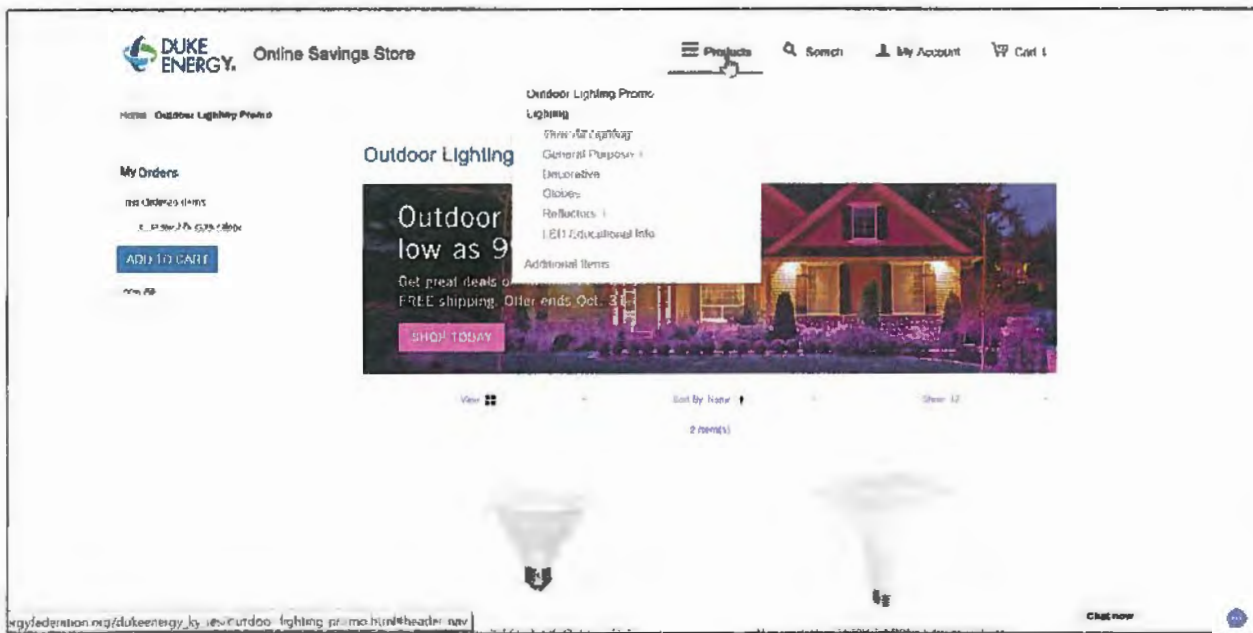


DEK Online Shopping Experience

11. Message available shows item added to cart and updated shopping cart with quantity.



12. Customer can continue to shop by choosing more products from the dropdown menu.



DEK Online Shopping Experience

Example of detail on product page for 3 way bulb and purchase limit language (second screenshot)

Filter By

General Purpose 3-Way X

Clear All

RETAIL PRICE >

BRIGHTNESS >

BULB TYPE >

LIGHTING TECHNOLOGY >

COLOR TEMPERATURE CATEGORY >

My Orders

all Ordered Items

TCP 5w 27k G25 Globe

ADD TO CART

View All

General Purpose

Capsules have a wide range of uses including table and floor lamps with clip-on shades, pendants, wall sconces and ceiling lights. LEDs become fully bright immediately after being turned on. Certain LED capsule bulbs are compatible with dimmer switches in which the light typically dims down to 20 percent of the bulb's full brightness, providing ambiance.

The total limit per customer account, for all categories of bulbs, is 36 at the incandescent price. If you previously purchased from our Savings Store and have met that limit, you are ineligible to purchase additional incandescent bulbs through our Savings Store. Visit the Additional Items section to order products without purchase limits.

Chat now

DUKE ENERGY Online Savings Store

Products Search My Account Cart 0

Home / Lighting / General Purpose / MaxLite 14w 30K 3-Way A19

This product (#R2010 309) has a limit of 36 per household. To add a different item, please delete the current item and select a new product.

MaxLite 14w 30K 3-Way A19

Availability in stock

Duke Energy Instant Rebate \$1.00

Your Price \$2.98

Qty 1 ADD TO CART

Add to Wishlist Add to Compare

Details

This MaxLite 3-Way bulb offers three distinct levels of light when used in a lamp with a 3-way socket. At its lowest level it will draw 4 watts of electricity, producing 500 lumens of light (a 29-watt incandescent equivalent). The middle setting will use 8 watts of electricity, producing 1,000 lumens of light (a 43-watt incandescent equivalent). At its highest setting it will consume 16 watts of electricity, producing 1,500 lumens of light (a 77-watt incandescent equivalent).

Key Features

- 3000 degree Kelvin warm white light
- Omnidirectional (light will be projected in all directions)
- 25,000 hour life (22.8 years when used 3 hours per day)

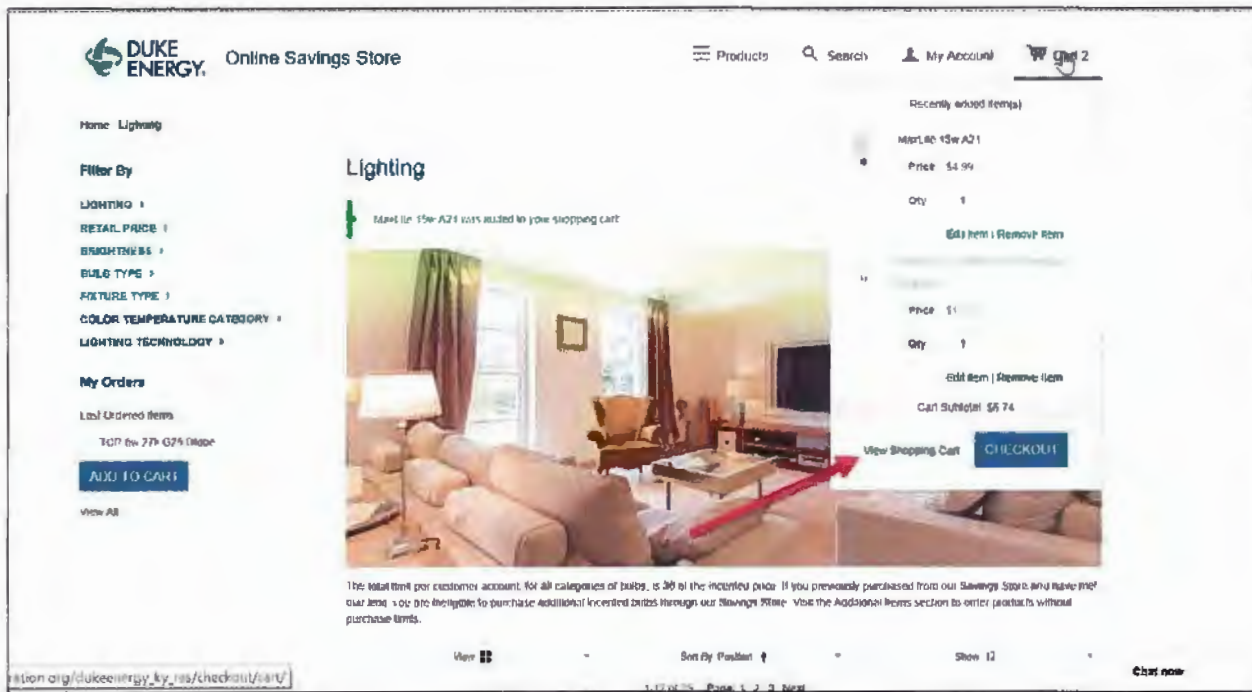
Additional Information

More Views

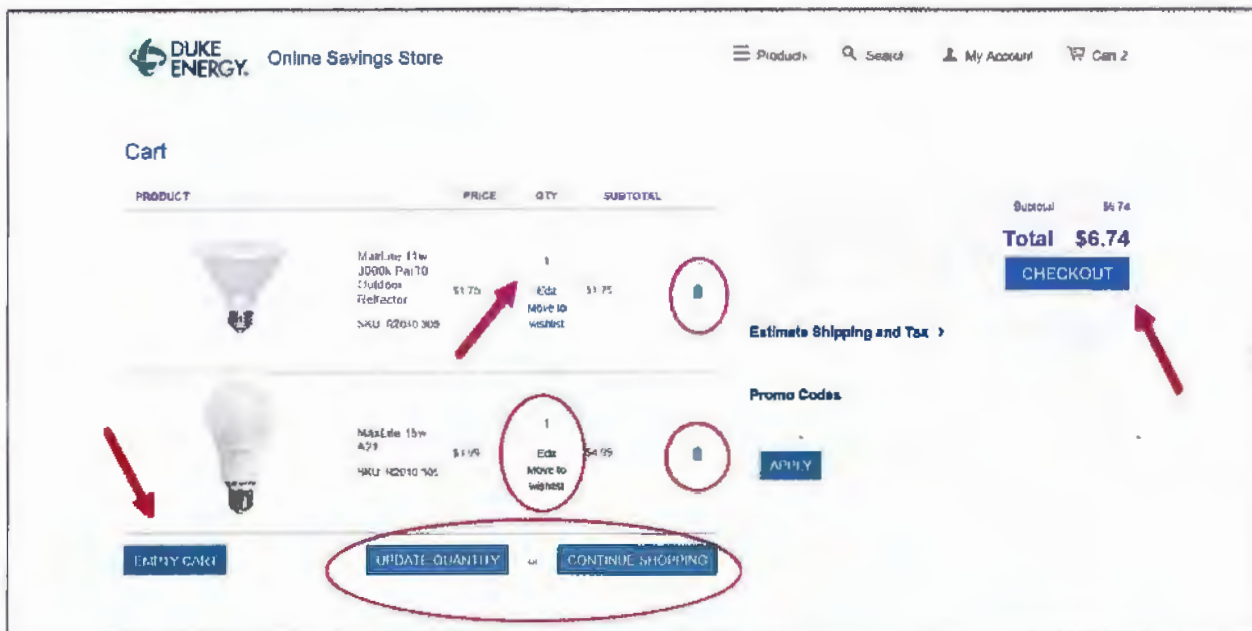
Customer may not purchase more than 36 bulbs total, per account. An error message will be presented in the event the customer tries to place more items in their cart than what is allowed.

DEK Online Shopping Experience

14. Prior to checkout, customer may choose to view items in the shopping cart and make any necessary changes (i.e. edit or remove).



15. Multiple ways to manage the shopping cart as shown below.
 a. Click "Checkout" to begin the purchasing process



DEK Online Shopping Experience

16. Step 1 & 2 – confirming the billing & shipping address.

- a. Duke Energy provides the address information associated with the account when the customer is transitioned over to the online store.

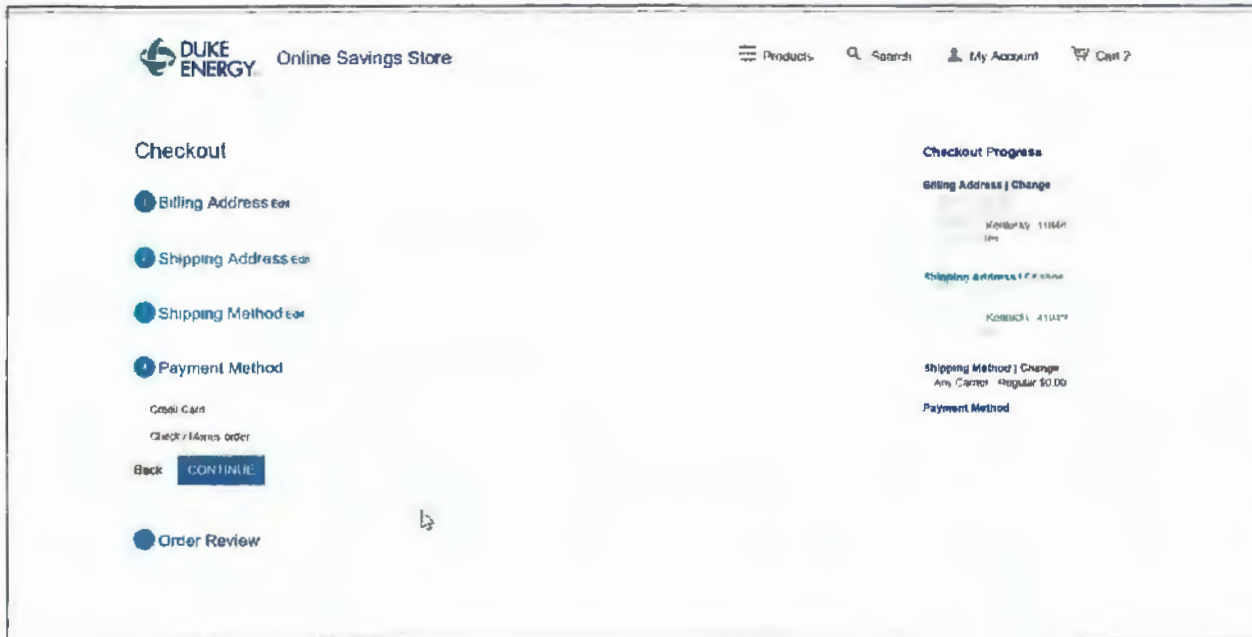
The screenshot shows the 'Checkout' page for the 'DUKE ENERGY Online Savings Store'. The page is divided into a main content area on the left and a 'Checkout Progress' sidebar on the right. The main content area shows '1 Billing Address' as the active step, with a dropdown menu for 'Kentucky 41048, United States'. Below this is a 'CONTINUE' button. The sidebar shows the progress: 'Billing Address' (active), 'Shipping Address', 'Shipping Method', 'Payment Method', and 'Order Review'. A 'Chat now' button is visible in the bottom right corner.

17. Step 3 – confirm the shipping method.

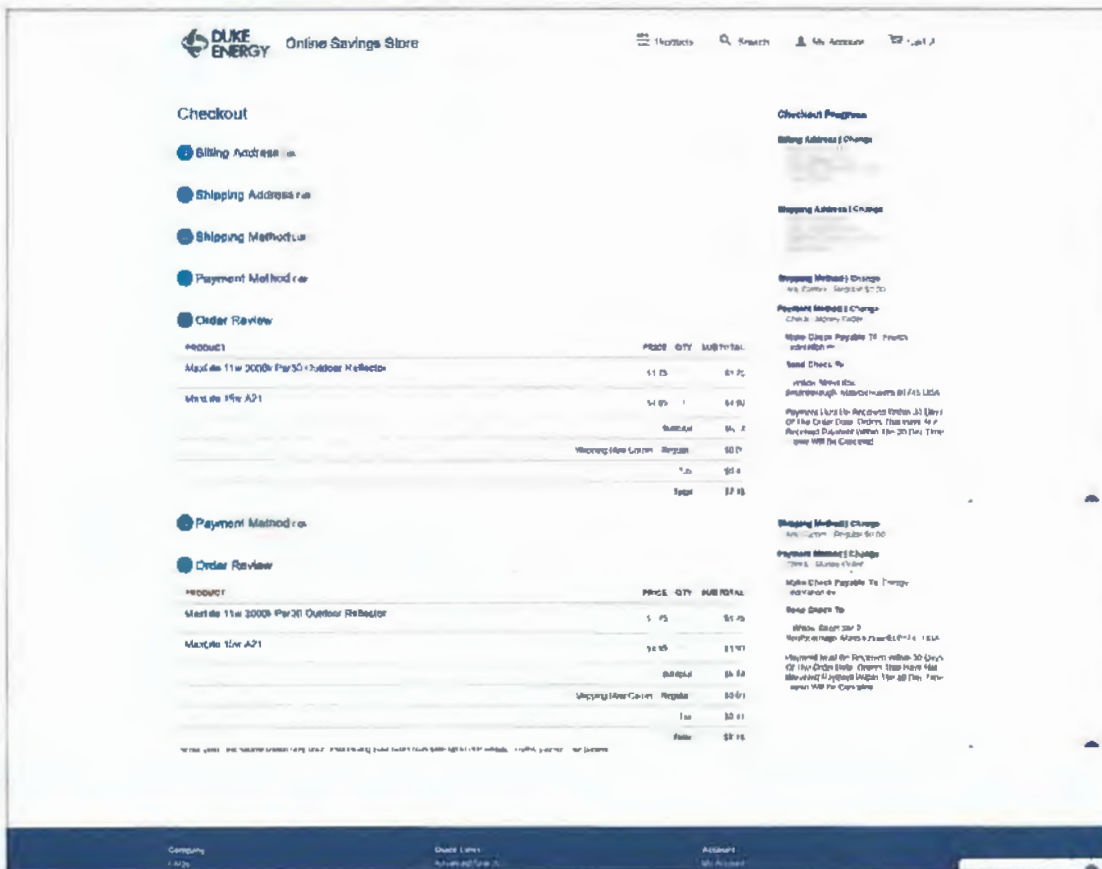
The screenshot shows the 'Checkout' page for the 'DUKE ENERGY Online Savings Store' at the 'Shipping Method' step. The main content area shows '3 Shipping Method' as the active step. Below this, there are options for 'United States Postal Service' and 'USPS Retail Ground \$7.95'. A 'Regular \$0.00' option is also visible. A 'Back' button and a 'CONTINUE' button are present. The sidebar shows the progress: 'Billing Address | Change', 'Shipping Address | Change', 'Shipping Method' (active), and 'Payment Method'. The 'CONTINUE' button is highlighted.

DEK Online Shopping Experience

18. Step 4 – Confirm the payment method (i.e. Check or credit card).

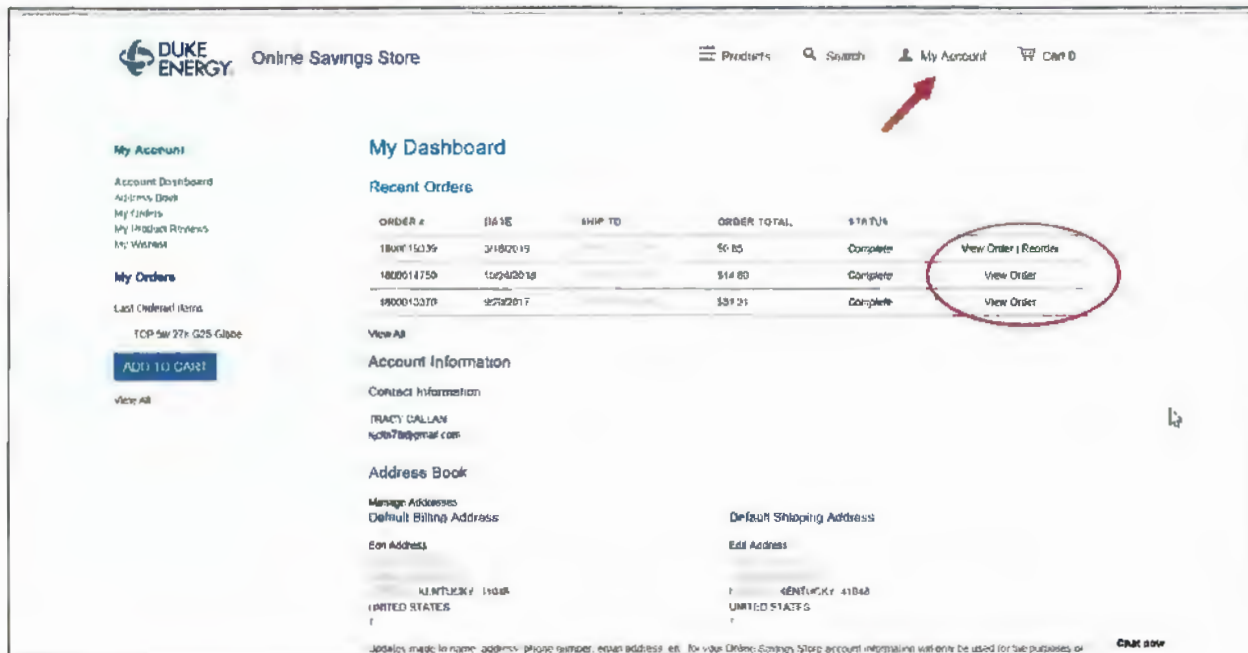


19. Step 5 – confirm the order for items in the cart and complete the order.

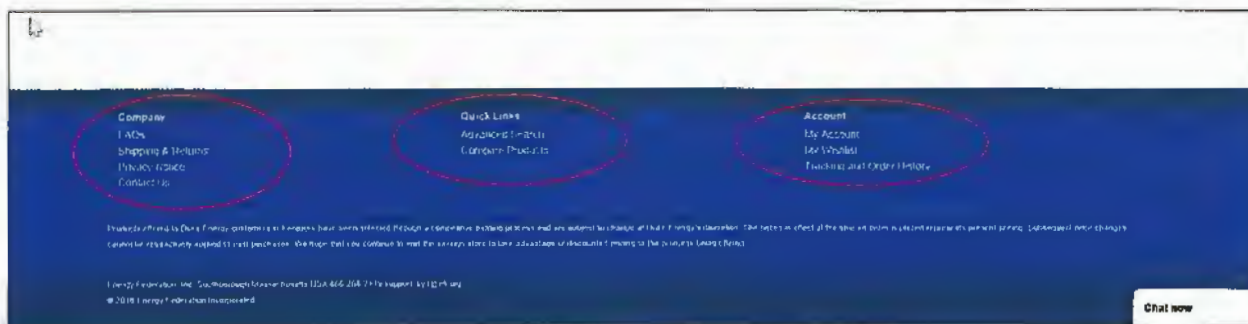


DEK Online Shopping Experience

20. The customer can review their account and order history by clicking on the "My Account" at the top of each page.
- Any orders places are available with the status, ability to view and ability to reorder.
 - Customer may also review the wish list or product reviews associated with their account.



21. At the footer of each page, the customer may access FAQ's, policies for shipping and returns and access their account information.



AG-DR-01-003

REQUEST:

Refer to the Application, page 6. Explain why the implementation of the Energy Independence and Security Act “will diminish the impact of the [Free LED] program as well as its cost effectiveness, therefore, no longer making it a viable program for the company to continue to offer.”

RESPONSE:

In anticipation of the DOE ruling, the assumption was that LEDs would become the baseline for Aline general service bulbs. Since the Free LED program offers Aline bulbs in the program, it seemed the ruling would therefore no longer make the measure cost effective. Duke Energy Kentucky will continue to offer Free LEDs through Q2 2020 to continue to reach eligible customers and ensure full utilization of inventory purchased for the program. During this time, Duke Energy Kentucky will continue to offer the program through low cost channels to ensure the program is cost effective.

PERSON RESPONSIBLE: Lari Granger
Jean Williams

**Duke Energy Kentucky
Case No. 2019-00277
Attorney General's First Set Data Requests
Date Received: October 11, 2019**

AG-DR-01-004

REQUEST:

Refer to the Application, page 7, paragraph 8. Explain how DEK plans to expand the scope of the My Home Energy Report program while simultaneously reducing the budget.

RESPONSE:

In 2019, we will be expanding the My Home Energy Report program to also be offered through the Duke Energy Mobile App. This channel will allow current participants in the program to see their usage comparison, usage breakdown, as well as energy efficiency tips on the mobile app. It will also offer an additional marketing channel for customers to enroll in the program if they are eligible.

Enabling customers to enroll in the program through the Duke Energy Mobile App will reduce the marketing budget that would have otherwise been required with the new opt-in design to obtain new participants through direct mail or email.

PERSON RESPONSIBLE: Tara Bolen

REQUEST:

Refer to DSM Program EM&V at DEK, and any affiliate companies, generally.

- a. Provide any policies DEK has developed and complies with to ensure DSM program EM&V project work is unbiased.
- b. Provide the amount DEK and all affiliate companies spent on DSM program EM&V in each of the years 2016, 2017, and 2018.
- c. Provide a list of all EM&V vendors DEK and all affiliate companies used from 2016 to 2018, along with the amounts paid to each.

RESPONSE:

- a. Duke Energy Kentucky has developed and complies with various policies to ensure DSM program EM&V work is unbiased, including:
 - Creating an organizational separation whereby there is internal staff dedicated to program EM&V responsibilities which is separate from internal staff dedicated to program implementation;
 - Implementing an EM&V framework whereby DSM program EM&V project work is conducted by third-party, independent evaluators which have no financial stake in the evaluation results;
 - Incorporating a randomized control trial design when applicable which eliminates selection bias when evaluating program impacts between those

participants randomly selected to be part of the treatment group versus those participants randomly selected to be part of the control group;

- Incorporating quasi-experimental designs when applicable through the use of matched comparison groups. This evaluation design minimizes bias by constructing a non-random control group that is made up of households that are as similar to the treatment groups as possible;
- Conducting participant surveys to establish free ridership and spillover as quickly as possible after program participation so as to mitigate response-bias.

b. Objection. Over broad and unduly burdensome insofar as it seeks information that is not related to the Company's application in these proceedings, and thus is irrelevant. Moreover, this request seeks information that is publicly available and accessible to the Attorney General. Without waiving said objection, and to the extent discoverable, this request seeks information that is DSM program EM&V costs for 2016, 2017, and 2018 are filed in each respective jurisdiction, therefore are publicly available. The file indicating the amount that Duke Energy Kentucky spent on EM&V in each of the years 2016, 2017, and 2018, by EM&V vendor, is attached as AG-DR-01-005 Attachment.

In the spirit of discovery, the respective jurisdictional case numbers with links are included. Note that no EM&V is conducted in Duke Energy Florida, therefore EM&V costs are not applicable in that jurisdiction. In addition, Duke Energy Progress and Duke Energy Carolinas filings state that EM&V costs do not exceed 5% of total program costs, however the filings do not provide exact EM&V costs paid in 2016, 2017, and 2018.

- Duke Energy Ohio filings, with EM&V program costs, can be found in the following cases:

- 2016: Case No. 17-781-EL-RDR

<http://dis.puc.state.oh.us/TiffToPDF/A1001001A17C31B34729D04434.pdf>

- 2017: Case No. 18-397-EL-RDR

<https://dis.puc.state.oh.us/DocumentRecord.aspx?DocID=d5f41bd5-cd0f-46ac-8dbc-f95c69067519>

- 2018: Case No. 19-622-EL-RDR

<https://dis.puc.state.oh.us/TiffToPDF/A1001001A19C29B15440I04512.pdf>

- Duke Energy Indiana filings, with EM&V costs, can be found in the following case numbers:

- 2016: Cause No. 43955 DSM-5, Public Workpapers of Karen Holbrook

<https://iurc.portal.in.gov/legal-case-details/?id=a3ce155d-c40a-e811-811c-1458d04e2fb8>

- 2017: Cause No. 43955-DSM-6, Public Workpapers of Karen Holbrook

<https://iurc.portal.in.gov/legal-case-details/?id=1f00e516-be9c-e811-8140-1458d04ece60>

- 2018: Cause No. 43955 DSM-7, Public Workpapers of Karen Holbrook

<https://iurc.portal.in.gov/legal-case-details/?id=6f3277cc-04e9-e911-a98b-001dd800c973>

c. Objection. This request is overly broad and burdensome and seeks information that is irrelevant to the Company's application in this proceeding insofar as it seeks information of affiliates of Duke Energy Kentucky that are not regulated by the Kentucky Public Service Commission. In the spirit of discovery however, Duke Energy Kentucky utilized the services of four (4) EM&V vendors in 2016, 2017, and 2018, that being TecMarket Works/Cadmus, Navigant, Nexant, and Opinion

Dynamics Corporation. Total costs of EM&V associated with these vendors is referenced in the immediate preceding data response.

PERSON RESPONSIBLE: Jean Williams

Duke Energy Kentucky
 EM&V Costs by Program

Summary by Vendor

Residential Programs	Vendor	Fiscal Year			Fiscal Year	EM&V Vendor		
		2015/2016	2016-2017	2017-2018		Nexant	TecMarket Works/Cadmus	Navigant
Appliance Recycling Program	n/a	\$ -	\$ -	\$ -	2015/2016	\$ 37,432	\$ 64,990	\$ 354
Energy Education for Schools (NEED)	Nexant	\$ 16,427	\$ 76,492	\$ 1,947	2016/2017	\$ 98,236	\$ 602	\$ 41,752
Energy Education for Schools (NTC)	TecMarket Works/Cadmus*	\$ 27,065			2017/2018	\$ 61,348	\$ -	\$ 9,320
Energy Education for Schools (NTC)	Nexant			\$ 19,361	TOTAL	\$ 197,016	\$ 65,592	\$ 51,426
Low Income Neighborhood	TecMarket Works/Cadmus	\$ 1,020						
Low Income Services	n/a	\$ -	\$ -	\$ -				
My Home Energy Report	Nexant			\$ 1,339				
Residential Energy Assessments	n/a	\$ -	\$ -	\$ -				
Residential Smart Saver (Specialty Bulb)	TecMarket Works/Cadmus	\$ 840						
Residential Smart Saver (HVAC)	TecMarket Works/Cadmus	\$ 4,212						
Residential Smart Saver (SEWK)	Nexant		\$ 6,083	\$ 3,128				
Power Manager	Nexant	\$ 21,005	\$ 15,661	\$ 6,932				
Power Manager for Apartments	n/a	\$ -	\$ -	\$ -				
Non-Residential Programs								
Power Manager for Business	n/a	\$ -	\$ -	\$ -				
PowerShare	Navigant	\$ 354	\$ 11,381	\$ 4,992				
Small Business Energy Saver	Navigant		\$ 30,371	\$ 4,328				
Smart Saver Non-Residential Performance Incentive Program		\$ -	\$ -	\$ -				
Smart Saver Custom	TecMarket Works/Cadmus	\$ 30,405	\$ 602					
Smart Saver Custom	Nexant			\$ 28,641				
Smart Saver Non-Residential Prescripti	TecMarket Works/Cadmus	\$ 1,448						
TOTAL		\$ 102,776	\$ 140,590	\$ 70,668				

* Cadmus acquired TecMarket Works in 2015

REQUEST:

Refer to the PTR Pilot descriptions on Application pages 8-12. Regarding the PTR Pilot impact and benefit measurement:

- a. Provide a demand and energy impact estimation plan for the PTR Pilot.
- b. Describe any plans DEK has to distinguish, and evaluate separately, summer PTR impacts and winter PTR impacts.
- c. Will the impact estimates from the PTR Pilot serve as the basis for full PTR roll-out impact projections? If not, explain why not.
- d. Describe how DEK will translate estimated demand and energy impact from PTR into economic, system-wide benefits to DEK and customers.
- e. Explain how demand and energy impacts will affect DEK's load obligation used in DEK's FRR plan. If any value could be derived from the demand and energy impacts in reducing load obligations in the event PTR was applied system wide, explain the derivation of such value and the impact of same.

RESPONSE:

- a. The EM&V plan from Nexant, the evaluator, is being provided in response to AG-DR-01-007 as AG-DR-01-007(e) Confidential Attachment.
- b. As a result of the discussion with the Kentucky Collaborative, the methodology chosen for the impact analysis is a difference-in-differences analysis to compare

REQUEST:

Refer to the PTR Pilot descriptions on Application pages 8-12. Regarding the PTR Pilot EM&V vendor:

- a. Identify the vendor DEK has selected to estimate the impact of the PTR Pilot.
- b. Provide a list of projects, including descriptions and dollar amounts paid for each project, for which the selected vendor has provided service to DEK or any affiliate companies over the past five (5) years.
- c. Is the selected vendor's work specific to the PTR Pilot, or will the selected vendor evaluate other DEK DSM program impacts as well?
- d. Provide a copy of all contracts currently in effect between the selected vendor and DEK or any affiliate company of DEK.
- e. Provide the request for proposal ("RFP") and all vendor responses DEK received during the process of selecting an EM&V vendor for the PTR Pilot.
- f. Describe the process DEK followed to identify qualified vendors, distribute the RFP, and encourage responses to the RFP from qualified vendors.

RESPONSE:

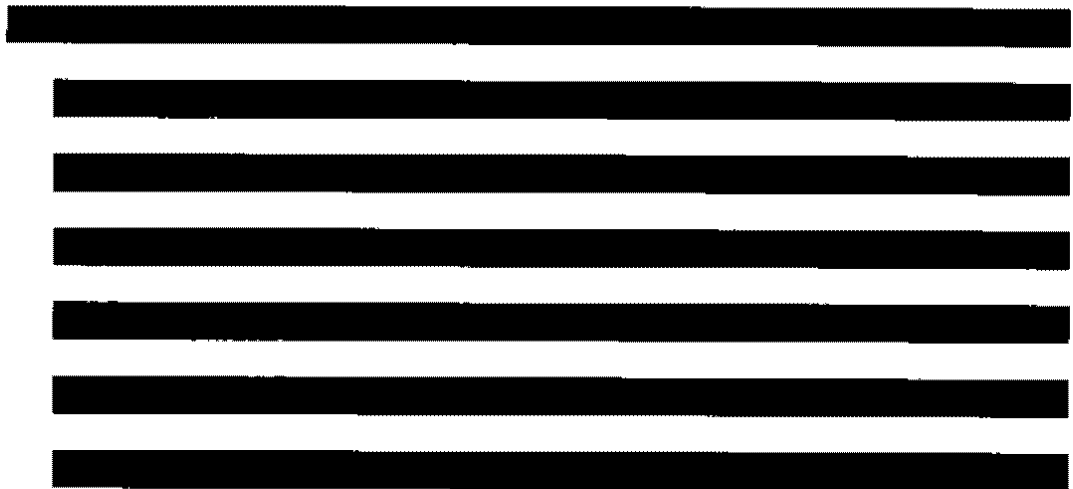
CONFIDENTIAL PROPRIETARY TRADE SECRET

- a. The vendor selected to estimate the impact of the PTR Pilot is Nexant.
- b. Objection. This request is overly broad and burdensome. Without waiving said objection, to the extent discoverable, and in the spirit of discovery, the list of

projects, including descriptions and dollar amounts paid for each project, for which Nexant provided services to DEK over the last 5 years is:



- c. Nexant will continue to evaluate other DSM programs.
- d. Objection. This request is overly broad and burdensome, and seeks information that is irrelevant to the Company's application in this proceeding insofar as it seeks information of affiliates of Duke Energy Kentucky that are not regulated by the Kentucky Public Service Commission. Without waiving said objection, to the extent discoverable, and in the spirit of discovery, The Nexant Master Services Agreement is attached as AG-DR-01-007(d) Confidential Attachment.
- e. Attached as AG-DR-01-007(e) Confidential Attachments 1 and 2 is the request for proposal ("RFP") and the vendor response.



[REDACTED]

PERSON RESPONSIBLE: Rose Stoeckle

**CONFIDENTIAL PROPRIETARY TRADE
SECRET**

**AG-DR-01-007(d) CONFIDENTIAL
ATTACHMENT**

FILED UNDER SEAL

**CONFIDENTIAL PROPRIETARY TRADE
SECRET**

**AG-DR-01-007(e) CONFIDENTIAL
ATTACHMENT 1**

FILED UNDER SEAL

**CONFIDENTIAL PROPRIETARY TRADE
SECRET**

**AG-DR-01-007(e) CONFIDENTIAL
ATTACHMENT 2**

FILED UNDER SEAL

REQUEST:

Refer to the PTR Pilot description on Application pages 8-12. Regarding PTR Pilot design:

- a. What are the objectives of the PTR Pilot?
- b. Provide a list of questions the PTR Pilot will answer.

RESPONSE:

- a. As stated in the stipulation on page 9 in Case No. 2016-00152, "The intent of the PTR Pilot will be to collect the information from voluntary participants needed to properly evaluate the potential addition of a Peak-Time Rebate program that could be made available to all eligible residential customers."
- b. Beyond researching how customers respond to Critical Peak Events (CPE), the stipulation in Case No. 2016-00152 specifies that the EM&V report should address the following questions.
 - a. Did the chosen bill credit motivate behavior change?
 - b. Were customers properly identified for the bill credit and paid accordingly?
 - c. Was the marketing campaign successful?
 - d. Were customers effectively educated and motivated to use the program?
 - e. Did event notifications reach the customer such that they could effectively respond to the event?
 - f. What reasonable enhancements, if any, could be made cost effectively to continue the PTR Program?

PERSON RESPONSIBLE: Bruce Sailors

REQUEST:

Refer to the PTR Pilot description on Application pages 8-12. Regarding Critical Peak Events (CPEs):

- a. Provide the process DEK will follow daily in determining whether or not to call a CPE for the next day.
- b. Describe the rationale for allowing CPEs to be called as little as one hour in advance. Include in this rationale how DEK balanced the system-wide, incremental economic benefits of CPE notices issued as little as one hour in advance with countervailing issues such as customer satisfaction, reduced response, and reduced PTR Pilot impacts. Further, include in the rationale a discussion of the consequences of such a policy of allowing CPEs to be called as little as one hour in advance on PTR impact.
- c. Did DEK consider limiting CPE notices to no later than 8:00 p.m. the day prior to the CPE?
- d. Will DEK commit to limiting CPEs to those for which notices can be provided to customers by 8:00 p.m. the day prior to the CPE? If not, explain why not.
- e. The Application indicates DEK may send out reminder notices to customers just prior to the start of each CPE. Will DEK commit to doing this for every CPE? If not, explain why not.

- f. Describe all communications channels from which customers will be able to select for CPE notifications. State also whether the number of communications channels will increase once Duke's new Customer Information System is fully operational, and if so, describe each such new communication method.
- g. Describe all general (non-customer specific) communications channels to which participating customers might be exposed (Company website, Facebook page, etc.) that DEK plans to use to communicate CPEs. Explain whether system-wide deployment of PTR would open additional communication channels as compared to the PTR pilot.
- h. Did DEK consider instituting a limit to the maximum number of CPEs it could call in any week, month, season, or year? If so, provide the details of such considerations, including associated issues, impacts, pros, and cons.
- i. Did DEK consider instituting a minimum number of CPEs it could call in any week, month, season, or year? If so, provide the details of such considerations, including associated issues, impacts, pros, and cons.

RESPONSE:

- a. The determination to implement a CPE will be accomplished by the Company's demand response group. These professionals have experience with demand response implementation review. They will primarily be using projected load and implement events on the expected highest load days of the year; although consideration of temperature forecasts, regional reserve amounts, and LMP prices may also provide insight in determining a CPE. In addition, while the PTR Pilot program does not have a maximum number of CPEs (i.e., since customers have the option to respond or not respond to any individual event), a range of 16 to 25 CPEs

per year will be targeted. This range should provide opportunity for participants to earn savings and stay engaged in the program but also provide a targeted upper limit on events to avoid customer fatigue.

- b. From a system operations perspective, demand response programs with shorter lead times to implement can be more valuable when unforeseen operational issues arise. Further, some regional entities, such as PJM, require very short implementation lead times for demand response programs to qualify as a capacity resource. [Note that the PTR Pilot program will not meet PJM capacity requirements.] The PTR Pilot program is proposed to be flexible to assess a short implementation time. While it is likely that almost all PTR implementations will be determined before 8 pm on a day ahead basis, the Company may call an event or two with very short notice to measure customer acceptance and response. Customers are not obligated to participate in any individual event which should limit customer dissatisfaction. This approach strikes a balance between customer and operations issues and can provide insight into a permanent approach if the PTR Pilot should continue beyond the pilot phase.
- c. Yes.
- d. No. See answer to (b) above.
- e. No. The Company intends to use the pilot to review customer response when a reminder is sent and when a reminder is not sent. This communication may or may not have a significant impact.
- f. The PTR Pilot program requires customers to provide and maintain either an email address or a text message number. Other channels could be considered in the future including automated telephone calls and social media. Customer Connect will add

new dimension to existing programs by allowing customers to select their preferred channel of communication (i.e., email, text message, phone call) and will interface with other systems to send the communication.

- g. Targeted customers for enrollment will receive email and potentially direct mail, and will be referred to a webpage available to them containing information on the pilot program. In addition, customers may elect to provide a text message number for pilot communication purposes. Since the pilot has a limited enrollment, the Company will not use mass market communication channels such as radio, TV, social media, and the Company's main website pages. These channels, as well as automated telephone calling, might be used if the pilot program continues beyond the pilot phase.
- h. As mentioned above, the Company will target a number of CPEs in the range of 16 to 25. A number of CPEs in this range should provide customers with opportunity to earn credits but also avoid program fatigue. The Company will ask customers for insight regarding the number of events at the end of the pilot. One line of thought is that more events can be called since the customer is not obligated to respond to any individual event. However, this philosophy could lead to customer fatigue or to customers becoming immune to event notices. As more and more events are implemented, customers may start to wonder why the events are being called if the weather conditions are not consistent with high customer usage. Alternatively, calling fewer and fewer events, customers may not see value in the program since they would have few opportunities to earn credits and may disengage or forget that they are a participant in the program. For the pilot, the Company believes a range of 16 to 25 events should provide a good balance. Further, our

demand response professionals are well versed in the issues surrounding consecutive events and will balance the need to target high load days with customer fatigue considerations.

- i. See answer to (h) above.

PERSON RESPONSIBLE: Bruce Sailors

REQUEST:

Refer to the PTR Pilot description on Application pages 8-12. Regarding rebates:

- a. Provide the methodology DEK will use to compute an energy usage baseline for each customer.
- b. Provide the methodology DEK will use to identify and quantify energy usage reductions from the baseline during a CPE for each customer.
- c. Describe the process DEK used, including issues discussed, impacts considered, pros, cons, comparisons to historical real-time energy and capacity rates in the PJM market during system peaks, and other variables, in arriving at the rebate amount of \$0.33 per kWh of demonstrated energy reductions from baseline.
- d. Describe any discussions DEK had regarding the offer of a higher rebate amount per kWh. Discuss the consequences of a relatively low rebate amount on PTR Pilot energy and demand impact.
- e. Explain why up to two billing cycles will be required to calculate, and present to customers, the rebate amount. Discuss the consequences of delayed rebate reporting on PTR program impact.
- f. Will DEK commit to calculating rebate amounts, and reporting such amounts to customers via the same communication channel selected by customers for CPE notifications, within 24 hours of a CPE? If not, explain why not.
- g. Describe how rebates will be presented on customer bills.

RESPONSE:

- a. See AG-DR-01-010(a) Attachment for a description of how the PTR Pilot program baselines will be calculated.
- b. Energy usage reductions from the baseline will be calculated by summing the hourly baseline usage and comparing the result to the sum of the actual usage during the event. Assuming the customer does not increase usage during event hours, the load reduction equals the baseline usage minus the actual usage. Customers do not earn credits for actual usage greater than the baseline usage.
- c. The credit proposed of \$0.33 / kWh is an avoided cost based credit consistent with the range of events described in AG-DR-01-009. Also see STAFF-DR-01-006.
- d. The Company proposes an avoided cost based credit consistent with the range of events described in AG-DR-01-009. Other potential higher credit values would have implications for pilot implementation. A higher avoided cost based credit value is consistent with a lower number of events making it relatively more difficult to implement events during the highest load days of the year. A higher credit value may result in greater load reduction impacts depending on the value customers place on electricity consumption during the hottest and coldest days of the year. The Company's proposed PTR Pilot program does not incorporate alternative credit levels.
- e. See STAFF-DR-01-006(b). In addition, PTR Pilot program participants will be referred to their online hourly usage and how they can compare event day usage to other days to receive feedback on their load reduction efforts. The Company does not believe there will be a significant customer impact associated with applying credits to the customer's bill as proposed.

- f. No. Customer credit amounts will not be available within 24 hours.
- g. Rebates will be displayed on customer bills through a miscellaneous adjustment process which will appear as a line item on the customer's bill in a manner like the following: Peak Time Rebate Pilot Credit \$XX.XX.

PERSON RESPONSIBLE: Bruce Sailors

Baseline Calculation Description for 2020 DEK PTR Pilot Program

1. **Step 1: Identify the 10 Day Consideration Set:**
 - a. Using the customer's interval usage data, identify the last 10 non-event, non-holiday, weekdays for the participant; but do not go back prior to May 1 for summer season and not prior to November 1 for Winter season.
 - b. Average the data identified by hour for all days in the consideration set. Store these values for future use as needed below.
2. **Step 2: Event Like Days Set:**
 - a. Using the at most 10 days identified above, if the average Summer Heat Index (HI) between 3 pm and 7 pm or average Winter Temperature (WT) between 6 AM and 10 AM for any of the 10 selected consideration days is not within +/- 1 HI/WT of the event day average HI/WT for the event period, then exclude that day.
 - b. Average by hour all days in the "event like days" consideration set to determine baseline. **This is an "event-like day" baseline and the baseline process ends unless there are no "event-like days" in the set.**
3. **Step 3: When there are no Event Like Days:**
 - a. If there are no event like days, develop a weather sensitivity model for the participant to determine if the customer is weather sensitive.
 - b. If the customer is **NOT** weather sensitive, average by hour the load on all days originally selected (at most 10) for baseline consideration. This value was calculated above in Step 1. **If the customer is not weather sensitive, this is the baseline; process ends.**
 - c. If the customer is weather sensitive, then
 - i. Use the value calculated in Step 1 as the starting / underlying baseline to which the weather adjustment is applied.
 - ii. Average by hour the HI/WT on all days (at most 10) originally selected for baseline consideration. Keep these values for later.
 - iii. Perform a regression on customer hourly loads on all non-event, non-holiday, weekdays during the summer/winter to obtain an HI/WT relationship to load during each event hour.
 - iv. Subtract the average HI/WT (calculated above) for each event hour from the consideration days selected from the applicable event hour HI/WT on the CPE day.
 - v. By hour, multiply the HI or WT difference calculated above by the HI or WT relationship values from the regression.
 - vi. Add/subtract the hourly adjustments to the average load calculated in Step 1 above. **If the customer is weather sensitive, this is the baseline; process ends.**

REQUEST:

Refer to the PTR Pilot description on Application pages 8-12. Regarding PTR Pilot participation:

- a. Describe how, other than the eligibility exceptions listed, DEK will ensure that the customers participating in the PTR Pilot are representative, as a group, of DEK's entire residential customer base.
- b. Provide the promotion plan DEK will follow in recruiting customers to the PTR Pilot, including communication channels, messages to be employed, etc.
- c. Describe customer PTR Pilot enrollment mechanisms.
- d. Describe the educational efforts and materials DEK will use, including communications channels, messages to be employed, etc., to help customers maximize their response to CPEs.
- e. Calculate the minimum number of participating customers completing the full two-year pilot which will be required to ensure that PTR Pilot demand and energy impact estimates will be statistically significant at a 95% or higher confidence level. Include all calculations, assumptions, work papers, and other materials used to develop the response to this data request.
- f. Provide a copy of the survey DEK will require of PTR Pilot participants.
- g. Provide a copy of any PTR satisfaction survey DEK will attempt to secure from PTR Pilot participants.

RESPONSE:

- a. The Company will not ensure that the PTR Pilot participants are representative of the entire Duke Energy Kentucky residential customer base. The Company will select randomly from eligible customers and offer participation to that randomly selected group. Part of the information derived from the pilot program will be the characteristics of customers who choose to enroll. However, the Company will monitor enrollments based on customer average monthly usage to ensure that participation represents both below and above average consumption consumers. See STAFF-DR-01-007(a) for additional information.
- b. The details of the communication plan such as the messages to customers are not yet determined. The Company intends to leverage email marketing first due to the relative low cost of this channel. As needed, direct mail will also be used.
- c. Enrollment mechanisms are not finalized but will likely include a webpage enrollment form with the option of calling the Company's Customer Prototype Lab to enroll.
- d. The educational messages and materials are not yet final but will likely include a webpage that contains a video description of the program and additional information such as Frequently Asked Questions (FAQs) that will describe how the program works and how customers can reduce their load during event periods. A link to this webpage will likely be sent with each event notification.
- e. The determination of the minimum number of participants required to meet the generally accepted thresholds of statistical significance for EM&V studies is best determined through a statistical power analysis. A power analysis is

included as an optional task in the scope of work. In addition, it is Nexant's understanding that Duke Energy intends for Nexant to conduct the power analysis once participants begin to enroll on the program.

- f. Survey materials are not yet available.
- g. Survey materials are not yet available.

PERSON RESPONSIBLE: Bruce Sailors
Rose Stoeckle – e.

REQUEST:

Refer to the PTR Pilot description on Application pages 8-12. Regarding PTR Pilot costs:

- a. Estimate the cost of PTR Pilot EM&V.
- b. Estimate the cost of billing system revisions for the PTR Pilot.
- c. Estimate the cost of PTR Pilot participant recruiting and educational efforts.
- d. Estimate the cost of PTR Pilot operations annually, including CPE determinations, CPE notifications, rebate calculations, rebate credits to customers, and similar.

RESPONSE:

- a. The Nexant proposal to perform EM&V for the PTR Pilot program contains an estimate of approximately \$135,000.
- b. As originally filed, billing system revisions are estimated at \$150,000. However, as the Company describes in STAFF-DR-01-008(b), Company IT costs have been reduced to \$12,000 to reflect the more manual process suggested for the pilot.
- c. Marketing effort costs average approximately \$17,835 annually across the assumed pilot duration of 3 years. This value is the total projected marketing cost divided by 3. This cost includes CPE notifications.
- d. As originally filed, operations costs for pilot implementation, customer credits, and customer care average approximately \$91,000 annually for 3 years. Costs

for rebate calculations and event determinations were inadvertently excluded. An estimate of costs for rebate calculations and event determinations is approximately \$40,250 annually for 3 years. As discussed in STAFF-DR-01-008(b), Company does not propose any changes to the budget for the pilot program since the credit calculation cost exclusion replaces the billing system cost reduction resulting in an immaterial change in the program budget.

PERSON RESPONSIBLE: Rose Stoeckle – a.
 Bruce Sailors – b. through d.

Duke Energy Kentucky
Case No. 2019-00277
Attorney General's First Set Data Requests
Date Received: October 11, 2019

AG-DR-01-013

REQUEST:

Refer to the Application, Appendix A. Provide the derivation of the data used to calculate the Cost Effectiveness Test Results. Any response should specifically identify the capacity value(s) used, the energy value(s) used, the time period the value(s) was determined, and any modification to or escalation of values.

RESPONSE:

Please see AG-DR-01-013 Attachment.

The tab labeled "Avoided Costs" contains two tables of Avoided Energy, Capacity and T&D. Because the period contained in this filing spans two calendar years (July 2019 through June 2020) the spreadsheet contains the information for Year 1 = 2019 and Year 1 = 2020. All new participation added in 2019 was valued using the Year 1 = 2019 data and the participation added in 2020 used the Year 1 = 2020 information.

The attachment also contains a tab showing the measure life for each measure contained in this filing. The calculations of the Cost Effectiveness Test Results used the NPV of the stream of Avoided Costs generated by each measure during the life of that measure.

PERSON RESPONSIBLE: Tom Wiles

13. Refer to the Application, Appendix A. Provide the derivation of the data used to calculate the Cost Effectiveness Test Results. Any response should specifically identify the capacity value(s) used, the energy value(s) used, the time period the value(s) was determined, and any modification to or escalation of values.

Year 1 = 2019	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Avoided Energy, \$/KWh	\$ 0.034	\$ 0.037	\$ 0.039	\$ 0.041	\$ 0.042	\$ 0.043	\$ 0.044	\$ 0.045	\$ 0.045	\$ 0.046	\$ 0.047	\$ 0.048	\$ 0.049	\$ 0.050	\$ 0.051	\$ 0.052	\$ 0.054	\$ 0.056	\$ 0.057	\$ 0.059	\$ 0.061	\$ 0.063	\$ 0.065	\$ 0.067	\$ 0.070
Avoided Capacity, \$/KW-year	\$ 70.10	\$71.85	\$73.65	\$75.49	\$77.38	\$79.31	\$81.30	\$83.33	\$85.41	\$87.55	\$89.74	\$91.98	\$94.28	\$96.64	\$99.05	\$101.53	\$104.07	\$106.67	\$109.33	\$112.07	\$114.87	\$117.74	\$120.68	\$123.70	\$126.79
Avoided T&D, \$/KW-year	\$ 49.65	\$ 50.84	\$ 51.96	\$ 53.13	\$ 54.34	\$ 55.61	\$ 56.88	\$ 58.17	\$ 59.52	\$ 60.90	\$ 62.27	\$ 63.66	\$ 65.04	\$ 66.43	\$ 67.86	\$ 69.31	\$ 70.79	\$ 72.31	\$ 73.87	\$ 75.46	\$ 77.08	\$ 78.77	\$ 80.52	\$ 82.31	\$ 84.14

Year 1 = 2020	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044
Avoided Energy, \$/KWh	\$ 0.037	\$ 0.039	\$ 0.041	\$ 0.042	\$ 0.043	\$ 0.044	\$ 0.045	\$ 0.045	\$ 0.046	\$ 0.047	\$ 0.048	\$ 0.049	\$ 0.050	\$ 0.051	\$ 0.052	\$ 0.054	\$ 0.056	\$ 0.057	\$ 0.059	\$ 0.061	\$ 0.063	\$ 0.065	\$ 0.067	\$ 0.070	\$ 0.072
Avoided Capacity, \$/KW-year	\$ 71.85	\$ 73.65	\$ 75.49	\$ 77.38	\$ 79.31	\$ 81.30	\$ 83.33	\$ 85.41	\$ 87.55	\$ 89.74	\$ 91.98	\$ 94.28	\$ 96.64	\$ 99.05	\$ 101.53	\$ 104.07	\$ 106.67	\$ 109.33	\$ 112.07	\$ 114.87	\$ 117.74	\$ 120.68	\$ 123.70	\$ 126.79	\$ 129.96
Avoided T&D, \$/KW-year	\$ 50.84	\$ 51.96	\$ 53.13	\$ 54.34	\$ 55.61	\$ 56.88	\$ 58.17	\$ 59.52	\$ 60.90	\$ 62.27	\$ 63.66	\$ 65.04	\$ 66.43	\$ 67.86	\$ 69.31	\$ 70.79	\$ 72.31	\$ 73.87	\$ 75.46	\$ 77.08	\$ 78.77	\$ 80.52	\$ 82.31	\$ 84.14	\$ 86.01

13. Refer to the Application, Appendix A. Provide the derivation of the data used to calculate the Cost Effectiveness Test Results. Any response should specifically identify the capacity value(s) used, the energy value(s) used, the time period the value(s) was determined, and any modification to or escalation of values.

Year	Jur	Measure ID	Name	pcode	Measure Life
2019	KY	10054	2ft TLED Delamp with Reflector	NRLTG	10
2019	KY	10053	2ft TLED Delamping	NRLTG	10
2019	KY	10055	4ft TLED Delamp with Reflector	NRLTG	10
2019	KY	10052	4ft TLED Delamp	NRLTG	10
2019	KY	6122	Air Cooled Chiller_Any greater than 150 tons	NRHVAC	20
2019	KY	6123	Air Cooled Chiller_Any less than 150 tons	NRHVAC	20
2019	KY	8820	Air Receiver Tanks for Load, No Load Compressors	NRPROC	10
2019	KY	292	Anti-sweat Heater Controls	NRFS	12
2019	KY	5661	ARC 10 to 15 Ton Gas Heat	NRHVAC	15
2019	KY	5662	ARC greater than 15 Ton Gas Heat	NRHVAC	15
2019	KY	5663	ARC HP 10 to 15 Ton	NRHVAC	15
2019	KY	5664	ARC HP greater than 15 Ton	NRHVAC	15
2019	KY	5665	ARC HP less than 10 Ton	NRHVAC	15
2019	KY	5666	ARC less than 10 Ton Gas Heat	NRHVAC	15
2019	KY	1192	Barrel Wraps (Inj Mold & Extruders) kW per ton	NRPROC	5
2019	KY	1132	Beverage Reach-in Controller	NRFS	10
2019	KY	10071	Bi-level Stairwell Fixture with Integrated Sensor	NRLTG	8
2019	KY	10091	C&I Clothes Washer	NRPROC	7
2019	KY	10092	C&I Electric Clothes Dryer	NRPROC	7
2019	KY	9987	C&I Refrigerators - CEE T2 ER	NRFS	12
2019	KY	9988	C&I Refrigerators - CEE T2 TOS	NRFS	12
2019	KY	9990	C&I Refrigerators - ENERGY STAR ER	NRFS	12
2019	KY	9992	C&I Refrigerators - ENERGY STAR TOS	NRFS	12
2019	KY	1133	CEE Tier 1 Room AC greater than 14,000 Btu per hr	NRHVAC	15
2019	KY	1134	CEE Tier 1 Room AC less than 14,000 Btu per hr	NRHVAC	15
2019	KY	1135	CEE Tier 2 Room AC greater than 14,000 Btu per hr	NRHVAC	15

2019	KY	1136	CEE Tier 2 Room AC less than 14,000 Btu per hr	NRHVAC	15
2019	KY	3006	Chilled Water Reset- Air Cooled Chillers, Grocery	NRHVAC	10
2019	KY	3007	Chilled Water Reset- Air Cooled Chillers, Other	NRHVAC	10
2019	KY	3008	Chilled Water Reset- Air Cooled Chillers, Retail	NRHVAC	10
2019	KY	3010	Chilled Water Reset- Water Cooled Chillers, Other	NRHVAC	10
2019	KY	3119	Chilled Wtr Reset- Air Cooled Chillers, College or Sm Ofc	NRHVAC	10
2019	KY	3009	Chilled Wtr Reset- Air Cooled Chillers, SCH (K-12)	NRHVAC	10
2019	KY	3120	Chilled Wtr Reset- Wtr Cooled Chillers, College or Sm Ofc	NRHVAC	10
2019	KY	3011	Chilled Wtr Reset- Wtr Cooled Chillers, Retail	NRHVAC	10
2019	KY	3012	Chilled Wtr Reset- Wtr Cooled Chillers, SCH (K-12)	NRHVAC	10
2019	KY	3013	Chilled Wtr Reset-Wtr Cooled Chillers, Grocery	NRHVAC	10
2019	KY	5758	Combination Oven_10 pan	NRFS	12
2019	KY	5759	Combination Oven_20 pan	NRFS	12
2019	KY	8821	Compressed Air Audit and Leak Repair	NRPROC	3
2019	KY	3014	Controlled Plug Strip	NRIT	4
2019	KY	5760	Convection Oven Full-Sized	NRFS	12
2019	KY	4501	CoolRoof New Replace on Burnout College-sq ft	NRHVAC	15
2019	KY	4502	CoolRoof New Replace on Burnout Health-sq ft	NRHVAC	15
2019	KY	4503	CoolRoof New Replace on Burnout Hotel-sq ft	NRHVAC	15
2019	KY	4504	CoolRoof New Replace on Burnout Large Office-sq ft	NRHVAC	15
2019	KY	4505	CoolRoof New Replace on Burnout Medium Offic-sq ft	NRHVAC	15
2019	KY	4506	CoolRoof New Replace on Burnout Motel-sq ft	NRHVAC	15
2019	KY	4507	CoolRoof New Replace on Burnout Other-sq ft	NRHVAC	15
2019	KY	4508	CoolRoof New Replace on Burnout Retail-sq ft	NRHVAC	15
2019	KY	4509	CoolRoof New Replace on Burnout School-sq ft	NRHVAC	15
2019	KY	4510	CoolRoof New Replace on Burnout Strip Mall-sq ft	NRHVAC	15
2019	KY	8822	Creep Heat Pad	NRPROC	5
2019	KY	8823	Cycling Compressed Air Dryer	NRPROC	10
2019	KY	8824	Dairy Heat Reclaimer	NRPROC	15
2019	KY	8825	Dairy Plate Cooler	NRPROC	10
2019	KY	8826	Dairy Scroll Compressor	NRPROC	15
2019	KY	8827	Daylighting Control with Occupancy Sensors	NRLTG	8
2019	KY	10012	DCV Retrofit Medium Office - per sq ft	NRHVAC	15
2019	KY	10002	DCV Retrofit Motel - per sq ft	NRHVAC	15

2019	KY	10006	DCV Retrofit Restaurant - per sq ft	NRHVAC	15
2019	KY	10003	DCV Retrofit Retail - per sq ft	NRHVAC	15
2019	KY	10004	DCV Retrofit School - per sq ft	NRHVAC	15
2019	KY	10009	DCV Retrofit Small Office - per sq ft	NRHVAC	15
2019	KY	10007	DCV Retrofit Strip Mall - per sq ft	NRHVAC	15
2019	KY	8828	Demand Control Ventilation for Kitchen Exhaust Hood	NRFS	15
2019	KY	1146	Door Gaskets - Cooler and Freezer	NRFS	4
2019	KY	5667	DX RTU Tune-up_ AC_ Fixed Orifice_ +10% chg adj	NRHVAC	10
2019	KY	5668	DX RTU Tune-up_ AC_ Fixed Orifice_ +15% chg adj	NRHVAC	10
2019	KY	5669	DX RTU Tune-up_ AC_ Fixed Orifice_ +20% chg adj	NRHVAC	10
2019	KY	5670	DX RTU Tune-up_ AC_ Fixed Orifice_ +25% chg adj	NRHVAC	10
2019	KY	5671	DX RTU Tune-up_ AC_ Fixed Orifice_ +30% chg adj	NRHVAC	10
2019	KY	5672	DX RTU Tune-up_ AC_ Fixed Orifice_ +5% chg adj	NRHVAC	10
2019	KY	5673	DX RTU Tune-up_ AC_ Fixed Orifice_ -20% chg adj	NRHVAC	10
2019	KY	5674	DX RTU Tune-up_ AC_ TXV_ +10% chg adj	NRHVAC	10
2019	KY	5675	DX RTU Tune-up_ AC_ TXV_ +15% chg adj	NRHVAC	10
2019	KY	5676	DX RTU Tune-up_ AC_ TXV_ +20% chg adj	NRHVAC	10
2019	KY	5677	DX RTU Tune-up_ AC_ TXV_ +25% chg adj	NRHVAC	10
2019	KY	5678	DX RTU Tune-up_ AC_ TXV_ +30% chg adj	NRHVAC	10
2019	KY	5679	DX RTU Tune-up_ AC_ TXV_ +5% chg adj	NRHVAC	10
2019	KY	5680	DX RTU Tune-up_ AC_ TXV_ -20% chg adj	NRHVAC	10
2019	KY	5681	DX RTU Tune-up_ HP_ Fixed Orifice_ +10% chg adj	NRHVAC	10
2019	KY	5682	DX RTU Tune-up_ HP_ Fixed Orifice_ +15% chg adj	NRHVAC	10
2019	KY	5683	DX RTU Tune-up_ HP_ Fixed Orifice_ +20% chg adj	NRHVAC	10
2019	KY	5684	DX RTU Tune-up_ HP_ Fixed Orifice_ +25% chg adj	NRHVAC	10
2019	KY	5685	DX RTU Tune-up_ HP_ Fixed Orifice_ +30% chg adj	NRHVAC	10
2019	KY	5686	DX RTU Tune-up_ HP_ Fixed Orifice_ +5% chg adj	NRHVAC	10
2019	KY	5687	DX RTU Tune-up_ HP_ Fixed Orifice_ -20% chg adj	NRHVAC	10
2019	KY	5688	DX RTU Tune-up_ HP_ TXV_ +10% chg adj	NRHVAC	10
2019	KY	5689	DX RTU Tune-up_ HP_ TXV_ +15% chg adj	NRHVAC	10
2019	KY	5690	DX RTU Tune-up_ HP_ TXV_ +20% chg adj	NRHVAC	10
2019	KY	5691	DX RTU Tune-up_ HP_ TXV_ +25% chg adj	NRHVAC	10
2019	KY	5692	DX RTU Tune-up_ HP_ TXV_ +30% chg adj	NRHVAC	10
2019	KY	5693	DX RTU Tune-up_ HP_ TXV_ +5% chg adj	NRHVAC	10

2019	KY	5694	DX RTU Tune-up_HP_TXV_-20% chg adj	NRHVAC	10
2019	KY	5734	EC Plug Fan_ 20 HP	NRIT	10
2019	KY	5735	EC Plug Fan_ 3 HP	NRIT	10
2019	KY	5736	EC Plug Fan_ 5 HP	NRIT	10
2019	KY	5737	EC Plug Fan_10 HP	NRIT	10
2019	KY	5738	EC Plug Fan_15 HP	NRIT	10
2019	KY	5739	EC Plug Fan_ 2 HP	NRIT	10
2019	KY	5740	EC Plug Fan_7.5 HP	NRIT	10
2019	KY	5695	ECM for HVAC fan_ 1 HP	NRHVAC	15
2019	KY	5696	ECM for HVAC fan_ 3 qrtr HP	NRHVAC	15
2019	KY	5697	ECM for HVAC fan_ half HP	NRHVAC	15
2019	KY	5698	ECM for HVAC fan_ qrtr HP	NRHVAC	15
2019	KY	5699	ECM for HVAC fan_ third HP	NRHVAC	15
2019	KY	10000	ECM Refrigerated or Freezer Display Case Motors - ECM replacing PSC	NRFS	15
2019	KY	9998	ECM Refrigerated or Freezer Display Case Motors - ECM replacing SP	NRFS	15
2019	KY	9999	ECM Walk-In Cooler and Freezer Motors - ECM replacing PSC	NRFS	15
2019	KY	9997	ECM Walk-In Cooler and Freezer Motors - ECM replacing SP	NRFS	15
2019	KY	882	ENERGY STAR Commercial Glass Door Freezers 15 to 30 ft3 - var	NRFS	12
2019	KY	884	ENERGY STAR Commercial Glass Door Freezers 30 to 50ft3 - var	NRFS	12
2019	KY	880	ENERGY STAR Commercial Glass Door Freezers less than 15ft3 - var	NRFS	12
2019	KY	886	ENERGY STAR Commercial Glass Door Freezers more than 50ft3 - var	NRFS	12
2019	KY	890	ENERGY STAR Commercial Glass Door Refrigerators 15 to 30 ft3 - var	NRFS	12
2019	KY	892	ENERGY STAR Commercial Glass Door Refrigerators 30 to 50ft3 - var	NRFS	12
2019	KY	888	ENERGY STAR Commercial Glass Door Refrigerators less than 15ft3 - var	NRFS	12
2019	KY	894	ENERGY STAR Commercial Glass Door Refrigerators more than 50ft3 - var	NRFS	12
2019	KY	898	ENERGY STAR Commercial Solid Door Freezers 15 to 30 ft3 - var	NRFS	12
2019	KY	900	ENERGY STAR Commercial Solid Door Freezers 30 to 50ft3 - var	NRFS	12
2019	KY	896	ENERGY STAR Commercial Solid Door Freezers less than 15ft3 - var	NRFS	12
2019	KY	902	ENERGY STAR Commercial Solid Door Freezers more than 50ft3 - var	NRFS	12
2019	KY	906	ENERGY STAR Commercial Solid Door Refrigerators 15 to 30 ft3 - var	NRFS	12
2019	KY	908	ENERGY STAR Commercial Solid Door Refrigerators 30 to 50ft3 - var	NRFS	12
2019	KY	904	ENERGY STAR Commercial Solid Door Refrigerators less than 15ft3 - var	NRFS	12
2019	KY	910	ENERGY STAR Commercial Solid Door Refrigerators more than 50ft3 - var	NRFS	12
2019	KY	518	Energy Star Room AC over 14,000 Btu hr	NRHVAC	15

2019	KY	519	Energy Star Room AC under 14,000 Btu hr	NRHVAC	15
2019	KY	8829	Engine Block Heater Timer	NRPROC	5
2019	KY	534	Engineered Nozzles - COMPRESS AIR	NRPROC	5
2019	KY	8830	Escalator Motor Efficiency Controller	NRP&M	15
2019	KY	10059	Exterior Bi-level Controls Retrofit	NRLTG	8
2019	KY	10084	Exterior HID replacement above 175W to 250W HID retrofit Lamp	NRLTG	12
2019	KY	1150	Exterior HID replacement above 175W to 250W HID retrofit	NRLTG	12
2019	KY	10085	Exterior HID replacement above 250W to 400W HID retrofit Lamp	NRLTG	12
2019	KY	1151	Exterior HID replacement above 250W to 400W HID retrofit	NRLTG	12
2019	KY	10076	Exterior HID replacement above 400W HID retrofit Lamp	NRLTG	12
2019	KY	1152	Exterior HID replacement above 400W HID retrofit	NRLTG	12
2019	KY	10072	Exterior HID replacement to 175W HID retrofit Lamp	NRLTG	12
2019	KY	1153	Exterior HID replacement to 175W HID retrofit	NRLTG	12
2019	KY	3000	Faucet Aerator (DI) - COMM, pvt use 0.5 gpm	NRHVAC	10
2019	KY	3003	Faucet Aerator (DI) - COMM, pvt use 1.0 gpm	NRHVAC	10
2019	KY	2999	Faucet Aerator (DI) - Commercial, public use 0.5 gpm	NRHVAC	10
2019	KY	3002	Faucet Aerator (DI) - Commercial, public use 1.0 gpm	NRHVAC	10
2019	KY	3001	Faucet Aerator (DI) - School, public use 0.5 gpm	NRHVAC	10
2019	KY	3004	Faucet Aerator (DI) - School, public use 1.0 gpm	NRHVAC	10
2019	KY	2970	Faucet Aerators MF Direct 1.0 GPM - bath	MFEEAR	10
2019	KY	2971	Faucet Aerators MF Direct 1.0 GPM - kitchen	MFEEAR	10
2019	KY	2973	Faucet Aerators MF DIY 1.0 GPM - bath	MFEEAR	10
2019	KY	2974	Faucet Aerators MF DIY 1.0 GPM - kitchen	MFEEAR	10
2019	KY	2979	Faucet Aerators SF DIY 1.0 GPM - bath	SFEEAR	10
2019	KY	2980	Faucet Aerators SF DIY 1.0 GPM - kitchen	SFEEAR	10
2019	KY	5630	FHAC_No Variable Speed_1975-1985	NRFS	16
2019	KY	5631	FHAC_No Variable Speed_1985-1996	NRFS	16
2019	KY	5632	FHAC_No Variable Speed_1996-2003	NRFS	16
2019	KY	5633	FHAC_No Variable Speed_less than 1975	NRFS	16
2019	KY	5634	FHAC_Variable Speed_1975-1985	NRFS	16
2019	KY	5635	FHAC_Variable Speed_1985-1996	NRFS	16
2019	KY	5636	FHAC_Variable Speed_1996-2003	NRFS	16
2019	KY	5637	FHAC_Variable Speed_less than 1975	NRFS	16
2019	KY	5638	FHWC_No Variable Speed_1975-1985	NRFS	16

2019	KY	5639	FHWC_No Variable Speed_1985-1996	NRFS	16
2019	KY	5640	FHWC_No Variable Speed_1996-2003	NRFS	16
2019	KY	5641	FHWC_No Variable Speed_less than 1975	NRFS	16
2019	KY	5642	FHWC_Variable Speed_1975-1985	NRFS	16
2019	KY	5643	FHWC_Variable Speed_1985-1996	NRFS	16
2019	KY	5644	FHWC_Variable Speed_1996-2003	NRFS	16
2019	KY	5645	FHWC_Variable Speed_less than 1975	NRFS	16
2019	KY	5646	Floating Suction_1975-1985	NRFS	16
2019	KY	5647	Floating Suction_1985-1996	NRFS	16
2019	KY	5648	Floating Suction_1996-2003	NRFS	16
2019	KY	5649	Floating Suction_less than 1975	NRFS	16
2019	KY	8831	Fluorescent Delamping 2ft T8 with Reflector	NRLTG	10
2019	KY	8832	Fluorescent Delamping 2ft T8	NRLTG	10
2019	KY	8833	Fluorescent Delamping 3ft T8 with Reflector	NRLTG	10
2019	KY	8834	Fluorescent Delamping 3ft T8	NRLTG	10
2019	KY	8835	Fluorescent Delamping 4ft T8 with Reflector	NRLTG	10
2019	KY	8836	Fluorescent Delamping 4ft T8	NRLTG	10
2019	KY	8837	Fluorescent Delamping 8ft T8 with Reflector	NRLTG	10
2019	KY	8838	Fluorescent Delamping 8ft T8	NRLTG	10
2019	KY	5650	Fryer (Large Vat)	NRFS	12
2019	KY	5651	Fryer (Standard Vat)	NRFS	12
2019	KY	10080	Garage HID replacement above 175W to 250W HID retrofit Lamp	NRLTG	12
2019	KY	1154	Garage HID replacement above 175W to 250W HID retrofit	NRLTG	6
2019	KY	10081	Garage HID replacement above 250W to 400W HID retrofit Lamp	NRLTG	12
2019	KY	1155	Garage HID replacement above 250W to 400W HID retrofit	NRLTG	6
2019	KY	10073	Garage HID replacement above 400W HID retrofit Lamp	NRLTG	12
2019	KY	1156	Garage HID replacement above 400W HID retrofit	NRLTG	6
2019	KY	10069	Garage HID replacement to 175W HID retrofit Lamp	NRLTG	12
2019	KY	1157	Garage HID replacement to 175W HID retrofit	NRLTG	6
2019	KY	316	Griddles	NRFS	12
2019	KY	1158	Guest Room Energy Management, Electric Heating	NRHVAC	8
2019	KY	1159	Guest Room Energy Management, Gas Heating	NRHVAC	8
2019	KY	2981	Heat Pump Water Heater	HPWH	10
2019	KY	317	High Bay 2L T-5 High Output	NRLTG	12

2019	KY	318	High Bay 3L T-5 High Output	NRLTG	12
2019	KY	319	High Bay 4L T-5 High Output	NRLTG	12
2019	KY	320	High Bay 6L T-5 High Output	NRLTG	12
2019	KY	491	High Bay 6L T5 HO (2 fixtures) retrofit replc 1000W HID	NRLTG	12
2019	KY	321	High Bay 8L T-5 High Output	NRLTG	12
2019	KY	10017	High Efficiency Fans 14 to 23 inches - C&I	NRHVAC	10
2019	KY	8839	High Efficiency Fans 14 to 23 inches	NRHVAC	10
2019	KY	10018	High Efficiency Fans 24 to 35 inches - C&I	NRHVAC	10
2019	KY	8840	High Efficiency Fans 24 to 35 inches	NRHVAC	10
2019	KY	10019	High Efficiency Fans 36 to 47 inches - C&I	NRHVAC	10
2019	KY	8841	High Efficiency Fans 36 to 47 inches	NRHVAC	10
2019	KY	10020	High Efficiency Fans 48 to 61 inches - C&I	NRHVAC	10
2019	KY	8842	High Efficiency Fans 48 to 61 inches	NRHVAC	10
2019	KY	486	High Efficiency Pumps 1.5HP	NRP&M	15
2019	KY	488	High Efficiency Pumps 10HP	NRP&M	15
2019	KY	490	High Efficiency Pumps 15HP	NRP&M	15
2019	KY	494	High Efficiency Pumps 20HP	NRP&M	15
2019	KY	493	High Efficiency Pumps 2HP	NRP&M	15
2019	KY	496	High Efficiency Pumps 3HP	NRP&M	15
2019	KY	498	High Efficiency Pumps 5HP	NRP&M	15
2019	KY	499	High Efficiency Pumps 7.5HP	NRP&M	15
2019	KY	10001	High Volume Low Speed Fan	NRHVAC	15
2019	KY	327	Holding Cabinet Full Size Insulated	NRFS	12
2019	KY	328	Holding Cabinet Half Size Insulated	NRFS	12
2019	KY	329	Holding Cabinet Three Quarter Size Insulated	NRFS	12
2019	KY	5652	HT ES Multi-Tank - CNV DW New -rplc on Burnout	NRFS	20
2019	KY	3121	HT ES Multi-Tank - CNV DW w-Boost Htr (Elec) New -repl on BO	NRFS	20
2019	KY	3122	HT ES Multi-Tank - CNV DW w-Boost Htr (Gas) New -repl on BO	NRFS	20
2019	KY	5653	HT ES PotPanUtl DW (Elec) New -replc on Burnout	NRFS	10
2019	KY	5654	HT ES PotPanUtl DW (Gas) New -replc on Burnout	NRFS	10
2019	KY	5655	HT ES PotPanUtl DW New -replc on Burnout	NRFS	10
2019	KY	5656	HT ES Sngl Tank - CNV DW New -rplc on Burnout	NRFS	20
2019	KY	3123	HT ES Sngl Tank - CNV DW w-Boost Htr (Elec) New -repl on BO	NRFS	20
2019	KY	3124	HT ES Sngl Tank - CNV DW w-Boost Htr (Gas) New -repl on BO	NRFS	20

2019	KY	5657	HT ES Sngl Tank - Door DW New -repl on Burnout	NRFS	15
2019	KY	3125	HT ES Sngl Tank - Door DW w-Boost Htr (Elec) New -repl on BD	NRFS	15
2019	KY	3126	HT ES Sngl Tank - Door DW w-Boost Htr (Gas) New -repl on BO	NRFS	15
2019	KY	5658	HT ES UC DW New -repl on Burnout	NRFS	10
2019	KY	3062	HT ES UC DW w-Boost Htr (Elec) New -repl on BO	NRFS	10
2019	KY	3063	HT ES UC DW w-Boost Htr (Gas) New -repl on BO	NRFS	10
2019	KY	10029	HVAC DX AC 135-240kBtuh 11.7 EER (Tier 0_1) - EER only	NRHVAC	15
2019	KY	5700	HVAC DX AC 135-240kBtuh 11.7 EER (Tier 0_1)	NRHVAC	15
2019	KY	10026	HVAC DX AC 135-240kBtuh 12.2 EER (Tier 2) - EER only	NRHVAC	15
2019	KY	5701	HVAC DX AC 135-240kBtuh 12.2 EER (Tier 2)	NRHVAC	15
2019	KY	10030	HVAC DX AC 240-760kBtuh 10.5 EER (Tier 0_1) - EER only	NRHVAC	15
2019	KY	5702	HVAC DX AC 240-760kBtuh 10.5 EER (Tier 0_1)	NRHVAC	15
2019	KY	10027	HVAC DX AC 240-760kBtuh 10.8 EER (Tier 2) - EER only	NRHVAC	15
2019	KY	5703	HVAC DX AC 240-760kBtuh 10.8 EER (Tier 2)	NRHVAC	15
2019	KY	10028	HVAC DX AC 65-135kBtuh 11.7 EER (Tier 0_1) - EER only	NRHVAC	15
2019	KY	5704	HVAC DX AC 65-135kBtuh 11.7 EER (Tier 0_1)	NRHVAC	15
2019	KY	10025	HVAC DX AC 65-135kBtuh 12.2 EER (Tier 2) - EER only	NRHVAC	15
2019	KY	5705	HVAC DX AC 65-135kBtuh 12.2 EER (Tier 2)	NRHVAC	15
2019	KY	10038	HVAC DX AC greater than 760kBtuh 10.4 EER (Tier 2) - EER only	NRHVAC	15
2019	KY	5706	HVAC DX AC greater than 760kBtuh 10.4 EER (Tier 2)	NRHVAC	15
2019	KY	10039	HVAC DX AC greater than 760kBtuh 9.9 EER (Tier 0_1) - EER only	NRHVAC	15
2019	KY	5707	HVAC DX AC greater than 760kBtuh 9.9 EER (Tier 0_1)	NRHVAC	15
2019	KY	5708	HVAC DX AC less than 65kBtuh 14 SEER (Tier 0_1)	NRHVAC	15
2019	KY	10035	HVAC DX AC less than 65kBtuh 15 SEER (Tier 0_1) - EER only	NRHVAC	15
2019	KY	5709	HVAC DX AC less than 65kBtuh 15 SEER (Tier 2)	NRHVAC	15
2019	KY	10031	HVAC DX AC less than 65kBtuh 16 SEER (Tier 2) - EER only	NRHVAC	15
2019	KY	10037	HVAC DX HP 135-240kBtuh 10.9 EER 3.3 COP (Tier 1) - EER only	NRHVAC	15
2019	KY	5710	HVAC DX HP 135-240kBtuh 10.9 EER 3.3 COP (Tier 1)	NRHVAC	15
2019	KY	10036	HVAC DX HP 65-135kBtuh 11.3 EER 3.4 COP (Tier 1) - EER only	NRHVAC	15
2019	KY	5711	HVAC DX HP 65-135kBtuh 11.3 EER 3.4 COP (Tier 1)	NRHVAC	15
2019	KY	10040	HVAC DX HP greater than 240 kBtuh 10.3 EER 3.3 COP (Tier 1) - EER only	NRHVAC	15
2019	KY	5712	HVAC DX HP greater than 240 kBtuh 10.3 EER 3.3 COP (Tier 1)	NRHVAC	15
2019	KY	5713	HVAC DX HP Packaged less than 65kBtuh 14 SEER 8 HSPF (Tier 1)	NRHVAC	15
2019	KY	10042	HVAC DX HP Packaged less than 65kBtuh 15 SEER 8.5 HSPF (Tier 1) - EER only	NRHVAC	15

2019	KY	5715	HVAC DX HP Packaged less than 65kBtuh 15 SEER 8.5 HSPF (Tier 2)	NRHVAC	15
2019	KY	10041	HVAC DX HP Packaged less than 65kBtuh 16 SEER 9 HSPF (Tier 2) - EER only	NRHVAC	15
2019	KY	5717	HVAC DX HP Split less than 65kBtuh 15 SEER 9 HSPF (Tier 2)	NRHVAC	15
2019	KY	5719	HVAC DX mini split AC 15 SEER	NRHVAC	15
2019	KY	5720	HVAC DX mini split AC 16 SEER	NRHVAC	15
2019	KY	5721	HVAC DX mini split AC 18 SEER	NRHVAC	15
2019	KY	5722	HVAC DX mini split AC 20 SEER	NRHVAC	15
2019	KY	5723	HVAC DX mini split HP 15 SEER 8.5 HSPF	NRHVAC	15
2019	KY	5725	HVAC DX mini split HP 16 SEER 8.5 HSPF	NRHVAC	15
2019	KY	5727	HVAC DX mini split HP 18 SEER 9.6 HSPF	NRHVAC	15
2019	KY	5729	HVAC DX mini split HP 20 SEER 9.6 HSPF	NRHVAC	15
2019	KY	5731	HVAC DX PTAC 12000 Btuh 10.7 EER	NRHVAC	15
2019	KY	5732	HVAC DX PTAC 15000 Btuh 9.8 EER	NRHVAC	15
2019	KY	5733	HVAC DX PTAC 7600 Btuh 12.2 EER	NRHVAC	15
2019	KY	10010	HVAC PTHP 12000 Btuh 11.4 EER 3.3 COP	NRHVAC	15
2019	KY	10011	HVAC PTHP 15000 Btuh 10.2 EER 3.2 COP	NRHVAC	15
2019	KY	10008	HVAC PTHP 7600 Btuh 12.4 EER 3.4 COP	NRHVAC	15
2019	KY	8843	HVAC Water Source HP greater than 17 kBtuh and less than 65 kBtuh	NRHVAC	15
2019	KY	8844	HVAC Water Source HP greater than 65 kBtuh and less than 135 kBtuh	NRHVAC	15
2019	KY	8845	HVAC Water Source HP less than 17 kBtuh	NRHVAC	15
2019	KY	348	Icemaker (100 to 500 lbs_day)	NRFS	10
2019	KY	349	icemaker (501 to 1000 lbs_day)	NRFS	10
2019	KY	350	Icemaker (Greater Than 1000 lbs_day)	NRFS	10
2019	KY	8846	Int induction Lighting replacing HPS greater than 100W, up to 200W	NRLTG	20
2019	KY	8847	Int Induction Lighting replacing HPS greater than 200W, up to 400W	NRLTG	20
2019	KY	8848	Int Induction Lighting replacing MH between 70W and 200W	NRLTG	20
2019	KY	8849	Int Induction Lighting replacing MH greater than 200W, up to 250W	NRLTG	20
2019	KY	6010	LED - Retail Fixture	RTLLED	12
2019	KY	6009	LED - Retail General Purpose A Line	RTLLED	12
2019	KY	6013	LED - Retail Reflector Outdoor	RTLLED	15
2019	KY	6011	LED - Retail Reflector Recessed	RTLLED	12
2019	KY	6012	LED - Retail Reflector Track Lighting	RTLLED	12
2019	KY	7430	LED - Retail Specialty 3 Way	RTLLED	12
2019	KY	6014	LED - Retail Specialty Decorative Candelabra	RTLLED	15

2019	KY	6015	LED - Retail Specialty Globe	RTLLED	12
2019	KY	8850	LED 2ft Tube 1-LED, replacing or in lieu of T8 fluorescent	NRLTG	15
2019	KY	5742	LED 4ft Case Lights, T8 to LED - With Controls	NRLTG	15
2019	KY	5741	LED 4ft Case Lights, T8 to LED	NRLTG	15
2019	KY	10082	LED 4ft Tube 1-LED replacing or in lieu of T5SO fluorescent	NRLTG	15
2019	KY	10083	LED 4ft Tube 1-LED, replacing or in lieu of T5HO fluorescent	NRLTG	15
2019	KY	8851	LED 4ft Tube 1-LED, replacing or in lieu of T8 fluorescent	NRLTG	15
2019	KY	5744	LED 5ft Case Lights, T8 to LED - With Controls	NRLTG	15
2019	KY	5743	LED 5ft Case Lights, T8 to LED	NRLTG	15
2019	KY	10068	LED 6ft Case Lights, T8 to LED - With Controls	NRLTG	15
2019	KY	10056	LED 6ft Case Lights, T8 to LED	NRLTG	15
2019	KY	10086	LED A Lamps replacing exterior Incandescent and CFL less than 100W	NRLTG	8
2019	KY	8852	LED A Lamps	NRLTG	15
2019	KY	10067	LED Bollard Fixtures for Exterior Lighting	NRLTG	15
2019	KY	10060	LED Canopy replacing 176-250W HID Lamp	NRLTG	13
2019	KY	3064	LED Canopy replacing 176-250W HID	NRLTG	15
2019	KY	10061	LED Canopy replacing 251-400W HID Lamp	NRLTG	13
2019	KY	3065	LED Canopy replacing 251-400W HID	NRLTG	15
2019	KY	10064	LED Canopy replacing up to 175W HID Lamp	NRLTG	13
2019	KY	3066	LED Canopy replacing up to 175W HID	NRLTG	15
2019	KY	8853	LED Decorative, Globe, 3-Way Lamps	NRLTG	15
2019	KY	3128	LED Display Case (rplcng or ILO INCD or FL display case Ltng)	NRLTG	15
2019	KY	1161	LED Downlight	NRLTG	15
2019	KY	352	LED Exit Signs Electronic Fixtures (Retrofit Only)	NRLTG	16
2019	KY	10079	LED FLD rplcng or ILO greater than 500W HAL, INCD, or HID	NRLTG	15
2019	KY	3067	LED FLD rplcng or ILO GRT 100W HAL, INCD, or HID	NRLTG	15
2019	KY	3068	LED FLD rplcng or ILO up to 100W HAL, INCD, or HID	NRLTG	15
2019	KY	10075	LED Highbay Fixture replacing 2-lamp 8ft T12 fixture	NRLTG	15
2019	KY	10077	LED Highbay Fixture replacing 4-lamp 4ft T5HO fixture	NRLTG	15
2019	KY	10074	LED Highbay Fixture replacing 6-lamp 4ft T8 fixture	NRLTG	15
2019	KY	10062	LED Highbay replacing 251-400W HID Lamp	NRLTG	13
2019	KY	3069	LED Highbay replacing 251-400W HID	NRLTG	15
2019	KY	10070	LED Highbay replacing greater than 400W HID Lamp	NRLTG	13
2019	KY	3070	LED Highbay replacing greater than 400W HID	NRLTG	15

2019	KY	8854	LED Indoor Channel Sign, greater than 2 feet	NRLTG	15
2019	KY	8855	LED Indoor Channel Sign, less than or equal to 2 feet	NRLTG	15
2019	KY	8856	LED Indoor Sport Lighting	NRLTG	15
2019	KY	10063	LED Lowbay replacing 176W-250W HID Lamp	NRLTG	13
2019	KY	3071	LED Lowbay replacing 176W-250W HID	NRLTG	15
2019	KY	10065	LED Lowbay replacing up to 175W HID Lamp	NRLTG	13
2019	KY	3072	LED Lowbay replacing up to 175W HID	NRLTG	15
2019	KY	8857	LED Outdoor Channel Sign, greater than 2 feet	NRLTG	15
2019	KY	8858	LED Outdoor Channel Sign, less than or equal to 2 feet	NRLTG	15
2019	KY	3073	LED Panel 1x4 replacing or in lieu of T8 FL	NRLTG	15
2019	KY	3075	LED Panel 2x2 replacing or in lieu of T8 FL	NRLTG	15
2019	KY	3077	LED Panel 2x4 replacing or in lieu of T8 FL	NRLTG	15
2019	KY	8859	LED PAR, BR, MR Lamps	NRLTG	15
2019	KY	8860	LED Poultry Lights	NRLTG	9
2019	KY	3131	LED Track Ltng (rplcng or ILO INCD, HAL, CFL, or HID track Ltng)	NRLTG	15
2019	KY	2984	LF Showerhead MF Direct 1.5 GPM	MFEESH	10
2019	KY	2987	LF Showerhead MF DIY 1.5 GPM	MFEESH	10
2019	KY	354	Light Tube	NRLTG	14
2019	KY	8861	Lighting Power Density for New Construction	NRLTG	15
2019	KY	8862	Low Energy Livestock Waterer	NRPROC	10
2019	KY	3118	Low Flow Showerhead (DI) - COMM, public use 1.5 gpm	NRHVAC	10
2019	KY	3005	Low Flow Showerhead (DI) - COMM, pvt use 1.5 gpm	NRHVAC	10
2019	KY	8863	Low Pressure Drop Filter for Compressed Air Systems	NRPROC	5
2019	KY	8864	Low Pressure Sprinkler Nozzles Portable	NRPROC	4
2019	KY	8865	Low Pressure Sprinkler Nozzles Solid Set	NRPROC	5
2019	KY	3079	Low-Temp ES Multi-Tank - CNV DW New -repl on BO	NRFS	20
2019	KY	3082	Low-Temp ES UC DW New -repl on Burnout	NRFS	10
2019	KY	8866	Milk Vacuum Pump VFD	NRP&M	15
2019	KY	10095	MultiFamily Common Area Clothes Dryer	NRPROC	7
2019	KY	10096	MultiFamily Common Area Clothes Washer	NRPROC	7
2019	KY	10093	MultiFamily Tnt Clothes Dryer	NRPROC	14
2019	KY	10094	MultiFamily Tnt Clothes Washer	NRPROC	14
2019	KY	10043	MultiFamily Tnt Heat Pump Water Heater	NRHVAC	13
2019	KY	5560	My Home Energy Report - Online	HECR	1

2019	KY	2098	My Home Energy Report	HECR	1
2019	KY	364	Night covers for displays	NRFS	5
2019	KY	8867	No-loss Condensate Drain	NRPROC	5
2019	KY	10005	Notched V-Belts for HVAC Systems	NRHVAC	5
2019	KY	367	Occupancy Sensors over 500 Watts	NRLTG	10
2019	KY	8868	Occupancy Sensors per Watt	NRLTG	8
2019	KY	368	Occupancy Sensors under 500 Watts	NRLTG	10
2019	KY	3083	PC Power Management from Network	NRIT	5
2019	KY	1176	Pellet Dryer Tanks & Ducts 3in dia per ft	NRPROC	5
2019	KY	1177	Pellet Dryer Tanks & Ducts 4in dia per ft	NRPROC	5
2019	KY	1178	Pellet Dryer Tanks & Ducts 5in dia per ft	NRPROC	5
2019	KY	1179	Pellet Dryer Tanks & Ducts 6in dia per ft	NRPROC	5
2019	KY	1180	Pellet Dryer Tanks & Ducts 8in dia per ft	NRPROC	5
2019	KY	8869	Photocells with Time Clocks	NRLTG	8
2019	KY	8870	Photocells	NRLTG	8
2019	KY	2994	Pipe Wrap MF Direct	MFEPPW	13
2019	KY	2995	Pipe Wrap MF DIY	MFEPPW	13
2019	KY	2997	Pipe Wrap SF DIY	SFEPPW	13
2019	KY	8871	Plug Load Occupancy Sensor	NRIT	8
2019	KY	2998	Pool Pump	PEEPVS	10
2019	KY	1167	Pre Rinse Sprayers	NRFS	5
2019	KY	6470	Quality Installation - Non-Referred	SSQINR	10
2019	KY	6454	Quality Installation - Referred	SSQIR	10
2019	KY	5622	RCFLSP - Specialty Bulbs 3 Way LED	RCFLSP	12
2019	KY	2769	RCFLSP - Specialty Bulbs A Line LED	RCFLSP	12
2019	KY	4587	RCFLSP - Specialty Bulbs Candelabra LED	RCFLSP	15
2019	KY	5621	RCFLSP - Specialty Bulbs Globe LED	RCFLSP	12
2019	KY	2385	RCFLSP - Specialty Bulbs Recessed LED	RCFLSP	12
2019	KY	4588	RCFLSP - Specialty Bulbs Recessed Outdoor LED	RCFLSP	15
2019	KY	8872	Remote Mounted Daylight Sensor per Watt	NRLTG	8
2019	KY	3084	Remote-Mounted Daylight Sensor	NRLTG	8
2019	KY	7246	RLED - Free LED Phase 1	RLED	12
2019	KY	7247	RLED - Free LED Phase 2	RLED	12
2019	KY	8502	RLEDPM - Aline	RLEDPM	12

2019	KY	8504	RLEDPM - Candelabra	RLEDPM	15
2019	KY	8503	RLEDPM - Globe	RLEDPM	12
2019	KY	4906	SBES HVAC AC	SSBDIR	15
2019	KY	4907	SBES HVAC HP	SSBDIR	15
2019	KY	4908	SBES Lighting 8760	SSBDIR	10
2019	KY	4909	SBES Lighting Daylighting	SSBDIR	10
2019	KY	4910	SBES Lighting DusktoDawn	SSBDIR	10
2019	KY	4911	SBES OccSensors	SSBDIR	10
2019	KY	4912	SBES Refrigeration	SSBDIR	15
2019	KY	384	Setback Programmable Thermostat	NRHVAC	11
2019	KY	6474	Smart Saver - Attic Insul & Air Sealing - Non-Referred	SSAISN	20
2019	KY	6458	Smart Saver - Attic Insul & Air Sealing - Referred	SSAISR	20
2019	KY	6464	Smart Saver - Central Air Conditioner Tier 1 - Non-Referred	SSAC1N	13
2019	KY	6448	Smart Saver - Central Air Conditioner Tier 1 - Referred	SSAC1R	13
2019	KY	6466	Smart Saver - Central Air Conditioner Tier 2 - Non-Referred	SSAC2N	15
2019	KY	6450	Smart Saver - Central Air Conditioner Tier 2 - Referred	SSAC2R	15
2019	KY	6468	Smart Saver - Central Air Conditioner Tier 3 - Non-Referred	SSAC3N	15
2019	KY	6452	Smart Saver - Central Air Conditioner Tier 3 - Referred	SSAC3R	15
2019	KY	6476	Smart Saver - Duct Insulation - Non-Referred	SSDINN	20
2019	KY	6460	Smart Saver - Duct Insulation - Referred	SSDINR	20
2019	KY	6475	Smart Saver - Duct Sealing - Non-Referred	SSDSEN	18
2019	KY	6459	Smart Saver - Duct Sealing - Referred	SSDSEK	18
2019	KY	6465	Smart Saver - Heat Pump Tier 1 - Non-Referred	SSHP1N	12
2019	KY	6449	Smart Saver - Heat Pump Tier 1 - Referred	SSHP1R	12
2019	KY	6467	Smart Saver - Heat Pump Tier 2 - Non-Referred	SSHP2N	15
2019	KY	6451	Smart Saver - Heat Pump Tier 2 - Referred	SSHP2R	15
2019	KY	6469	Smart Saver - Heat Pump Tier 3 - Non-Referred	SSHP3N	15
2019	KY	6453	Smart Saver - Heat Pump Tier 3 - Referred	SSHP3R	15
2019	KY	6471	Smart Thermostat - Non-Referred	SSSTN	11
2019	KY	6455	Smart Thermostat - Referred	SSSTR	11
2019	KY	1168	Snack Machine Controller	NRFS	10
2019	KY	522	Steamer_3 pan	NRFS	12
2019	KY	525	Steamer_4 pan	NRFS	12
2019	KY	526	Steamer_5 pan	NRFS	12

2019	KY	527	Steamer_6 pan	NRFS	12
2019	KY	9986	Strip Curtains - Freezers	NRFS	4
2019	KY	9993	Strip Curtains - Refrigerated Warehouse	NRFS	4
2019	KY	9989	Suction Pipe Insulation - Coolers	NRFS	11
2019	KY	9991	Suction Pipe Insulation - Freezers	NRFS	11
2019	KY	8873	Switch or Fixture Mounted Daylight Sensor per Watt	NRLTG	8
2019	KY	3086	Switch or Fixture-Mounted Daylight Sensor	NRLTG	8
2019	KY	8874	Switching Controls for Multi-Level Lighting	NRLTG	8
2019	KY	8875	Time Clocks External Lighting	NRLTG	8
2019	KY	8876	Time Clocks Internal Lighting	NRLTG	8
2019	KY	8877	Variable speed drive on HVAC chiller	NRHVAC	15
2019	KY	416	Vending Equipment Controller	NRFS	10
2019	KY	1112	VFD HVAC Fan	NRP&M	15
2019	KY	10098	VFD on Chilled Water Pump	NRP&M	15
2019	KY	10097	VFD on Hot Water Pump	NRP&M	15
2019	KY	1114	VFD Process Pump 1-50 HP	NRP&M	15
2019	KY	3089	VFDs on chilled water pumps 10HP w Economizer	NRIT	10
2019	KY	3088	VFDs on chilled water pumps 10HP	NRIT	10
2019	KY	3091	VFDs on chilled water pumps 15HP w Economizer	NRIT	10
2019	KY	3090	VFDs on chilled water pumps 15HP	NRIT	10
2019	KY	3093	VFDs on chilled water pumps 20HP w Economizer	NRIT	10
2019	KY	3092	VFDs on chilled water pumps 20HP	NRIT	10
2019	KY	3095	VFDs on chilled water pumps 25HP w Economizer	NRIT	10
2019	KY	3097	VFDs on chilled water pumps 30HP w Economizer	NRIT	10
2019	KY	3099	VFDs on chilled water pumps 40HP w Economizer	NRIT	10
2019	KY	3101	VFDs on chilled water pumps 50HP w Economizer	NRIT	10
2019	KY	3103	VFDs on chilled water pumps 5HP w Economizer	NRIT	10
2019	KY	3102	VFDs on chilled water pumps 5HP	NRIT	10
2019	KY	3105	VFDs on chilled water pumps 7.5HP w Economizer	NRIT	10
2019	KY	3104	VFDs on chilled water pumps 7.5HP	NRIT	10
2019	KY	3106	VFDs on CRAC CRAH AHU fans 10HP	NRIT	10
2019	KY	3107	VFDs on CRAC CRAH AHU fans 15HP	NRIT	10
2019	KY	3108	VFDs on CRAC CRAH AHU fans 20HP	NRIT	10
2019	KY	3109	VFDs on CRAC CRAH AHU fans 2HP	NRIT	10

2019	KY	3110	VFDs on CRAC CRAH AHU fans 3HP	NRIT	10
2019	KY	3111	VFDs on CRAC CRAH AHU fans 5HP	NRIT	10
2019	KY	3112	VFDs on CRAC CRAH AHU fans 7.5HP	NRIT	10
2019	KY	3113	VSD Air COMP replacing load no load COMP	NRPROC	15
2019	KY	3114	VSD Air COMP replacing variable displacement COMP	NRPROC	15
2019	KY	1169	VSD Air Compressors	NRPROC	15
2019	KY	3115	Walk-In Cooler Automatic Door-Closer Retrofit	NRFS	8
2019	KY	3116	Walk-In Freezer Automatic Door-Closer Retrofit	NRFS	8
2019	KY	6124	Water Cooled Chiller_Centrifugal at least 150 tons and less than 300 tons	NRHVAC	20
2019	KY	6125	Water Cooled Chiller_Centrifugal at least 300 tons and less than 600 tons	NRHVAC	20
2019	KY	6126	Water Cooled Chiller_Centrifugal at least 600 tons	NRHVAC	20
2019	KY	6127	Water Cooled Chiller_Centrifugal less than 150 tons	NRHVAC	20
2019	KY	6128	Water Cooled Screw or Scroll at least 150 tons and less than 300 tons	NRHVAC	20
2019	KY	6129	Water Cooled Screw or Scroll at least 300 tons	NRHVAC	20
2019	KY	6130	Water Cooled Screw or Scroll at least 75 tons and less than 150 tons	NRHVAC	20
2019	KY	6131	Water Cooled Screw or Scroll less than 75 tons	NRHVAC	20
2019	KY	3117	Water Heater Pipe Insulation	NRHVAC	13
2019	KY	437	Window Film	NRHVAC	10
2019	KY	5659	Zero Energy Doors_High-Temp Cooler	NRFS	10
2019	KY	5660	Zero Energy Doors_Med-Temp Cooler	NRFS	10
2020	KY	6122	Air Cooled Chiller_Any greater than 150 tons	NRHVAC	20
2020	KY	6123	Air Cooled Chiller_Any less than 150 tons	NRHVAC	20
2020	KY	8820	Air Receiver Tanks for Load, No Load Compressors	NRPROC	10
2020	KY	292	Anti-sweat Heater Controls	NRFS	12
2020	KY	1192	Barrel Wraps (Inj Mold & Extruders) kW per ton	NRPROC	5
2020	KY	5758	Combination Oven_10 pan	NRFS	12
2020	KY	5759	Combination Oven_20 pan	NRFS	12
2020	KY	8821	Compressed Air Audit and Leak Repair	NRPROC	3
2020	KY	5760	Convection Oven Full-Sized	NRFS	12
2020	KY	8824	Dairy Heat Reclaimer	NRPROC	15
2020	KY	8826	Dairy Scroll Compressor	NRPROC	15
2020	KY	10012	DCV Retrofit Medium Office - per sq ft	NRHVAC	15
2020	KY	10002	DCV Retrofit Motel - per sq ft	NRHVAC	15
2020	KY	10006	DCV Retrofit Restaurant - per sq ft	NRHVAC	15

2020	KY	10003	DCV Retrofit Retail - per sq ft	NRHVAC	15
2020	KY	10004	DCV Retrofit School - per sq ft	NRHVAC	15
2020	KY	10009	DCV Retrofit Small Office - per sq ft	NRHVAC	15
2020	KY	10007	DCV Retrofit Strip Mall - per sq ft	NRHVAC	15
2020	KY	1146	Door Gaskets - Cooler and Freezer	NRFS	4
2020	KY	5695	ECM for HVAC fan_ 1 HP	NRHVAC	15
2020	KY	5696	ECM for HVAC fan_ 3 qrtr HP	NRHVAC	15
2020	KY	5697	ECM for HVAC fan_ half HP	NRHVAC	15
2020	KY	5698	ECM for HVAC fan_ qrtr HP	NRHVAC	15
2020	KY	5699	ECM for HVAC fan_ third HP	NRHVAC	15
2020	KY	10000	ECM Refrigerated or Freezer Display Case Motors - ECM replacing PSC	NRFS	15
2020	KY	9998	ECM Refrigerated or Freezer Display Case Motors - ECM replacing SP	NRFS	15
2020	KY	9999	ECM Walk-In Cooler and Freezer Motors - ECM replacing PSC	NRFS	15
2020	KY	9997	ECM Walk-In Cooler and Freezer Motors - ECM replacing SP	NRFS	15
2020	KY	518	Energy Star Room AC over 14,000 Btu hr	NRHVAC	15
2020	KY	519	Energy Star Room AC under 14,000 Btu hr	NRHVAC	15
2020	KY	8829	Engine Block Heater Timer	NRPROC	5
2020	KY	534	Engineered Nozzles - COMPRESS AIR	NRPROC	5
2020	KY	8830	Escalator Motor Efficiency Controller	NRP&M	15
2020	KY	3000	Faucet Aerator (DI) - COMM, pvt use 0.5 gpm	NRHVAC	10
2020	KY	3003	Faucet Aerator (DI) - COMM, pvt use 1.0 gpm	NRHVAC	10
2020	KY	2999	Faucet Aerator (DI) - Commercial, public use 0.5 gpm	NRHVAC	10
2020	KY	3002	Faucet Aerator (DI) - Commercial, public use 1.0 gpm	NRHVAC	10
2020	KY	3001	Faucet Aerator (DI) - School, public use 0.5 gpm	NRHVAC	10
2020	KY	3004	Faucet Aerator (DI) - School, public use 1.0 gpm	NRHVAC	10
2020	KY	2970	Faucet Aerators MF Direct 1.0 GPM - bath	MFEEAR	10
2020	KY	2971	Faucet Aerators MF Direct 1.0 GPM - kitchen	MFEEAR	10
2020	KY	2973	Faucet Aerators MF DIY 1.0 GPM - bath	MFEEAR	10
2020	KY	2974	Faucet Aerators MF DIY 1.0 GPM - kitchen	MFEEAR	10
2020	KY	2979	Faucet Aerators SF DIY 1.0 GPM - bath	SFEEAR	10
2020	KY	2980	Faucet Aerators SF DIY 1.0 GPM - kitchen	SFEEAR	10
2020	KY	5630	FHAC_No Variable Speed_1975-1985	NRFS	16
2020	KY	5631	FHAC_No Variable Speed_1985-1996	NRFS	16
2020	KY	5632	FHAC_No Variable Speed_1996-2003	NRFS	16

2020	KY	5633	FHAC_No Variable Speed_less than 1975	NRFS	16
2020	KY	5634	FHAC_Variable Speed_1975-1985	NRFS	16
2020	KY	5635	FHAC_Variable Speed_1985-1996	NRFS	16
2020	KY	5636	FHAC_Variable Speed_1996-2003	NRFS	16
2020	KY	5637	FHAC_Variable Speed_less than 1975	NRFS	16
2020	KY	5638	FHWC_No Variable Speed_1975-1985	NRFS	16
2020	KY	5639	FHWC_No Variable Speed_1985-1996	NRFS	16
2020	KY	5640	FHWC_No Variable Speed_1996-2003	NRFS	16
2020	KY	5641	FHWC_No Variable Speed_less than 1975	NRFS	16
2020	KY	5642	FHWC_Variable Speed_1975-1985	NRFS	16
2020	KY	5643	FHWC_Variable Speed_1985-1996	NRFS	16
2020	KY	5644	FHWC_Variable Speed_1996-2003	NRFS	16
2020	KY	5645	FHWC_Variable Speed_less than 1975	NRFS	16
2020	KY	5646	Floating Suction_1975-1985	NRFS	16
2020	KY	5647	Floating Suction_1985-1996	NRFS	16
2020	KY	5648	Floating Suction_1996-2003	NRFS	16
2020	KY	5649	Floating Suction_less than 1975	NRFS	16
2020	KY	5650	Fryer (Large Vat)	NRFS	12
2020	KY	5651	Fryer (Standard Vat)	NRFS	12
2020	KY	2981	Heat Pump Water Heater	HPWH	10
2020	KY	10017	High Efficiency Fans 14 to 23 inches - C&I	NRHVAC	10
2020	KY	8839	High Efficiency Fans 14 to 23 inches	NRHVAC	10
2020	KY	10018	High Efficiency Fans 24 to 35 inches - C&I	NRHVAC	10
2020	KY	8840	High Efficiency Fans 24 to 35 inches	NRHVAC	10
2020	KY	10019	High Efficiency Fans 36 to 47 inches - C&I	NRHVAC	10
2020	KY	8841	High Efficiency Fans 36 to 47 inches	NRHVAC	10
2020	KY	10020	High Efficiency Fans 48 to 61 inches - C&I	NRHVAC	10
2020	KY	8842	High Efficiency Fans 48 to 61 inches	NRHVAC	10
2020	KY	486	High Efficiency Pumps 1.5HP	NRP&M	15
2020	KY	488	High Efficiency Pumps 10HP	NRP&M	15
2020	KY	490	High Efficiency Pumps 15HP	NRP&M	15
2020	KY	494	High Efficiency Pumps 20HP	NRP&M	15
2020	KY	493	High Efficiency Pumps 2HP	NRP&M	15
2020	KY	496	High Efficiency Pumps 3HP	NRP&M	15

2020	KY	498	High Efficiency Pumps 5HP	NRP&M	15
2020	KY	499	High Efficiency Pumps 7.5HP	NRP&M	15
2020	KY	10001	High Volume Low Speed Fan	NRHVAC	15
2020	KY	5652	HT ES Multi-Tank - CNV DW New -rplc on Burnout	NRFS	20
2020	KY	3121	HT ES Multi-Tank - CNV DW w-Boost Htr (Elec) New -repl on BO	NRFS	20
2020	KY	3122	HT ES Multi-Tank - CNV DW w-Boost Htr (Gas) New -repl on BO	NRFS	20
2020	KY	5656	HT ES Sngl Tank - CNV DW New -rplc on Burnout	NRFS	20
2020	KY	3123	HT ES Sngl Tank - CNV DW w-Boost Htr (Elec) New -repl on BO	NRFS	20
2020	KY	3124	HT ES Sngl Tank - CNV DW w-Boost Htr (Gas) New -repl on BO	NRFS	20
2020	KY	5657	HT ES Sngl Tank - Door DW New -repl on Burnout	NRFS	15
2020	KY	3125	HT ES Sngl Tank - Door DW w-Boost Htr (Elec) New -repl on BO	NRFS	15
2020	KY	3126	HT ES Sngl Tank - Door DW w-Boost Htr (Gas) New -repl on BO	NRFS	15
2020	KY	5658	HT ES UC DW New -replc on Burnout	NRFS	10
2020	KY	3062	HT ES UC DW w-Boost Htr (Elec) New -repl on BO	NRFS	10
2020	KY	3063	HT ES UC DW w-Boost Htr (Gas) New -repl on BO	NRFS	10
2020	KY	10029	HVAC DX AC 135-240kBtuh 11.7 EER (Tier 0_1) - EER only	NRHVAC	15
2020	KY	5700	HVAC DX AC 135-240kBtuh 11.7 EER (Tier 0_1)	NRHVAC	15
2020	KY	10026	HVAC DX AC 135-240kBtuh 12.2 EER (Tier 2) - EER only	NRHVAC	15
2020	KY	5701	HVAC DX AC 135-240kBtuh 12.2 EER (Tier 2)	NRHVAC	15
2020	KY	10030	HVAC DX AC 240-760kBtuh 10.5 EER (Tier 0_1) - EER only	NRHVAC	15
2020	KY	5702	HVAC DX AC 240-760kBtuh 10.5 EER (Tier 0_1)	NRHVAC	15
2020	KY	10027	HVAC DX AC 240-760kBtuh 10.8 EER (Tier 2) - EER only	NRHVAC	15
2020	KY	5703	HVAC DX AC 240-760kBtuh 10.8 EER (Tier 2)	NRHVAC	15
2020	KY	10028	HVAC DX AC 65-135kBtuh 11.7 EER (Tier 0_1) - EER only	NRHVAC	15
2020	KY	5704	HVAC DX AC 65-135kBtuh 11.7 EER (Tier 0_1)	NRHVAC	15
2020	KY	10025	HVAC DX AC 65-135kBtuh 12.2 EER (Tier 2) - EER only	NRHVAC	15
2020	KY	5705	HVAC DX AC 65-135kBtuh 12.2 EER (Tier 2)	NRHVAC	15
2020	KY	10038	HVAC DX AC greater than 760kBtuh 10.4 EER (Tier 2) - EER only	NRHVAC	15
2020	KY	5706	HVAC DX AC greater than 760kBtuh 10.4 EER (Tier 2)	NRHVAC	15
2020	KY	10039	HVAC DX AC greater than 760kBtuh 9.9 EER (Tier 0_1) - EER only	NRHVAC	15
2020	KY	5707	HVAC DX AC greater than 760kBtuh 9.9 EER (Tier 0_1)	NRHVAC	15
2020	KY	5708	HVAC DX AC less than 65kBtuh 14 SEER (Tier 0_1)	NRHVAC	15
2020	KY	10035	HVAC DX AC less than 65kBtuh 15 SEER (Tier 0_1) - EER only	NRHVAC	15
2020	KY	5709	HVAC DX AC less than 65kBtuh 15 SEER (Tier 2)	NRHVAC	15

2020	KY	10031	HVAC DX AC less than 65kBtuh 16 SEER (Tier 2) - EER only	NRHVAC	15
2020	KY	10037	HVAC DX HP 135-240kBtuh 10.9 EER 3.3 COP (Tier 1) - EER only	NRHVAC	15
2020	KY	5710	HVAC DX HP 135-240kBtuh 10.9 EER 3.3 COP (Tier 1)	NRHVAC	15
2020	KY	10036	HVAC DX HP 65-135kBtuh 11.3 EER 3.4 COP (Tier 1) - EER only	NRHVAC	15
2020	KY	5711	HVAC DX HP 65-135kBtuh 11.3 EER 3.4 COP (Tier 1)	NRHVAC	15
2020	KY	10040	HVAC DX HP greater than 240 kBtuh 10.3 EER 3.3 COP (Tier 1) - EER only	NRHVAC	15
2020	KY	5712	HVAC DX HP greater than 240 kBtuh 10.3 EER 3.3 COP (Tier 1)	NRHVAC	15
2020	KY	5713	HVAC DX HP Packaged less than 65kBtuh 14 SEER 8 HSPF (Tier 1)	NRHVAC	15
2020	KY	10042	HVAC DX HP Packaged less than 65kBtuh 15 SEER 8.5 HSPF (Tier 1) - EER only	NRHVAC	15
2020	KY	5715	HVAC DX HP Packaged less than 65kBtuh 15 SEER 8.5 HSPF (Tier 2)	NRHVAC	15
2020	KY	10041	HVAC DX HP Packaged less than 65kBtuh 16 SEER 9 HSPF (Tier 2) - EER only	NRHVAC	15
2020	KY	5717	HVAC DX HP Split less than 65kBtuh 15 SEER 9 HSPF (Tier 2)	NRHVAC	15
2020	KY	5719	HVAC DX mini split AC 15 SEER	NRHVAC	15
2020	KY	5720	HVAC DX mini split AC 16 SEER	NRHVAC	15
2020	KY	5721	HVAC DX mini split AC 18 SEER	NRHVAC	15
2020	KY	5722	HVAC DX mini split AC 20 SEER	NRHVAC	15
2020	KY	5723	HVAC DX mini split HP 15 SEER 8.5 HSPF	NRHVAC	15
2020	KY	5725	HVAC DX mini split HP 16 SEER 8.5 HSPF	NRHVAC	15
2020	KY	5727	HVAC DX mini split HP 18 SEER 9.6 HSPF	NRHVAC	15
2020	KY	5729	HVAC DX mini split HP 20 SEER 9.6 HSPF	NRHVAC	15
2020	KY	5731	HVAC DX PTAC 12000 Btuh 10.7 EER	NRHVAC	15
2020	KY	5732	HVAC DX PTAC 15000 Btuh 9.8 EER	NRHVAC	15
2020	KY	5733	HVAC DX PTAC 7600 Btuh 12.2 EER	NRHVAC	15
2020	KY	10010	HVAC PTHP 12000 Btuh 11.4 EER 3.3 COP	NRHVAC	15
2020	KY	10011	HVAC PTHP 15000 Btuh 10.2 EER 3.2 COP	NRHVAC	15
2020	KY	10008	HVAC PTHP 7600 Btuh 12.4 EER 3.4 COP	NRHVAC	15
2020	KY	6010	LED - Retail Fixture	RTLLED	12
2020	KY	6009	LED - Retail General Purpose A Line	RTLLED	12
2020	KY	6013	LED - Retail Reflector Outdoor	RTLLED	15
2020	KY	6011	LED - Retail Reflector Recessed	RTLLED	12
2020	KY	6012	LED - Retail Reflector Track Lighting	RTLLED	12
2020	KY	7430	LED - Retail Specialty 3 Way	RTLLED	12
2020	KY	6014	LED - Retail Specialty Decorative Candelabra	RTLLED	15
2020	KY	6015	LED - Retail Specialty Globe	RTLLED	12

2020	KY	8850	LED 2ft Tube 1-LED, replacing or in lieu of T8 fluorescent	NRLTG	15
2020	KY	10082	LED 4ft Tube 1-LED replacing or in lieu of T5SO fluorescent	NRLTG	15
2020	KY	10083	LED 4ft Tube 1-LED, replacing or in lieu of T5HO fluorescent	NRLTG	15
2020	KY	8851	LED 4ft Tube 1-LED, replacing or in lieu of T8 fluorescent	NRLTG	15
2020	KY	10086	LED A Lamps replacing exterior Incandescent and CFL less than 100W	NRLTG	8
2020	KY	8852	LED A Lamps	NRLTG	15
2020	KY	8853	LED Decorative, Globe, 3-Way Lamps	NRLTG	15
2020	KY	3128	LED Display Case (rplcng or ILO INCD or FL display case Ltng)	NRLTG	15
2020	KY	352	LED Exit Signs Electronic Fixtures (Retrofit Only)	NRLTG	16
2020	KY	10079	LED FLD rplcng or ILO greater than 500W HAL, INCD, or HID	NRLTG	15
2020	KY	3067	LED FLD rplcng or ILO GRT 100W HAL, INCD, or HID	NRLTG	15
2020	KY	3068	LED FLD rplcng or ILO up to 100W HAL, INCD, or HID	NRLTG	15
2020	KY	10075	LED Highbay Fixture replacing 2-lamp 8ft T12 fixture	NRLTG	15
2020	KY	10077	LED Highbay Fixture replacing 4-lamp 4ft T5HO fixture	NRLTG	15
2020	KY	10074	LED Highbay Fixture replacing 6-lamp 4ft T8 fixture	NRLTG	15
2020	KY	10062	LED Highbay replacing 251-400W HID Lamp	NRLTG	13
2020	KY	3069	LED Highbay replacing 251-400W HID	NRLTG	15
2020	KY	10070	LED Highbay replacing greater than 400W HID Lamp	NRLTG	13
2020	KY	3070	LED Highbay replacing greater than 400W HID	NRLTG	15
2020	KY	10063	LED Lowbay replacing 176W-250W HID Lamp	NRLTG	13
2020	KY	3071	LED Lowbay replacing 176W-250W HID	NRLTG	15
2020	KY	10065	LED Lowbay replacing up to 175W HID Lamp	NRLTG	13
2020	KY	3072	LED Lowbay replacing up to 175W HID	NRLTG	15
2020	KY	3073	LED Panel 1x4 replacing or in lieu of T8 FL	NRLTG	15
2020	KY	3075	LED Panel 2x2 replacing or in lieu of T8 FL	NRLTG	15
2020	KY	3077	LED Panel 2x4 replacing or in lieu of T8 FL	NRLTG	15
2020	KY	8859	LED PAR, BR, MR Lamps	NRLTG	15
2020	KY	8860	LED Poultry Lights	NRLTG	9
2020	KY	3131	LED Track Ltng (rplcng or ILO INCD, HAL, CFL, or HID track Ltng)	NRLTG	15
2020	KY	2984	LF Showerhead MF Direct 1.5 GPM	MFEESH	10
2020	KY	2987	LF Showerhead MF DIY 1.5 GPM	MFEESH	10
2020	KY	3118	Low Flow Showerhead (DI) - COMM, public use 1.5 gpm	NRHVAC	10
2020	KY	3005	Low Flow Showerhead (DI) - COMM, pvt use 1.5 gpm	NRHVAC	10
2020	KY	3079	Low-Temp ES Multi-Tank - CNV DW New -repl on BO	NRFS	20

2020	KY	3082	Low-Temp ES UC DW New -repl on Burnout	NRFS	10
2020	KY	8866	Milk Vacuum Pump VFD	NRP&M	15
2020	KY	2098	My Home Energy Report	HECR	1
2020	KY	2994	Pipe Wrap MF Direct	MFEPPW	13
2020	KY	2995	Pipe Wrap MF DIY	MFEPPW	13
2020	KY	2997	Pipe Wrap SF DIY	SFEPPW	13
2020	KY	2998	Pool Pump	PEEPVS	10
2020	KY	1167	Pre Rinse Sprayers	NRFS	5
2020	KY	6470	Quality Installation - Non-Referred	SSQINR	10
2020	KY	6454	Quality Installation - Referred	SSQIR	10
2020	KY	5622	RCFLSP - Specialty Bulbs 3 Way LED	RCFLSP	12
2020	KY	2769	RCFLSP - Specialty Bulbs A Line LED	RCFLSP	12
2020	KY	4587	RCFLSP - Specialty Bulbs Candelabra LED	RCFLSP	15
2020	KY	5621	RCFLSP - Specialty Bulbs Globe LED	RCFLSP	12
2020	KY	2385	RCFLSP - Specialty Bulbs Recessed LED	RCFLSP	12
2020	KY	4588	RCFLSP - Specialty Bulbs Recessed Outdoor LED	RCFLSP	15
2020	KY	7246	RLED - Free LED Phase 1	RLED	12
2020	KY	7247	RLED - Free LED Phase 2	RLED	12
2020	KY	8502	RLEDPM - Aline	RLEDPM	12
2020	KY	8504	RLEDPM - Candelabra	RLEDPM	15
2020	KY	8503	RLEDPM - Globe	RLEDPM	12
2020	KY	4906	SBES HVAC AC	SSBDIR	15
2020	KY	4907	SBES HVAC HP	SSBDIR	15
2020	KY	4908	SBES Lighting 8760	SSBDIR	10
2020	KY	4909	SBES Lighting Daylighting	SSBDIR	10
2020	KY	4910	SBES Lighting DusktoDawn	SSBDIR	10
2020	KY	4911	SBES OccSensors	SSBDIR	10
2020	KY	4912	SBES Refrigeration	SSBDIR	15
2020	KY	384	Setback Programmable Thermostat	NRHVAC	11
2020	KY	6474	Smart Saver - Attic Insul & Air Sealing - Non-Referred	SSAISN	20
2020	KY	6458	Smart Saver - Attic Insul & Air Sealing - Referred	SSAISR	20
2020	KY	6464	Smart Saver - Central Air Conditioner Tier 1 - Non-Referred	SSAC1N	13
2020	KY	6448	Smart Saver - Central Air Conditioner Tier 1 - Referred	SSAC1R	13
2020	KY	6466	Smart Saver - Central Air Conditioner Tier 2 - Non-Referred	SSAC2N	15

2020	KY	6450	Smart Saver - Central Air Conditioner Tier 2 - Referred	SSAC2R	15
2020	KY	6468	Smart Saver - Central Air Conditioner Tier 3 - Non-Referred	SSAC3N	15
2020	KY	6452	Smart Saver - Central Air Conditioner Tier 3 - Referred	SSAC3R	15
2020	KY	6476	Smart Saver - Duct Insulation - Non-Referred	SSDINN	20
2020	KY	6460	Smart Saver - Duct Insulation - Referred	SSDINR	20
2020	KY	6475	Smart Saver - Duct Sealing - Non-Referred	SSDSEN	18
2020	KY	6459	Smart Saver - Duct Sealing - Referred	SSDSEER	18
2020	KY	6465	Smart Saver - Heat Pump Tier 1 - Non-Referred	SSHP1N	12
2020	KY	6449	Smart Saver - Heat Pump Tier 1 - Referred	SSHP1R	12
2020	KY	6467	Smart Saver - Heat Pump Tier 2 - Non-Referred	SSHP2N	15
2020	KY	6451	Smart Saver - Heat Pump Tier 2 - Referred	SSHP2R	15
2020	KY	6469	Smart Saver - Heat Pump Tier 3 - Non-Referred	SSHP3N	15
2020	KY	6453	Smart Saver - Heat Pump Tier 3 - Referred	SSHP3R	15
2020	KY	6471	Smart Thermostat - Non-Referred	SSSTN	11
2020	KY	6455	Smart Thermostat - Referred	SSSTR	11
2020	KY	522	Steamer_3 pan	NRFS	12
2020	KY	525	Steamer_4 pan	NRFS	12
2020	KY	526	Steamer_5 pan	NRFS	12
2020	KY	527	Steamer_6 pan	NRFS	12
2020	KY	9989	Suction Pipe Insulation - Coolers	NRFS	11
2020	KY	9991	Suction Pipe Insulation - Freezers	NRFS	11
2020	KY	10098	VFD on Chilled Water Pump	NRP&M	15
2020	KY	10097	VFD on Hot Water Pump	NRP&M	15
2020	KY	1114	VFD Process Pump 1-50 HP	NRP&M	15
2020	KY	3113	VSD Air COMP replacing load no load COMP	NRPROC	15
2020	KY	3114	VSD Air COMP replacing variable displacement COMP	NRPROC	15
2020	KY	1169	VSD Air Compressors	NRPROC	15
2020	KY	3116	Walk-In Freezer Automatic Door-Closer Retrofit	NRFS	8
2020	KY	6124	Water Cooled Chiller_Centrifugal at least 150 tons and less than 300 tons	NRHVAC	20
2020	KY	6125	Water Cooled Chiller_Centrifugal at least 300 tons and less than 600 tons	NRHVAC	20
2020	KY	6126	Water Cooled Chiller_Centrifugal at least 600 tons	NRHVAC	20
2020	KY	6127	Water Cooled Chiller_Centrifugal less than 150 tons	NRHVAC	20
2020	KY	6128	Water Cooled Screw or Scroll at least 150 tons and less than 300 tons	NRHVAC	20
2020	KY	6129	Water Cooled Screw or Scroll at least 300 tons	NRHVAC	20

2020	KY	6130	Water Cooled Screw or Scroll at least 75 tons and less than 150 tons	NRHVAC	20
2020	KY	6131	Water Cooled Screw or Scroll less than 75 tons	NRHVAC	20
2020	KY	3117	Water Heater Pipe Insulation	NRHVAC	13
2020	KY	5659	Zero Energy Doors_High-Temp Cooler	NRFS	10
2020	KY	5660	Zero Energy Doors_Med-Temp Cooler	NRFS	10
2019	KY	2993	LF Showerhead 5F DIY 1.5 GPM	SFEESH	10
2019	KY	G - 2019KYSHW	LF Wand Showerhead SF DIY 1.5 GPM	SFEESH	10
2019	KY	IG - 2019KYSHV	LF Wide Showerhead SF DIY 1.5 GPM	SFEESH	10
2020	KY	2993	LF Showerhead SF DIY 1.5 GPM	SFEESH	10
2020	KY	G - 2019KYSHW	LF Wand Showerhead SF DIY 1.5 GPM	SFEESH	10
2020	KY	IG - 2019KYSHV	LF Wide Showerhead SF DIY 1.5 GPM	SFEESH	10
2020	KY	12155	C&I Heat Pump Water Heater.xlsb	NRHVAC	10
2020	KY	12156	Control sensor for lighting and exhaust fan in restrooms.xlsb	NRLTG	8
2020	KY	12157	HVAC Maintenance - Coil Cleaning.xlsb	NRHVAC	3
2020	KY	12158	HVAC Maintenance - Economizer Repair and Optimizaton.xlsb	NRHVAC	5
2020	KY	12159	HVAC Maintenance - Refrigerant Charge.xlsb	NRHVAC	10
2020	KY	12160	LED Linear Ambient Fixture.xlsb	NRLTG	15
2020	KY	12161	Notched V-Belts for Non-HVAC Systems.xlsb	NRPROC	5
2020	KY	12163	Roof Insulation.xlsb	NRHVAC	20
2020	KY	12164	Wall Insulation.xlsb	NRHVAC	20
2020	KY	10054	2ft TLED Delamp with Reflector.xlsb	NRLTG	10
2020	KY	10053	2ft TLED Delamping.xlsb	NRLTG	10
2020	KY	10055	4ft TLED Delamp with Reflector.xlsb	NRLTG	10
2020	KY	10052	4ft TLED Delamp.xlsb	NRLTG	10
2020	KY	5661	ARC 10 to 15 Ton Gas Heat.xlsb	NRHVAC	15
2020	KY	5662	ARC greater than 15 Ton Gas Heat.xlsb	NRHVAC	15
2020	KY	5663	ARC HP 10 to 15 Ton.xlsb	NRHVAC	15
2020	KY	5664	ARC HP greater than 15 Ton.xlsb	NRHVAC	15
2020	KY	5665	ARC HP less than 10 Ton.xlsb	NRHVAC	15
2020	KY	5666	ARC less than 10 Ton Gas Heat.xlsb	NRHVAC	15
2020	KY	1132	Beverage Reach-in Controller.xlsb	NRFS	10
2020	KY	10071	Bi-level Stairwell Fixture with Integrated Sensor.xlsb	NRLTG	8
2020	KY	1133	CEE Tier 1 Room AC greater than 14,000 Btu per hr.xlsb	NRHVAC	15
2020	KY	1134	CEE Tier 1 Room AC less than 14,000 Btu per hr.xlsb	NRHVAC	15

2020	KY	1135	CEE Tier 2 Room AC greater than 14,000 Btu per hr.xlsb	NRHVAC	15
2020	KY	1136	CEE Tier 2 Room AC less than 14,000 Btu per hr.xlsb	NRHVAC	15
2020	KY	3006	Chilled Water Reset- Air Cooled Chillers, Grocery.xlsb	NRHVAC	10
2020	KY	3007	Chilled Water Reset- Air Cooled Chillers, Other.xlsb	NRHVAC	10
2020	KY	3008	Chilled Water Reset- Air Cooled Chillers, Retail.xlsb	NRHVAC	10
2020	KY	3010	Chilled Water Reset- Water Cooled Chillers, Other.xlsb	NRHVAC	10
2020	KY	3119	Chilled Wtr Reset- Air Cooled Chillers, College or Sm Ofc.xlsb	NRHVAC	10
2020	KY	3009	Chilled Wtr Reset- Air Cooled Chillers, SCH (K-12).xlsb	NRHVAC	10
2020	KY	3120	Chilled Wtr Reset- Wtr Cooled Chillers, College or Sm Ofc.xlsb	NRHVAC	10
2020	KY	3011	Chilled Wtr Reset- Wtr Cooled Chillers, Retail.xlsb	NRHVAC	10
2020	KY	3012	Chilled Wtr Reset- Wtr Cooled Chillers, SCH (K-12).xlsb	NRHVAC	10
2020	KY	3013	Chilled Wtr Reset-Wtr Cooled Chillers, Grocery.xlsb	NRHVAC	10
2020	KY	10092	Clothes Dryer C&I - Electric.xlsb	NRPROC	7
2020	KY	10095	Clothes Dryer MF Common Area.xlsb	NRPROC	7
2020	KY	10093	Clothes Dryer MF Tnt.xlsb	NRPROC	14
2020	KY	10091	Clothes Washer C&I.xlsb	NRPROC	7
2020	KY	10096	Clothes Washer MF Common Area.xlsb	NRPROC	7
2020	KY	10094	Clothes Washer MF Tnt.xlsb	NRPROC	14
2020	KY	3014	Controlled Plug Strip.xlsb	NRIT	4
2020	KY	4501	CoolRoof New Replace on Burnout College-sq ft.xlsb	NRHVAC	15
2020	KY	4502	CoolRoof New Replace on Burnout Health-sq ft.xlsb	NRHVAC	15
2020	KY	4503	CoolRoof New Replace on Burnout Hotel-sq ft.xlsb	NRHVAC	15
2020	KY	4504	CoolRoof New Replace on Burnout Large Office-sq ft.xlsb	NRHVAC	15
2020	KY	4505	CoolRoof New Replace on Burnout Medium Offic-sq ft.xlsb	NRHVAC	15
2020	KY	4506	CoolRoof New Replace on Burnout Motel-sq ft.xlsb	NRHVAC	15
2020	KY	4507	CoolRoof New Replace on Burnout Other-sq ft.xlsb	NRHVAC	15
2020	KY	4508	CoolRoof New Replace on Burnout Retail-sq ft.xlsb	NRHVAC	15
2020	KY	4509	CoolRoof New Replace on Burnout School-sq ft.xlsb	NRHVAC	15
2020	KY	4510	CoolRoof New Replace on Burnout Strip Mall-sq ft.xlsb	NRHVAC	15
2020	KY	8822	Creep Heat Pad.xlsb	NRPROC	5
2020	KY	8823	Cycling Compressed Air Dryer.xlsb	NRPROC	10
2020	KY	8825	Dairy Plate Cooler.xlsb	NRPROC	10
2020	KY	8827	Daylighting Control with Occupancy Sensors.xlsb	NRLTG	8
2020	KY	8828	Demand Control Ventilation for Kitchen Exhaust Hood.xlsb	NRFS	15

2020	KY	5667	DX RTU Tune-up_ AC_ Fixed Orifice_ +10% chg adj.xlsb	NRHVAC	10
2020	KY	5668	DX RTU Tune-up_ AC_ Fixed Orifice_ +15% chg adj.xlsb	NRHVAC	10
2020	KY	5669	DX RTU Tune-up_ AC_ Fixed Orifice_ +20% chg adj.xlsb	NRHVAC	10
2020	KY	5670	DX RTU Tune-up_ AC_ Fixed Orifice_ +25% chg adj.xlsb	NRHVAC	10
2020	KY	5671	DX RTU Tune-up_ AC_ Fixed Orifice_ +30% chg adj.xlsb	NRHVAC	10
2020	KY	5672	DX RTU Tune-up_ AC_ Fixed Orifice_ +5% chg adj.xlsb	NRHVAC	10
2020	KY	5673	DX RTU Tune-up_ AC_ Fixed Orifice_ -20% chg adj.xlsb	NRHVAC	10
2020	KY	5674	DX RTU Tune-up_ AC_ TXV_ +10% chg adj.xlsb	NRHVAC	10
2020	KY	5675	DX RTU Tune-up_ AC_ TXV_ +15% chg adj.xlsb	NRHVAC	10
2020	KY	5676	DX RTU Tune-up_ AC_ TXV_ +20% chg adj.xlsb	NRHVAC	10
2020	KY	5677	DX RTU Tune-up_ AC_ TXV_ +25% chg adj.xlsb	NRHVAC	10
2020	KY	5678	DX RTU Tune-up_ AC_ TXV_ +30% chg adj.xlsb	NRHVAC	10
2020	KY	5679	DX RTU Tune-up_ AC_ TXV_ +5% chg adj.xlsb	NRHVAC	10
2020	KY	5680	DX RTU Tune-up_ AC_ TXV_ -20% chg adj.xlsb	NRHVAC	10
2020	KY	5681	DX RTU Tune-up_ HP_ Fixed Orifice_ +10% chg adj.xlsb	NRHVAC	10
2020	KY	5682	DX RTU Tune-up_ HP_ Fixed Orifice_ +15% chg adj.xlsb	NRHVAC	10
2020	KY	5683	DX RTU Tune-up_ HP_ Fixed Orifice_ +20% chg adj.xlsb	NRHVAC	10
2020	KY	5684	DX RTU Tune-up_ HP_ Fixed Orifice_ +25% chg adj.xlsb	NRHVAC	10
2020	KY	5685	DX RTU Tune-up_ HP_ Fixed Orifice_ +30% chg adj.xlsb	NRHVAC	10
2020	KY	5686	DX RTU Tune-up_ HP_ Fixed Orifice_ +5% chg adj.xlsb	NRHVAC	10
2020	KY	5687	DX RTU Tune-up_ HP_ Fixed Orifice_ -20% chg adj.xlsb	NRHVAC	10
2020	KY	5688	DX RTU Tune-up_ HP_ TXV_ +10% chg adj.xlsb	NRHVAC	10
2020	KY	5689	DX RTU Tune-up_ HP_ TXV_ +15% chg adj.xlsb	NRHVAC	10
2020	KY	5690	DX RTU Tune-up_ HP_ TXV_ +20% chg adj.xlsb	NRHVAC	10
2020	KY	5691	DX RTU Tune-up_ HP_ TXV_ +25% chg adj.xlsb	NRHVAC	10
2020	KY	5692	DX RTU Tune-up_ HP_ TXV_ +30% chg adj.xlsb	NRHVAC	10
2020	KY	5693	DX RTU Tune-up_ HP_ TXV_ +5% chg adj.xlsb	NRHVAC	10
2020	KY	5694	DX RTU Tune-up_ HP_ TXV_ -20% chg adj.xlsb	NRHVAC	10
2020	KY	5734	EC Plug Fan_ 20 HP.xlsb	NRIT	10
2020	KY	5735	EC Plug Fan_ 3 HP.xlsb	NRIT	10
2020	KY	5736	EC Plug Fan_ 5 HP.xlsb	NRIT	10
2020	KY	5737	EC Plug Fan_ 10 HP.xlsb	NRIT	10
2020	KY	5738	EC Plug Fan_ 15 HP.xlsb	NRIT	10
2020	KY	5739	EC Plug Fan_ 2 HP.xlsb	NRIT	10

2020	KY	5740	EC Plug Fan_7.5 HP.xlsb	NRIT	10
2020	KY	882	ENERGY STAR Commercial Glass Door Freezers 15 to 30 ft3 - var.xlsb	NRFS	12
2020	KY	884	ENERGY STAR Commercial Glass Door Freezers 30 to 50ft3 - var.xlsb	NRFS	12
2020	KY	880	ENERGY STAR Commercial Glass Door Freezers less than 15ft3 - var.xlsb	NRFS	12
2020	KY	886	ENERGY STAR Commercial Glass Door Freezers more than 50ft3 - var.xlsb	NRFS	12
2020	KY	890	ENERGY STAR Commercial Glass Door Refrigerators 15 to 30 ft3 - var.xlsb	NRFS	12
2020	KY	892	ENERGY STAR Commercial Glass Door Refrigerators 30 to 50ft3 - var.xlsb	NRFS	12
2020	KY	888	ENERGY STAR Commercial Glass Door Refrigerators less than 15ft3 - var.xlsb	NRFS	12
2020	KY	894	ENERGY STAR Commercial Glass Door Refrigerators more than 50ft3 - var.xlsb	NRFS	12
2020	KY	898	ENERGY STAR Commercial Solid Door Freezers 15 to 30 ft3 - var.xlsb	NRFS	12
2020	KY	900	ENERGY STAR Commercial Solid Door Freezers 30 to 50ft3 - var.xlsb	NRFS	12
2020	KY	896	ENERGY STAR Commercial Solid Door Freezers less than 15ft3 - var.xlsb	NRFS	12
2020	KY	902	ENERGY STAR Commercial Solid Door Freezers more than 50ft3 - var.xlsb	NRFS	12
2020	KY	906	ENERGY STAR Commercial Solid Door Refrigerators 15 to 30 ft3 - var.xlsb	NRFS	12
2020	KY	908	ENERGY STAR Commercial Solid Door Refrigerators 30 to 50ft3 - var.xlsb	NRFS	12
2020	KY	904	ENERGY STAR Commercial Solid Door Refrigerators less than 15ft3 - var.xlsb	NRFS	12
2020	KY	910	ENERGY STAR Commercial Solid Door Refrigerators more than 50ft3 - var.xlsb	NRFS	12
2020	KY	10059	Exterior Bi-level Controls Retrofit.xlsb	NRLTG	8
2020	KY	10084	Exterior HID replacement above 175W to 250W HID retrofit Lamp.xlsb	NRLTG	12
2020	KY	1150	Exterior HID replacement above 175W to 250W HID retrofit.xlsb	NRLTG	12
2020	KY	10085	Exterior HID replacement above 250W to 400W HID retrofit Lamp.xlsb	NRLTG	12
2020	KY	1151	Exterior HID replacement above 250W to 400W HID retrofit.xlsb	NRLTG	12
2020	KY	10076	Exterior HID replacement above 400W HID retrofit Lamp.xlsb	NRLTG	12
2020	KY	1152	Exterior HID replacement above 400W HID retrofit.xlsb	NRLTG	12
2020	KY	10072	Exterior HID replacement to 175W HID retrofit Lamp.xlsb	NRLTG	12
2020	KY	1153	Exterior HID replacement to 175W HID retrofit.xlsb	NRLTG	12
2020	KY	8831	Fluorescent Delamping 2ft T8 with Reflector.xlsb	NRLTG	10
2020	KY	8832	Fluorescent Delamping 2ft T8.xlsb	NRLTG	10
2020	KY	8833	Fluorescent Delamping 3ft T8 with Reflector.xlsb	NRLTG	10
2020	KY	8834	Fluorescent Delamping 3ft T8.xlsb	NRLTG	10
2020	KY	8835	Fluorescent Delamping 4ft T8 with Reflector.xlsb	NRLTG	10
2020	KY	8836	Fluorescent Delamping 4ft T8.xlsb	NRLTG	10
2020	KY	8837	Fluorescent Delamping 8ft T8 with Reflector.xlsb	NRLTG	10
2020	KY	8838	Fluorescent Delamping 8ft T8.xlsb	NRLTG	10

2020	KY	10080	Garage HID replacement above 175W to 250W HID retrofit Lamp.xlsb	NRLTG	12
2020	KY	1154	Garage HID replacement above 175W to 250W HID retrofit.xlsb	NRLTG	6
2020	KY	10081	Garage HID replacement above 250W to 400W HID retrofit Lamp.xlsb	NRLTG	12
2020	KY	1155	Garage HID replacement above 250W to 400W HID retrofit.xlsb	NRLTG	6
2020	KY	10073	Garage HID replacement above 400W HID retrofit Lamp.xlsb	NRLTG	12
2020	KY	1156	Garage HID replacement above 400W HID retrofit.xlsb	NRLTG	6
2020	KY	10069	Garage HID replacement to 175W HID retrofit Lamp.xlsb	NRLTG	12
2020	KY	1157	Garage HID replacement to 175W HID retrofit.xlsb	NRLTG	6
2020	KY	316	Griddles.xlsb	NRFS	12
2020	KY	1158	Guest Room Energy Management, Electric Heating.xlsb	NRHVAC	8
2020	KY	1159	Guest Room Energy Management, Gas Heating.xlsb	NRHVAC	8
2020	KY	10043	Heat Pump Water Heater MF Tnt.xlsb	NRHVAC	13
2020	KY	317	High Bay 2L T-5 High Output.xlsb	NRLTG	12
2020	KY	318	High Bay 3L T-5 High Output.xlsb	NRLTG	12
2020	KY	319	High Bay 4L T-5 High Output.xlsb	NRLTG	12
2020	KY	320	High Bay 6L T-5 High Output.xlsb	NRLTG	12
2020	KY	491	High Bay 6L T5 HO (2 fixtures) retrofit replc 1000W HID.xlsb	NRLTG	12
2020	KY	321	High Bay 8L T-5 High Output.xlsb	NRLTG	12
2020	KY	327	Holding Cabinet Full Size Insulated.xlsb	NRFS	12
2020	KY	328	Holding Cabinet Half Size Insulated.xlsb	NRFS	12
2020	KY	329	Holding Cabinet Three Quarter Size insulated.xlsb	NRFS	12
2020	KY	5653	HT ES PotPanUtl DW (Elec) New -replc on Burnout.xlsb	NRFS	10
2020	KY	5654	HT ES PotPanUtl DW (Gas) New -replc on Burnout.xlsb	NRFS	10
2020	KY	5655	HT ES PotPanUtl DW New -replc on Burnout.xlsb	NRFS	10
2020	KY	8843	HVAC Water Source HP greater than 17 kBtuh and less than 65 kBtuh.xlsb	NRHVAC	15
2020	KY	8844	HVAC Water Source HP greater than 65 kBtuh and less than 135 kBtuh.xlsb	NRHVAC	15
2020	KY	8845	HVAC Water Source HP less than 17 kBtuh.xlsb	NRHVAC	15
2020	KY	348	Icemaker (100 to 500 lbs_day).xlsb	NRFS	10
2020	KY	349	Icemaker (501 to 1000 lbs_day).xlsb	NRFS	10
2020	KY	350	Icemaker (Greater Than 1000 lbs_day).xlsb	NRFS	10
2020	KY	8846	Int Induction Lighting replacing HPS greater than 100W, up to 200W.xlsb	NRLTG	20
2020	KY	8847	Int Induction Lighting replacing HPS greater than 200W, up to 400W.xlsb	NRLTG	20
2020	KY	8848	Int Induction Lighting replacing MH between 70W and 200W.xlsb	NRLTG	20
2020	KY	8849	Int Induction Lighting replacing MH greater than 200W, up to 250W.xlsb	NRLTG	20

2020	KY	5742	LED 4ft Case Lights, T8 to LED - With Controls.xlsb	NRLTG	15
2020	KY	5741	LED 4ft Case Lights, T8 to LED.xlsb	NRLTG	15
2020	KY	5744	LED 5ft Case Lights, T8 to LED - With Controls.xlsb	NRLTG	15
2020	KY	5743	LED 5ft Case Lights, T8 to LED.xlsb	NRLTG	15
2020	KY	10068	LED 6ft Case Lights, T8 to LED - With Controls.xlsb	NRLTG	15
2020	KY	10056	LED 6ft Case Lights, T8 to LED.xlsb	NRLTG	15
2020	KY	10067	LED Bollard Fixtures for Exterior Lighting.xlsb	NRLTG	15
2020	KY	10060	LED Canopy replacing 176-250W HID Lamp.xlsb	NRLTG	13
2020	KY	3064	LED Canopy replacing 176-250W HID.xlsb	NRLTG	15
2020	KY	10061	LED Canopy replacing 251-400W HID Lamp.xlsb	NRLTG	13
2020	KY	3065	LED Canopy replacing 251-400W HID.xlsb	NRLTG	15
2020	KY	10064	LED Canopy replacing up to 175W HID Lamp.xlsb	NRLTG	13
2020	KY	3066	LED Canopy replacing up to 175W HID.xlsb	NRLTG	15
2020	KY	1161	LED Downlight.xlsb	NRLTG	15
2020	KY	8854	LED Indoor Channel Sign, greater than 2 feet.xlsb	NRLTG	15
2020	KY	8855	LED Indoor Channel Sign, less than or equal to 2 feet.xlsb	NRLTG	15
2020	KY	8856	LED Indoor Sport Lighting.xlsb	NRLTG	15
2020	KY	8857	LED Outdoor Channel Sign, greater than 2 feet.xlsb	NRLTG	15
2020	KY	8858	LED Outdoor Channel Sign, less than or equal to 2 feet.xlsb	NRLTG	15
2020	KY	354	Light Tube.xlsb	NRLTG	14
2020	KY	8861	Lighting Power Density for New Construction.xlsb	NRLTG	15
2020	KY	8862	Low Energy Livestock Waterer.xlsb	NRPROC	10
2020	KY	8863	Low Pressure Drop Filter for Compressed Air Systems.xlsb	NRPROC	5
2020	KY	8864	Low Pressure Sprinkler Nozzles Portable.xlsb	NRPROC	4
2020	KY	8865	Low Pressure Sprinkler Nozzles Solid Set.xlsb	NRPROC	5
2020	KY	364	Night covers for displays.xlsb	NRFS	5
2020	KY	8867	No-loss Condensate Drain.xlsb	NRPROC	5
2020	KY	10005	Notched V-Belts for HVAC Systems.xlsb	NRHVAC	5
2020	KY	367	Occupancy Sensors over 500 Watts.xlsb	NRLTG	10
2020	KY	8868	Occupancy Sensors per Watt.xlsb	NRLTG	8
2020	KY	368	Occupancy Sensors under 500 Watts.xlsb	NRLTG	10
2020	KY	3083	PC Power Management from Network.xlsb	NRIT	5
2020	KY	1176	Pellet Dryer Tanks & Ducts 3in dia per ft.xlsb	NRPROC	5
2020	KY	1177	Pellet Dryer Tanks & Ducts 4in dia per ft.xlsb	NRPROC	5

2020	KY	1178	Pellet Dryer Tanks & Ducts 5in dia per ft.xlsb	NRPROC	5
2020	KY	1179	Pellet Dryer Tanks & Ducts 6in dia per ft.xlsb	NRPROC	5
2020	KY	1180	Pellet Dryer Tanks & Ducts 8in dia per ft.xlsb	NRPROC	5
2020	KY	8869	Photocells with Time Clocks.xlsb	NRLTG	8
2020	KY	8870	Photocells.xlsb	NRLTG	8
2020	KY	8871	Plug Load Occupancy Sensor.xlsb	NRIT	8
2020	KY	9987	Refrigerators - C&I - CEE T2 ER.xlsb	NRFS	12
2020	KY	9988	Refrigerators - C&I - CEE T2 TOS.xlsb	NRFS	12
2020	KY	9990	Refrigerators - C&I - ENERGY STAR ER.xlsb	NRFS	12
2020	KY	9992	Refrigerators - C&I - ENERGY STAR TOS.xlsb	NRFS	12
2020	KY	8872	Remote Mounted Daylight Sensor per Watt.xlsb	NRLTG	8
2020	KY	3084	Remote-Mounted Daylight Sensor.xlsb	NRLTG	8
2020	KY	1168	Snack Machine Controller.xlsb	NRFS	10
2020	KY	9986	Strip Curtains - Freezers.xlsb	NRFS	4
2020	KY	9993	Strip Curtains - Refrigerated Warehouse.xlsb	NRFS	4
2020	KY	8873	Switch or Fixture Mounted Daylight Sensor per Watt.xlsb	NRLTG	8
2020	KY	3086	Switch or Fixture-Mounted Daylight Sensor.xlsb	NRLTG	8
2020	KY	8874	Switching Controls for Multi-Level Lighting.xlsb	NRLTG	8
2020	KY	8875	Time Clocks External Lighting.xlsb	NRLTG	8
2020	KY	8876	Time Clocks Internal Lighting.xlsb	NRLTG	8
2020	KY	8877	Variable speed drive on HVAC chiller.xlsb	NRHVAC	15
2020	KY	416	Vending Equipment Controller.xlsb	NRFS	10
2020	KY	1112	VFD HVAC Fan.xlsb	NRP&M	15
2020	KY	3089	VFDs on chilled water pumps 10HP w Economizer.xlsb	NRIT	10
2020	KY	3088	VFDs on chilled water pumps 10HP.xlsb	NRIT	10
2020	KY	3091	VFDs on chilled water pumps 15HP w Economizer.xlsb	NRIT	10
2020	KY	3090	VFDs on chilled water pumps 15HP.xlsb	NRIT	10
2020	KY	3093	VFDs on chilled water pumps 20HP w Economizer.xlsb	NRIT	10
2020	KY	3092	VFDs on chilled water pumps 20HP.xlsb	NRIT	10
2020	KY	3095	VFDs on chilled water pumps 25HP w Economizer.xlsb	NRIT	10
2020	KY	3097	VFDs on chilled water pumps 30HP w Economizer.xlsb	NRIT	10
2020	KY	3099	VFDs on chilled water pumps 40HP w Economizer.xlsb	NRIT	10
2020	KY	3101	VFDs on chilled water pumps 50HP w Economizer.xlsb	NRIT	10
2020	KY	3103	VFDs on chilled water pumps 5HP w Economizer.xlsb	NRIT	10

2020	KY	3102	VFDs on chilled water pumps 5HP.xlsb	NRIT	10
2020	KY	3105	VFDs on chilled water pumps 7.5HP w Economizer.xlsb	NRIT	10
2020	KY	3104	VFDs on chilled water pumps 7.5HP.xlsb	NRIT	10
2020	KY	3106	VFDs on CRAC CRAH AHU fans 10HP.xlsb	NRIT	10
2020	KY	3107	VFDs on CRAC CRAH AHU fans 15HP.xlsb	NRIT	10
2020	KY	3108	VFDs on CRAC CRAH AHU fans 20HP.xlsb	NRIT	10
2020	KY	3109	VFDs on CRAC CRAH AHU fans 2HP.xlsb	NRIT	10
2020	KY	3110	VFDs on CRAC CRAH AHU fans 3HP.xlsb	NRIT	10
2020	KY	3111	VFDs on CRAC CRAH AHU fans 5HP.xlsb	NRIT	10
2020	KY	3112	VFDs on CRAC CRAH AHU fans 7.5HP.xlsb	NRIT	10
2020	KY	3115	Walk-In Cooler Automatic Door-Closer Retrofit.xlsb	NRFS	8
2020	KY	437	Window Film.xlsb	NRHVAC	10
2020	KY	11786	Marketplace LED Fixtures Direct Wire.xlsb	MPLDF	18
2020	KY	11787	Marketplace LED Fixtures Portable.xlsb	MPLDF	20
2020	KY	11281	Marketplace Showerhead.xlsb	MPWTR	10
2020	KY	11279	Marketplace Smart Strips.xlsb	MPSMST	4
2020	KY	11280	Marketplace Smart Thermostats.xlsb	MPSMTS	11
2020	KY	11282	Marketplace Thermostatic Valve Device.xlsb	MPWTR	10
2020	KY	11923	LF Wand Showerhead SF DIY 1.5 GPM.xlsb	SFEESH	10
2020	KY	11924	LF Wide Showerhead SF DIY 1.5 GPM.xlsb	SFEESH	10

Duke Energy Kentucky
Case No. 2019-00277
Attorney General's First Set Data Requests
Date Received: October 11, 2019

AG-DR-01-014

REQUEST:

Explain to what degree DEK discussed or studied the PTR programs in other jurisdictions within the PJM footprint, such as the number of default, utility-wide programs that Exelon companies have in Maryland, Washington D.C. and other jurisdictions.

RESPONSE:

The PTR programs in other jurisdictions within the PJM footprint were studied to a small degree. The PTR Pilot program proposed adheres to the commitments of the settlement agreement in Case No. 2016-00152 and collaborative discussions.

PERSON RESPONSIBLE: Bruce Sailors