BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Duke Energy Ohio, Inc., for Approval of its 2021 Energy Efficiency and Demand Side Management Portfolio of Programs and Cost Recovery Mechanism.	)))))	Case No. 20-1444-EL-POR
In the Matter of the Application of Duke Energy Ohio, Inc., for Approval of Tariff Amendments.	)))	Case No. 20-1445-EL-ATA

DUKE ENERGY OHIO, INC.'S APPLICATION
FOR APPROVAL OF ENERGY EFFICIENCY AND DEMAND SIDE MANAGEMENT PORTFOLIO OF PROGRAMS AND A COST RECOVERY MECHANISM

I. INTRODUCTION

Now comes Duke Energy Ohio, Inc, (Duke Energy Ohio or Company) pursuant to Rules 4901:1-39-04 and 4901:1-39-06, Ohio Administrative Code (O.A.C.), and submits its proposal for implementation of a new pilot portfolio of energy efficiency (EE) and demand side management (DSM) programs to be offered during calendar year 2021 and proposal for a recovery mechanism. Insofar as the statutory mandate for EE contained in R.C. 4928.66 has been amended by House Bill 6 of the 133rd General Assembly (H.B. 6) and is being phased out pursuant to Commission Order, Duke Energy Ohio voluntarily proposes to offer this narrowly-tailored new pilot portfolio of four exclusively residential programs, to meet needs that cannot be met through market-based approaches.[1]

[1] The Company recognizes that discussions are currently ongoing regarding various options for repealing, replacing, and/or modifying H.B. 6, and is prepared to amend the proposed portfolio as may become appropriate if new legislation impacting utility offered EE and demand response programs is passed.

Duke Energy Ohio is an electric distribution utility as defined in R.C. 4928.01(A)(6). Duke Energy Ohio's last statutorily mandated[2] portfolio of EE and DSM programs was approved on September 27, 2017 and recently extended through the end of 2020, with an increase in the plan's budget to include an amount equal to the annual average of the approved budget for all the years of the portfolio plan.[3] However, this portfolio is being wound down and will expire entirely at the end of 2020.

In this Application, the Company submits a proposed pilot portfolio of four targeted residential EE/DSM programs for 2021, pursuant to O.A.C. 4901:1-39-04,[4] and submits for approval, pursuant to 4901:1-39-06, a proposed rate adjustment mechanism for recovery of program costs and a Joint Benefit Recognition Mechanism, that, for the limited purpose of this pilot portfolio, will be based on the system benefits that only account for the avoided costs resulting from transmission and distribution savings from customer participation in the Company's portfolio of approved programs.[5] The total portfolio cost, including the projected Joint Benefit Recognition Mechanism, is projected to be approximately $5.99 million. The Company commits that it will not seek to recover any more than $7.0 million and will, if necessary, limit program participation to comply with this limitation on revenue recovery.

Although there is no longer a statutory mandate to achieve any particular amount of EE savings annually, the Company believes the proposed programs are necessary to fulfill needs which

[2] Pursuant to the statutory mandate in R.C. 4928.66, which has since been amended by House Bill 6 (effective October 22, 2019).
[3] *In the Matter of the Application of Ohio Power Company for the Approval of its Energy Efficiency and Peak Demand Reduction Program Portfolio Plan for 2017 Through 2020*, Case Nos. 16-576-EL-POR, *et al.*, Finding and Order, p. 17 (February 26, 2020) (Continuation Order).
[4] *See* Section VII *infra* regarding waiver of O.A.C. 4901:1-39-04(A).
[5] Residential customers are subject to the Company's decoupling rider, Rider DDR (Distribution Decoupling Rider), which was approved in Case No. 11-5905-EL-RDR, and therefore no lost distribution revenues are currently included in the supporting calculations for this Application. However, the Company reserves the right to amend this Application to account for lost distribution revenues in the event that Rider DDR is modified or eliminated.

cannot be met through market-based approaches, will actually spur customer participation in market-based offerings, and are narrowly tailored to promote Ohio policies, as embodied in R.C. 4928.02. The proposed pilot portfolio is comprised solely of residential programs which have been previously offered (and continue to be offered today) under the existing portfolio approved in Case No. 16-576-EL-POR. Collectively, participants in these programs comprise over half of the Company's residential customers. Thus, although the proposed portfolio is substantially more targeted, there is a certain amount of continuity in what customers will continue to see. Furthermore, the proposed pilot portfolio is highly cost-effective, delivering over double the benefit to cost ratio required to break even under each of the four different industry standard analyses on cost effectiveness, as detailed below. Finally, as described in the testimony of Trisha A. Haemmerle, the Company will provide additional reporting for increased transparency as to the portfolio performance, specifically a formal mid-year performance update report with actual performance details for the first six month of the pilot, such as customer participation, kWh savings and kW savings achieved and program expenditures. The Company believes this proposed pilot portfolio will maximize program impacts realized relative to program costs.

In support of its Application, Duke Energy Ohio also submits testimony in this proceeding. Duke Energy Ohio witness Trisha A. Haemmerle provides an overview of the Application, the relevant recovery mechanism, the needs served by the programs, the benefits of the programs, and the Company's intent to participate in the PJM Capacity Auction. This testimony also describes the details of the new portfolio with respect to cost effectiveness and measurement and verification of outcomes. Duke Energy Ohio witness Rick Mifflin discusses residential program implementation, and Duke Energy Ohio witness James E. Ziolkowski testifies concerning revenue requirements and rate implementation.

II. BACKGROUND

Duke Energy Ohio has believed in the importance of helping its customers save money by becoming more energy efficient and has been offering EE and DSM programs since as early as 1992, long before any statute had set EE goals. In 1992, Duke Energy Ohio formed a collaborative to develop and implement EE programs to help reduce the electrical consumption and demand of customers (Collaborative). The Company has worked effectively with its Collaborative since then and has continuously offered EE programs for its customers.

Improving EE, reducing unnecessary usage and the demand for electricity at peak times is consistent with Ohio policies, and authorizing cost recovery for such programs is within the Commission's jurisdiction. For example, R.C. 4928.02 encourages demand-side management and the use of EE programs and alternative energy resources in small businesses.[6] And Ohio law permits utilities to include provisions in an electric security plan under which the utility "may implement . . . energy efficiency programs" and "allocate program costs across all classes of customers."[7] And a number of other Ohio statutes demonstrate that EE and demand reduction are desirable goals.[8]

There is ample Commission precedent for authorizing cost recovery for EE programs without any specific statutory targets being set or required. Prior to the enactment of the first statutory EE mandate in Senate Bill 221 of the 127th General Assembly (S.B. 221), the Company offered EE/DSM programs to its customers and recovered costs of its EE programs through a

[6] R.C. 4928.02(D), (M)
[7] R.C. 4928.143(B)(2)(i).
[8] *See* R.C. 4935.01 (requiring the Commission to formulate estimates "to be used in formulation of long-range policies and proposals for reduction of demand [and] conservation of energy"); R.C. 4928.01(A)(39) (defining "smart grid" as "capital improvements to . . . distribution infrastructure that improve . . . efficiency, . . . or reduce energy demand or use"); R.C. 4928.55 (directing the establishment of energy efficiency programming for PIPP customers).

discrete recovery mechanism, a demand-side management rider (Rider DSM).[9] Rider DSM was initiated prior to the passage of S.B. 221, and the creation of an electric security plan under R.C. 4928.143.[10]

Although there were no statutory EE baselines prior to S.B. 221, the Commission nonetheless recognized a need for EE/DSM programs. The Commission observed that EE efforts "in the electric marketplace" were "rather limited" and most customers had not taken the initiative on their own to implement measures.[11] Additionally, the Commission noted that "demand for electric generation . . . continue[d] to grow."[12] Accordingly, the Commission found that the proposed programs would "result in system-wide benefits to all customers," "help reduce Duke's dependency on purchasing power . . . to meet its service obligations," and "may also result in some reductions in load during the on-peak periods."[13] All of these statements remain true today.

Since S.B. 221, the Company has recovered such costs under its save-a-watt mechanism (Rider SAW), and most recently the existing EE/peak demand reduction (PDR) rider, (Rider EE/PDR).[14] However, H.B. 6, and specifically R.C. 4928.66(G)(3) contemplates the cessation of cost-recovery mechanisms, following final true-up, that were used to comply with statutory

[9] *In the Matter of the Application for Recovery of Costs, Lost Margin, and Performance Incentive Associated with the Implementation of Electric Residential Demand Side Management Programs by The Cincinnati Gas & Electric Company*, Case No. 06-91-EL-UNC, pp. 4-5 (July 11, 2007).
[10] *In the Matter of the Application of The Cincinnati Gas & Electric Company for an Increase in Electric Distribution Rates; In the Matter of the Application of The Cincinnati Gas & Electric Company for Approval to Change Accounting Methods*, Case No. 05-59-EL-AIR *et al.*, pp. 6, 11 Opinion and Order (December 21, 2005) (approving a non-residential DSM tracker, initially set at $0.00).
[11] *In the Matter of the Application for Recovery of Costs, Lost Margin, and Performance Incentive Associated with the Implementation of Electric Residential Demand Side Management Programs by The Cincinnati Gas & Electric Company*, Case No. 06-91-EL-UNC, Finding and Order, p. 5 (July 11, 2007).
[12] *Id.*
[13] *Id.*
[14] *See In the Matter of the Application of Duke Energy Ohio, Inc., for approval of an Electric Security Plan*, Case No. 08-920-EL-SSO, Opinion and Order, pp. 18, 42-43 (approving establishment of Rider DR-SAW); *In the Matter of the Application of Duke Energy Ohio, Inc. for an Energy Efficiency Cost Recovery Mechanism and for Approval of Additional Programs for Inclusion in its Existing Portfolio*, Case No. 11-4393-EL-RDR, pp. 6-7, 20 (August 15, 2012) (authorizing creation of Rider EE/PDR).

mandates for EE. Accordingly, the Company proposes to offer a smaller, exclusively residential-focused pilot portfolio of programs, narrowly tailored to promote the policies set out in R.C. 4928.02 and focused on needs that cannot be effectively served via the market. The Company proposes to once again use its former Rider DSM to recover program costs and a proportion of the total avoided transmission and distribution costs via a Joint Benefit Recognition Mechanism for a pilot portfolio of programs voluntarily offered to customers.

III. THE COMPANY SEEKS TO OFFER A NARROWLY TAILORED PILOT PORTFOLIO OF EXCLUSIVELY RESIDENTIAL EE AND DSM PROGRAMS IN 2021 TO SERVE NEEDS UNMET BY THE MARKET AND FOSTER MARKET PARTICIPATION.

With this Application, the Company submits a new portfolio of targeted residential EE and DSM programs pursuant to O.A.C. 4901:1-39-04 and seeks approval of a proposed rate adjustment mechanism pursuant to O.A.C. 4901:1-39-06 for recovery of associated program costs and also 4.5% (after-tax) of the total avoided costs resulting from transmission and distribution savings from customer participation in the Company's portfolio of approved programs, via a Joint Benefit Recognition Mechanism. The programs included herein and described in detail *infra* in Section VI are all currently being offered, having been previously reviewed and approved by the Commission in the Company's program portfolio plan, Case No. 16-576-EL-POR.[15] In the interest of consistency for customers, the Company proposes to continue a subset of the existing residential programs that will have a broad reach, leverage existing DSM assets, and importantly assist low income customers that are in desperate need of assistance to become more energy efficient and lower bills. Appendix A includes the measures and impacts for each program. The testimonies of

[15] *In the Matter of the Application of Ohio Power Company for the Approval of its Energy Efficiency and Peak Demand Reduction Program Portfolio Plan for 2017 Through 2020*, Case Nos. 16-576-EL-POR, *et al.*, Opinion and Order, (September 27, 2017).

Trisha Haemmerle and Rick Mifflin describe the benefits of EE and DSM Programs in general, as well as the benefits of the specific programs.

IV. CONCURRENT WITH THIS PILOT PORTFOLIO OF FOUR TARGETED RESIDENTIAL PROGRAMS, THE COMPANY PROPOSES A RATE ADJUSTMENT MECHANISM IN THE FORM OF RIDER DSM.

Duke Energy Ohio proposes to recover the direct program costs incurred to deliver EE and DSM programs and a Joint Benefit Recognition Mechanism of 4.5% of the total avoided costs resulting from transmission and distribution savings from customer participation in the Company's portfolio of approved programs, via a rider. The total portfolio cost is projected to be approximately $5.99 million. The Company commits that it will not seek to recover any more than $7.0 million and will, if necessary, limit program participation to comply with this limitation on revenue recovery.

A. A separate rider is an appropriate and necessary cost recovery mechanism.

The Company believes that rider recovery for EE/DSM portfolio programs through a discrete rider mechanism is an appropriate path under both the recently revised EE rules and consistent with the interests of prudence, equity, and transparency. The current EE rules clearly contemplate that both the Commission and Company will evaluate programs and determine cost recovery on an annual basis and authorize the Company to propose a "rate adjustment mechanism for recovery of costs…," as long as the Company demonstrates "why such recovery is appropriate and necessary."[16] Indeed, the Commission has previously recognized that the EE rules permit a new cost recovery mechanism, such as a rider, "to be sought as part of a portfolio filing."[17]

[16] O.A.C. 4901:1-39-06(A).

[17] *In the Matter of the Application of Duke Energy Ohio, Inc. for an Energy Efficiency Cost Recovery Mechanism and for Approval of Additional Programs for Inclusion in its Existing Portfolio*, Case No. 11-4393-EL-RDR, Opinion and Order, pp. 6-7 (August 15, 2012) ("While the Commission recognizes Duke's need to seek a new cost recovery mechanism to replace the now-expired Rider SAW, we believe [that] such a mechanism may only be sought in the context of an ESP ***or pursuant to the requirements of Rule 4901:1-39-07, O.A.C, which allows a cost recovery***

Additionally, a separate rider for such cost recovery would be consistent with what customers had become accustomed to under R.C. 4928.65, which mandates a separate item on the bill for EE compliance costs.

As explained in the testimony of Trisha Haemmerle, the practice of filing a portfolio annually is an approach that reflects the dynamic nature of the rapidly evolving EE marketplace. A rider is the most practical rate adjustment mechanism for an annual adjustment of program offerings and re-examination of the components of cost recovery. But this is not the only reason that cost recovery via a new rider is appropriate and necessary.

Recovery via Rider DSM will comply with H.B. 6's directive to terminate the existing Rider EE/PDR, while also offering continuity to customers who have paid for the Company's EE programs via riders since before S.B. 221. The practice of maintaining a separate EE rider has, for decades, offered customers transparency regarding rate allocation.

B. The proposed Joint Benefit Recognition Mechanism is appropriate and necessary.

The Company proposes a Joint Benefit Recognition Mechanism, to recover, on an after-tax basis, 4.5% of the benefit only factoring in the avoided transmission and distribution costs that result from customer participation in the programs. The calculation of the Joint Benefit Recognition Mechanism recovery is thus limited to the avoidance of non-bypassable costs, which is consistent with the non-bypassable charge imposed by the proposed Rider. The total amount thus recovered for 2021 is projected to be $449,014, representing less than six percent of the joint transmission and distribution benefits of the pilot portfolio. In support of this Joint Benefit Recognition Mechanism, the Company's Application is accompanied by the testimonies of

mechanism to be sought as part of a portfolio filing.") (emphasis added). Although the rules have since been revised, they continue to provide for the filing and approval of a cost recovery mechanism in Section 4901:1-39-06.

Company witnesses Trisha Haemmerle and Rick Mifflin, which make a demonstration "of need that cannot otherwise be met through market-based approaches" and a demonstration that the proposed mechanism "is narrowly tailored to promote the policies of the state codified in R.C. 4928.02."[18]

The four programs proposed for inclusion in the portfolio serve needs that cannot be met via a market-based approach. The two low-income programs specifically serve a vulnerable population which may not be sufficiently informed to participate efficiently in the market and likely does not possess sufficient purchasing power to motivate entities in the market to serve its needs. The residential demand response program, Power Manager, will be able to leverage over 47,000 load controlling devices which are already installed in customers' homes, a no-new cost resource that would not be available to market participants. And the MyHER program leverages the Company's long-standing relationship with customers and knowledge about customers' usage to educate and engage customers to enable them to be more energy efficient with a level of customization that market participants would be unable to match. Thus, the Company believes that continuing to offer these programs is essential and very appropriate, even in the absence of a statutory mandate.

Not only do these programs serve needs unmet by the market, but none of the programs impede market-based solutions and two of the four programs will actually spur participation in market-based offerings. The engagement provided to participants in the MyHer program gives participants actionable tips, encouraging them, among other things, towards the purchase of various EE measures available in the market and empowering them to be better-informed consumers in that

[18] *In the Matter of the Application of Duke Energy Ohio, Inc., for Approval of its 2021 Energy Efficiency and Demand Side Management Portfolio of Programs and Cost Recovery Mechanism*, Case Nos. 20-1013-EL-POR, *et al.*, Entry, ¶ 8 (June 17, 2020).

market. Unlike any similar program that might be offered in the market, the MyHER program does not attempt to steer participants to a particular brand or make of EE measure, but empowers them to make the best choice for them. The Pay for Performance Weatherization program enables customers who would otherwise likely lack market access entirely, to access EE measures available in the market. The agencies who select the measures being installed have every incentive to select the most cost-efficient measures, as the programs reimburse agencies based on kWh savings. Thus, investment in these programs fosters participation in the market for EE measures.

In addition to meeting needs underserved by the market, the proposed Joint Benefit Recognition Mechanism is narrowly tailored to promote specific statutory policies. First, the proposed programs are projected to result in a total of $7,767,050 in avoided transmission and distribution costs (less than half of the total avoided costs of $18,033,004), a savings which benefits all customers in the Company's service territory. The Joint Benefit Recognition Mechanism after-tax percentage of 4.5% is proposed to be calculated on the benefit that only recognizes avoided transmission and distribution costs, which makes it narrowly tailored to maintaining "efficient" and "reasonably priced" retail electric service.[19] Second, the low-income programs serve to "[p]rotect at-risk populations"[20] that are currently struggling to recover financially from the economic effects of the COVID-19 pandemic. And third, by making it financially feasible for the Company to offer these programs—which serve needs that could not be equally met by the market—the Joint Benefit Recognition Mechanism aligns customer and utility interests and "provide[s a] coherent, transparent means of giving appropriate incentives to technologies that can adapt successfully to potential environmental mandates."[21]

[19] R.C. 4928.02(A).
[20] R.C. 4928.02(L).
[21] R.C. 4928.02(J).

V. THE COMPANY REQUESTS CLARIFICATION ON THE SCOPE OF THE POST-APPROVAL PROCESS UNDER THE RECENTLY REVISED EE RULES.

In addition to approval of its proposed rate adjustment mechanism, as provided for in O.A.C. 4901:1-39-06, the Company seeks clarification on the standard for "post-approval" review under the revised rules. This is the first time that Duke Energy Ohio submits a portfolio under the revised rules of Chapter 39 of O.A.C. 4901:1. After the most recent revisions, which took effect approximately two months ago, the rules have "move[d] from a pre-approval process for portfolio plans to a post-approval scenario…."[22] In its order approving the recent rule revisions, the Commission has likened the new "post-approval verification process" to "other, similar verification processes currently in place at the Commission, such as the Distribution Investment Rider and the Alternative Energy Rider."[23] This suggests that the post-approval process will be limited to "verif[ying]" the substantiation, eligibility, and accuracy of costs sought to be recovered, as well as conducting the performance verification process laid out in O.A.C. 4901:1-39-05.

Given the absence of precedent, the Company seeks to clarify that, after its cost recovery mechanism is approved, the post-approval review process for its 2021 programs will be limited to (1) a "review of the cost effectiveness of a program portfolio plan, as well as review of the utility's performance in implementing the plan. . . during the performance verification process contained within O.A.C. 4901:1-39-05,"[24]; and (2) an audit-like review to ensure the submitted costs were properly substantiated and eligible for recovery, similar to the annual audit process for the

[22] *In the Matter of the Commission's Review of its Rules for Energy Efficiency Programs Contained in Chapter 4901:1-39 of the Ohio Administrative Code*, Case No. 12-2156-EL-ORD, *et al.*, Entry, p. 3 (January 29, 2014) (describing change as proposed by the Staff of the Commission).
[23] *In the Matter of the Commission's Review of its Rules for Energy Efficiency Programs Contained in Chapter 4901:1-39 of the Ohio Administrative Code*, Case No. 12-2156-EL-ORD, *et al.*, Order, p. 32 (December 19, 2018).
[24] *In the Matter of the Commission's Review of its Rules for Energy Efficiency Programs Contained in Chapter 4901:1-39 of the Ohio Administrative Code*, Case No. 12-2156-EL-ORD, *et al.*, Finding and Order, p. 29 (December 19, 2018).

Alternative Energy Rider or the current Rider EE/PDR. In other words, the "verification process[]" contemplated by the rules will be limited solely to verification, and will not be a portfolio planning exercise in which the Commission will be free to consider the exclusion of entire programs from the portfolio after customers have already relied upon their offering and incentives have been paid, or to consider severe after-the-fact program budget reductions for policy-based reasons. The Company submits these programs and proposed budgets now for the Commission's review.

VI. PROGRAM DESCRIPTIONS AND PORTFOLIO PLANNING REQUIREMENTS.

A. Residential Program Descriptions

Program Name	Program Description
My Home Energy Report (MyHER)	Engage customers around household electric usage by comparing it to similar, neighboring homes, and provide actionable recommendations to become more energy efficient.
Low Income Neighborhood Energy Saver Program	Takes a non-traditional approach to serving income qualified areas of the Duke Energy Ohio service territory by providing weatherization services, home audits, and installation of EE measures.
Low Income Weatherization – Pay for Performance	Helps Duke Energy Ohio income-qualified customers reduce their energy consumption and lower their energy costs.
Power Manager®	Residential Load Control program.

1. My Home Energy Report – (MyHER)

The MyHER is an EE program based on behavioral science to motivate and enable energy efficient behavior. This program utilizes a peer group of homes similar in size, age, type of heating fuel and geography to highlight the customer's variance in energy use when compared to the "Average Home" and "Efficient Home" to engage the customer. The energy usage data features easy to read charts and visuals that illustrate how a customer's home performed in the last month and trended over the year as compared to the sample set via print and online channels. Further, social motivation is introduced by establishing a value for an "Energy Efficient Home" within the peer group, as customers closest to the average are unlikely to be motivated to change their behavior. After engaging customers around their energy usage, the reports provide customers with

actionable EE tips and guidance on efficiency technologies and opportunities available in the competitive market, enabling them to become more energy efficient and lower their electric bills. In addition to providing EE tips, the reports are also used to increase customer awareness around other programs and market-based opportunities to increase customer efficiency. There is also the MyHER Interactive portal offering customers an opportunity to further engage with their energy usage.

Currently the MyHER is for customers living in single family homes and multifamily dwellings. The multifamily report is similar in the comparison data provided; however, multifamily dwellings are compared to other multifamily dwellings and the tips on the report are tailored to the behavior changes and efficiency changes a multifamily dwelling can make.

2. Low-Income Neighborhood Energy Saver Program

The Low-Income Neighborhood Program, known as Neighborhood Energy Saver or NES, assists primarily low-income customers in reducing energy costs through energy education and installation of energy efficient measures. Targeted low-income neighborhoods qualify for this program if approximately 50 percent of the households have incomes of 0 percent-200 percent of the Federal Poverty Guidelines. The primary goal of this program is to empower low-income customers to better manage their energy usage.

Customers participating in this program will receive a walk-through energy assessment and one-on-one education from program EE technicians. Additionally, the customer receives a suite of energy efficient items installed by the technicians.

3. Power Manager®

Power Manager® is a residential load control program. It is used to reduce electricity demand by controlling residential air conditioners during periods of peak demand. A load control device is attached to the outdoor air conditioning unit of participating customers. The device

enables Duke Energy Ohio to cycle central air conditioning systems off and on when the load on Duke Energy Ohio's system reaches peak levels.

4. Low Income Weatherization – Pay for Performance

The Low-Income Weatherization – Pay for Performance program is designed to help Duke Energy Ohio income-qualified customers reduce their energy consumption and lower their energy cost. This Program will specifically focus on customers that meet the income qualification level (*i.e.*, income below 200% of the federal poverty level). The weatherization program will also educate customers on their energy usage and other opportunities that can help reduce energy consumption and lower energy costs.

Duke Energy Ohio will work with community agencies to leverage the Ohio Home Weatherization Assistance Program to provide customers with weatherization services and other energy efficient measures such as refrigerators, water saving devices and efficient lighting. Agencies will be reimbursed a set amount per measure installed in Duke Energy Ohio customers' homes based on the average kWh savings per measure.

B. Compliance with O.A.C. 4901:1-39

Duke Energy Ohio submits this application in compliance with relevant sections of O.A.C. 4901:1-39 as recently amended by the Commission, and effective on March 26, 2020. Specifically, O.A.C. 4901:1-39-04 sets forth the filing requirements for a utility's subsequent EE/DSM program portfolio, upon the expiration of any commission-approved portfolio.[25]

1. 4901:1-39-04 (B) - Cost Effectiveness of Programs

[25] O.A.C. 4901:1-39-04 (A)

O.A.C. 4901:1-39-04(B) requires each utility to demonstrate the cost-effectiveness of its program portfolio plan based upon the total resource cost (TRC). The cost-effectiveness test results for the programs to be included in the portfolio are provided in Table 1 below.

Table 1*:

Program/Portfolio Cost Effectiveness - 2021					
Program		**UCT**	**TRC**	**RIM**	**PCT**
Residential Programs					
Low Income Neighborhood Program		0.64	0.64	0.54	2.21
Low Income Weatherization - Pay for Performance		1.76	8.16	0.93	
My Home Energy Report		2.00	2.00	1.15	
Power Manager®		7.95	16.85	7.95	
Total		3.18	3.76	2.06	45.79

*Programs without a Participant Test Score (PCT) are programs without participant costs resulting in a null participant score.

1. 4901:1-39-04(C) (1) Executive Summary

O.A.C. 4901:1-39-04(C)(1) requires an application to include an executive summary.[26] This portfolio of programs represents a comprehensive DSM and EE plan of action. The approach being pursued through the continuation of existing programs which will provide market access for cost-effective DSM and EE for residential classes. The Company considered the criteria in 4901:1-39-03(B) when developing programs for inclusion in this portfolio.

2. 4901:1-39-04(C)(1) Assessment of Potential pursuant to paragraph (A) of rule 4901:1-39-03

O.A.C. 4901:1-39-04(C)(1) requires an application to include an assessment of potential pursuant to paragraph (A) of rule 4901:1-39-03 of the Administrative Code.[27] Prior to proposing its comprehensive EE and DR program portfolio plan, an electric utility shall conduct an

[26] O.A.C. 4901:1-39-04 (C)(1).
[27] O.A.C. 4901:1-39-04 (C)(1).

assessment of potential energy savings and peak-demand reduction from adoption of EE and DR measures within its certified territory, which will be included in the electric utility's program portfolio filing. An electric utility may collaborate with other electric utilities to co-fund or conduct such an assessment on a broader geographic basis than its certified territory. However, such an assessment must also disaggregate results on the basis of each electric utility's certified territory.

In compliance with this requirement, Duke Energy Ohio had an Assessment of Potential study completed and has included such study in this filing. The Assessment of Potential study was conducted by Nexant and is Appendix B to this application.

a. 4901:1-39-03(A)(1) Analysis of technical potential.

Each electric utility shall survey and characterize electricity-consuming facilities located within its certified territory. Based upon the survey and characterization, the electric utility shall conduct an analysis of the technical potential for EE and peak-demand reduction obtainable from applying commercially available measures.

In satisfaction of this requirement, Duke Energy contracted with Nexant to perform a Market Potential Study which includes an analysis of technical potential based on the current state of energy-using equipment located in the Duke Energy Ohio territory. *See* Attachment B.

b. 4901:1-39-03(A)(2) Analysis of economic potential.

For each alternate measure identified in its assessment of technical potential, the electric utility shall conduct an assessment of cost-effectiveness using the total resource cost test or the utility cost test, whichever is applicable.

In satisfaction of this requirement, as part of the Market Potential Study referenced above, Nexant provided an analysis of the Economic Potential as calculated using the total resource cost test.

c. 4901:1-39-03(A)(3) Analysis of achievable potential.

For each alternate measure identified in its analysis of economic potential as cost-effective, the electric utility shall conduct an analysis of achievable potential. Such analysis shall consider the ability of the program design to overcome barriers to customer adoption, including, but not limited to, appropriate bundling of measures.

In satisfaction of this requirement, as part of the Market Potential Study referenced above, Nexant provided an analysis of a set of bundled measures that will be designed to overcome barriers to customer adoption. *See* Attachment B.

d. 4901:1-39-03(A)(4) Description of attributes relevant to assessing value

For each measure considered, the electric utility shall describe all attributes relevant to assessing its value, including, but not limited to potential energy savings or PDR, cost, and non-energy benefits.

In satisfaction of this requirement, as part of the Market Potential Study referenced above, see Appendix B, Section 7. Note: the Nexant study did not apply an economic value to non-energy benefits in the course of determining the economic potential. This is because there is not a defined list of approved benefits to be considered in Ohio nor an agreed-upon means to quantify and recognize the economic value of non-energy benefits.

3. <u>4901:1-39-04(C)(2) Stakeholder Participation</u>

As part of its application, the utility must include "[a] description of stakeholder participation in program planning efforts and program portfolio development."[28] The regulation

[28] O.A.C. 4901:1-39-04(C)(2).

further describes the minimum timing of these meetings, and the scope of information and participation by stakeholders.[29]

In satisfaction of this requirement, and as noted above, Duke Energy Ohio works closely and cooperatively with external stakeholders through the Collaborative process. The Company's EE Collaborative first began in 1992—sixteen years prior to the establishment of an EE mandate. Since that time, the Company has continued to engage with its Collaborative members on the design and operation of existing programs as well as ideas for new programs. Duke Energy Ohio seeks to obtain consensus approval from the Collaborative on proposals to be filed with the Commission. This same approach was employed in the development of the Company's current programs, which were filed and subsequently approved by the Commission for implementation through December 31, 2019 and extended until December 31, 2020, and is being used with respect to the portfolio of programs that the Company is requesting approval of in this application. Duke Energy Ohio has held meetings with external stakeholders, as well as a Duke Energy Ohio Collaborative meeting to discuss the portfolio, and will continue to do so. Based on feedback, Duke Energy Ohio believes that other than concerns around the potential need to establish a funding source to evaluate emerging energy efficient technologies and offerings, there is support for the proposed portfolio.

4. 4901:1-39-04 (C)(3) Other Public Utilities' Programs

As part of its application, the utility must include "a description of attempts to align and coordinate programs with other public utilities' programs."[30]

Although Duke Energy Ohio does not coordinate its programs with other public utilities, it does participate in ongoing dialogue with other utilities to understand both the successes and

[29] *Id.*
[30] O.A.C. 4901:1-39-04(C)(3)

challenges associated with each company's portfolios of programs. The Company does coordinate the design and implementation of its programs with its affiliate utility located in Northern Kentucky as well as with all other utility affiliates of Duke Energy (Duke Energy Kentucky, Duke Energy Indiana, and Duke Energy Carolinas).

5. 4901:1-39-04 (C) (4) Existing Programs and 4901:39-04(C)(5) Programs Included in the Portfolio Plan.

A utility's application must include an analysis of existing programs, "provide a description of each existing program, and measures within the program, including an analysis of the success of the program and the electric utility's rationale for continuing, modifying, or eliminating the program or measures within the program."[31]

With the elimination of the statutory EE mandates, the Company has reduced the size of its portfolio and focused only on residential programs. Thus, all existing non-residential programs are being eliminated from the proposed 2021 offerings. The Company has eliminated programs which provide incentives to commercial and industrial consumers for installation of high efficiency equipment in applications involving new construction, retrofit, and replacement of failed equipment. The non-residential demand response program, PowerShare®, has also been eliminated. Although the programs have been successful in the past, the programs target segments of customers that generally have demonstrated a desire to opt-out of participation in the Duke Energy Ohio EE programs.

Duke Energy Ohio began implementation of its existing programs on August 15, 2012. Below, the Company provides the response to the requested items for each of the existing previously approved programs proposed for inclusion in the 2021 portfolio plan as required by O.A.C. 4901:1039-04(C)(5).

[31] O.A.C. 4901:1-39-04(C)(4)

a. Descriptions Applicable to All Programs

In O.A.C. 4901:1-39-04 (C)(5)(a) to (k), there are a few elements for which the response is essentially the same for all the existing and new programs. These are the information requests under O.A.C. 4901:1-39-04 (C)(5), (d), (e), and (k). The common responses are provided below.

O.A.C. 4901:1-39-04(C)(5)(d): The Company is proposing a one-year duration for each program although two years of data are presented for a preview of future plans.

O.A.C. 4901:1-39-04(C)(5)(e): An estimate of the level of program participation is included in the table provided in response to Rule 4901:1-39-04(C)(5)(b).

O.A.C. 4901:1-39-04(C)(5)(k): In 2019, the Commission hired Evergreen Economics to update the State of Ohio Technical Resource Manual (TRM) that was originally filed on August 6, 2010 and updated by Michaels Energy on September 23, 2019 and filed in Case No. 19-02-EL-UNC on November 29, 2019 (2019 Ohio TRM). The Commission has not ruled on the 2019 Ohio TRM to date. Duke Energy Ohio will develop an evaluation, measurement, and verification (EM&V) schedule for each program as needed if the 2019 Ohio TRM is not approved by the time of program implementation.

b. Program Descriptions Required Pursuant to O.A.C. 4901:1-39-04(C)(5)

The following program descriptions are in response to the requirements set forth in Rule 4901:1-39-04(C)(5)(a) through (k), requiring specific information regarding each program, including a narrative description,[32] program objectives,[33] targeted customer sector,[34] proposed duration,[35]

[32] O.A.C. 4901:1-39-04(C)(5) (a).
[33] O.A.C. 4901:1-39-04(C)(5) (b).
[34] O.A.C. 4901:1-39-04(C)(5) (c).
[35] O.A.C. 4901:1-39-04(C)(5) (d).

estimated level of participation,[36] program participation requirements,[37] the marketing approach,[38] program implementation approach, [39] program budget, [40] participant costs [41] and plan for reporting.[42]

1. My Home Energy Report

(a) The MyHER is an EE program based on behavioral science to motivate energy efficient behavior. This program uses a peer group of homes of similar size, age, type of heating fuel and geography to highlight the customer's variance in energy use when compared to the "Average Home" and "Efficient Home" of the peer group to engage the customer. The energy usage data features easy to read charts and visuals that illustrate how a customer's home performed in the last month and trended over the year as compared to the sample set via print and online channels. Further social motivation is introduced by establishing a value for an "Energy Efficient Home" within the peer group, as customers closest to the average are unlikely to be motivated to change their behavior. Currently the MyHER is only available to customers living in single family homes.

(b) Regarding the basis for the impacts, Duke Energy Ohio will use the 2019 Ohio TRM upon approval or EM&V results recently accepted by the Commission. If required, the evaluation for MyHER will consist of an experimental program evaluation design in which households in a given population are randomly assigned into two groups: a treatment group and a control group. Regarding the basis for the impacts, third-party evaluators will determine impact estimates by comparing the energy usage between

[36] O.A.C. 4901:1-39-04(C)(5) (e).
[37] O.A.C. 4901:1-39-04(C)(5) (f).
[38] O.A.C. 4901:1-39-04(C)(5) (g).
[39] O.A.C. 4901:1-39-04(C)(5) (h).
[40] O.A.C. 4901:1-39-04(C)(5) (i).
[41] O.A.C. 4901:1-39-04(C)(5) (j).
[42] O.A.C. 4901:1-39-04(C)(5) (k).

MyHER treatment customers (those customers receiving MyHER reports) and control customers (those customers not receiving MyHER reports). The difference between the two groups is determined to be attributed to MyHER participation. Duke Energy Ohio uses the impact results of the evaluations to update the program and measure impacts. Appendix A includes the measures, impacts, and listing of source documentation.

	2021
kW	23,716
kWh	92,415,498
Participants	361,864

kW – Gross Annual Summer Coincident kW w/losses. kWh – Gross Annual kWh w/losses. Participants – Annual Participants (refers to number of households participating)

(c) Residential

(d) One year (2021)

(e) See above (b)

(f) The audience is Duke Energy Ohio customers who are identified through demographic information as likely to decrease energy usage in response to the information contained in the My Home Energy Report document. These customers reside in individually-metered, single-family or multi-family residences receiving concurrent service from the Company.

(g) The Program will be marketed through direct mail. The reports are also available to customers on-line or via mobile channels.

(h) The MyHER is sent via direct mail and email to targeted customers with desirable characteristics who are likely to respond to the information. The paper reports are distributed 8 times per year. The electronic reports are sent out 12 times per year.

(i) The projected program budget:

	2021
Annual Utility Costs	$3,711,135

(j) Not applicable

(k) Duke Energy Ohio will develop an EM&V schedule for each program as needed if the TRM is not approved by the time of program implementation.

2. Power Manager®

(a) Power Manager® is a residential load control program. It is used to reduce electricity demand by controlling residential air conditioners and electric water heaters during periods of peak demand. A load control switch is attached to the outdoor air conditioning unit of participating customers. The device enables Duke Energy Ohio to cycle central air conditioning systems off and on when the load on Duke Energy Ohio's system reaches peak levels.

(b) Regarding the basis for the impacts, Duke Energy Ohio will use the 2019 Ohio TRM upon approval or EM&V results recently accepted by the Commission. If necessary, Duke Energy Ohio will contract third-party EM&V consultants to provide evaluations of the program. These evaluations will follow recommended industry practices and PJM guidelines. Impacts are determined by a randomized control methodology in which the Power Manager population is separated into treatment and control groups for each event day. Appendix A includes the measures, impacts, and listing of source documentation.

	2021
kW	48,588
kWh	-
Participants	46,029

kW –Cumulative Summer Coincident kW w/losses. Participants –kW load reduction at the meter and prior to operability adjustments.

(c) Residential

(d) One year (2021)

(e) See above (b)

(f) This program is available to Duke Energy Ohio residential customers residing in owner- occupied, single-family residences with a functioning outdoor air conditioning unit.

(g) The Program may be promoted by, but not limited to:

a. Direct mail

b. Telemarketing

c. Promotion through other Duke Energy programs

d. Electronic channels such as Duke Energy's website and email.

(h) A device is installed on participating customer air conditioning units by a vendor contracted by Duke Energy Ohio. Once installed, the customer's A/C unit can be cycled off and back on during Power Manager events (May – September).

(i) The projected program budget:

	2021
Annual Utility Costs	$1,240,240

(j) Not applicable

(k) Duke Energy Ohio will develop an EM&V schedule for each program as needed if the TRM is not approved by the time of program implementation.

3. Low Income Neighborhood Energy Saver Program

(a) The Duke Energy Ohio Low Income Neighborhood Energy Saver Program takes a non-traditional approach to serving income-qualified areas of the Duke Energy Ohio service territory. The program engages targeted customers with personal interaction in a familiar

setting. Ultimately, the program aims to reduce energy consumption by directly installing measures and educating the customer on better ways to manage their energy bills.

(b) Regarding the basis for the impacts, Duke Energy Ohio will use the 2019 Ohio TRM upon approval or EM&V results recently accepted by the Commission. If necessary, third party evaluators will conduct a billing analysis to determine the overall ex post net program savings of the program. The billing analysis will utilize regression models to compare energy use of treated homes to a comparison group of non-treated homes. Duke Energy uses the impact results of the evaluations to update the program and measure impacts. Appendix A includes the measures, impacts, and listing of source documentation.

	2021
kW	137
kWh	443,352
Participants	1,000

kW – Gross Annual Summer Coincident kW w/losses. kWh – Gross Annual kWh w/losses. Participants – Annual Participants (refers to number of households participating)

(c) Low Income Residential

(d) One year (2021)

(e) See above (b)

(f) The Program is available only to individually metered residential customers in neighborhoods selected by Duke Energy Ohio, at its sole discretion, who are considered income eligible based on third party data that includes income level and household size. Neighborhoods targeted for participation in this program have approximately 50% of households with an income equal to or less than 200% of the Federal Poverty Guidelines established by the U.S. Government.

(g) The marketing strategy for this program will focus on a grassroots approach. The Program will be promoted by, but not limited to:

a. Direct mail

b. Social media

c. Door hangers

d. Press releases

e. Community presentations and partnerships

f. Inclusion in community publications such as newsletters, etc.

(h) Third party vendors will be used

(i) The projected program budget:

	2021
Annual Utility Costs	$ 447,242

(j) Not applicable.

(k) Duke Energy Ohio will develop an EM&V schedule for each program as needed if the TRM is not approved by the time of program implementation.

4. Low Income Weatherization - Pay for Performance

(a) The Low-Income Weatherization - Pay for Performance program is designed to help Duke Energy Ohio income-qualified customers reduce their energy consumption and lower their energy cost. This Program will specifically focus on customers that meet the income qualification level (*i.e.*, income below 200% of the Federal Poverty Guidelines). The weatherization program will also educate customers on their energy usage and other opportunities that can help reduce energy consumption and lower energy costs.

Duke Energy Ohio will partner with community agencies to provide customers with weatherization services and other energy efficient measures such as refrigerators, water saving devices and efficient lighting. Agencies will be reimbursed a set fee per measure installed in Duke Energy Ohio customers' homes based on the average kWh savings per measure.

(b) Regarding the basis for the impacts, Duke Energy Ohio will use the 2019 Ohio TRM upon approval or EM&V results recently accepted by the Commission. If necessary, contracted third-party evaluators will estimate net savings via engineering estimates using in-service rates via on-site verification and other inputs. Since this is an income-qualified program, no free ridership applies. Duke Energy uses the impact results of the evaluations to update the program and measure impacts. Appendix A includes the measures, impacts, and listing of source documentation.

	2021
kW	218
kWh	1,446,919
Participants	15,668

kW – Gross Annual Summer Coincident kW w/losses. kWh – Gross Annual kWh w/losses. Participants – Annual Participants (refers to per measure installed)

(c) Low Income Residential

(d) One year (2021)

(e) See above (b)

(f) The program is available to agencies serving single-family homes and multifamily units, both owners and renters with owner approval. Eligibility of participation is determined by

the weatherization agency and an in-home assessment. Qualified customers must receive electric service through Duke Energy Ohio and meet weatherization guidelines.

(g) The marketing strategy for this program will focus on utilizing low income agencies as the primary method for recruiting and informing customers of this program. Additional marketing will include mailers, flyers and direct contact between agencies and customers.

(h) Third party vendors will be used

(i) The projected program budget:

	2021
Annual Utility Costs	$ 267,072

(j) Not applicable

(k) Duke Energy Ohio will develop an EM&V schedule for each program as needed if the TRM is not approved by the time of program implementation.

6. O.A.C. 4901:1-39-04(D) Baselines

Pursuant to O.A.C. 4901:1-39-04(D), a utility may, as part of its filing, "request to adjust its sales and/or demand baseline." The following descriptions are in response to 4901:1-39-04(D).

R.C. 4928.66(A)(2)(a) states the baseline for energy savings under R.C. 4928.66(A)(1)(a) is the average of the total kilowatt hours the electric distribution utility sold in the preceding three calendar years. It also provides that the baseline for a peak demand reduction under division (A)(1)(b) shall be the average peak demand on the utility in the preceding three calendar years, except that the commission may reduce either baseline to adjust for new economic growth in the utility's certified territory. Additional adjustments are provided for.

Duke Energy Ohio respectfully submits that due to the statutorily mandated benchmarks in R.C. 4928.66(A)(1)(a) being removed after 2020 by H.B. 6, the baselines are no longer necessary to determine mandated savings.

VII. WAIVER OF THE PORTFOLIO FILING DEADLINE

Pursuant to a recent entry in Case Nos. 16-574-EL-POR, *et al.*, the Company understands that the September 1 deadline in O.A.C. 4901:1-39-04(A) has been waived.[43] The Company believes such waiver to apply to this portfolio application. However, out of an abundance of caution, in the event that the Commission interprets the aforementioned entry differently, the Company requests herein a waiver of the September 1 deadline in O.A.C. 4901:1-39-04(A).

VIII. CONCLUSION

Consistent with the information provided above as supported by the Company witnesses in testimony included with this Application, Duke Energy Ohio respectfully requests that (1) the Commission approve the cost recovery mechanism proposed for the portfolio of programs submitted here; and (2) provide the requested clarification regarding the post-approval process. In the event of any legislative developments affecting House Bill 6, the Company reserves the right to adjust the portfolio accordingly.

[43] *See In the Matter of the Application of Ohio Power Energy Company for Approval of its Energy Efficiency and Peak Demand Reduction Program Portfolio Plan for 2017 Through 2020*, Case Nos. 16-574-EL-POR, *et al.*, Entry, p. 3 (September 4, 2020) ("ORDERED, That the provisions of Ohio Adm.Code 4901:1-39-04(A) be waived until otherwise ordered by the Commission.").

Respectfully submitted,

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