

**BEFORE**

**THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application of Duke )  
Energy Ohio, Inc., for Approval of its ) Case No. 20-1013-EL-POR  
2021 Energy Efficiency and Demand Side )  
Management Portfolio of Programs and )  
Cost Recovery Mechanism. )

In the Matter of the Application of Duke ) Case No. 20-1114-EL-ATA  
Energy Ohio, Inc., for Approval of Tariff )  
Amendments. )

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**DIRECT TESTIMONY OF**

**GREG R. TIERNAN**

**ON BEHALF OF**

**DUKE ENERGY OHIO, INC.**

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June 3, 2020

**TABLE OF CONTENTS**

	<b><u>PAGE</u></b>
<b>I. INTRODUCTION.....</b>	<b>1</b>
<b>II. DISCUSSION .....</b>	<b>3</b>
<b>III. CONCLUSION .....</b>	<b>11</b>

## I. INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Greg R. Tiernan, and my business address is 1000 E Main Street,  
3 Plainfield, IN 46168.

4 **Q. PLEASE DESCRIBE YOUR ROLE WITH DUKE ENERGY.**

5 A. I am Director Products & Services for Business Markets. My team provides various  
6 administrative and other services to Duke Energy Ohio, Inc., (Duke Energy Ohio  
7 or the Company) and other affiliated companies of Duke Energy Corporation (Duke  
8 Energy).

9 **Q. PLEASE SUMMARIZE YOUR EDUCATION AND PROFESSIONAL**  
10 **EXPERIENCE.**

11 A. I received a Bachelor of Science degree in Management & Organization from  
12 Indiana University – Purdue University of Indianapolis, a Master of Business  
13 Administration from Indiana Wesleyan University, and I also am a Certified Energy  
14 Manager through the Association of Energy Engineers. I have held various  
15 positions throughout Duke Energy and its predecessor companies, including roles  
16 in Economic Development, Customer Service & Field Operations Management,  
17 and Non-Regulated Gas Marketing Operations. I joined the Marketing organization  
18 in 2010 to manage Duke Energy’s commercial and industrial energy efficiency  
19 (EE) programs. In 2018, I assumed managerial responsibility for all commercial  
20 and industrial demand side management (DSM) and EE products, which is still my  
21 current area of responsibility.

1 **Q. PLEASE DESCRIBE YOUR DUTIES AS DIRECTOR OF PRODUCTS &**  
2 **SERVICES – BUSINESS MARKETS.**

3 A. My team oversees the operation of Duke Energy Ohio’s Non-Residential EE and  
4 DSM programs to ensure they are delivered to customers cost effectively and  
5 efficiently. This involves managing contracts with external parties, monitoring the  
6 mix of incentives included in the portfolio, and planning strategies for raising  
7 customer awareness of the incentives offered. The Company works with external  
8 engineering firms to assist with developing costs for incentive measures, as well as  
9 guidance on incentives offered by other utilities to aid in the evaluation of cost  
10 effectiveness. The Company is constantly evaluating the number of incentive  
11 applications being submitted, types of technologies customers are employing, and  
12 evaluating strategies to increase adoption rates by customers. This also includes  
13 periodic reviews of the measures included in offerings to customers to ensure our  
14 portfolio of offers stays current with technology changes in the marketplace and  
15 updated efficiency standards.

16 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC**  
17 **UTILITIES COMMISSION OF OHIO?**

18 A. No, I have not previously provided testimony before the Public Utilities  
19 Commission of Ohio (Commission).

**II. DISCUSSION**

1 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**  
2 **PROCEEDING?**

3 A. The purpose of my testimony in this proceeding is to explain the non-residential  
4 (commercial and industrial) DSM and EE programs proposed to be offered by Duke  
5 Energy Ohio and to explain some of the marketing strategies being employed to raise  
6 awareness of the value of DSM and EE investments with customers to increase  
7 customer participation.

8 **Q. WHAT NON-RESIDENTIAL EE AND DSM PROGRAMS DOES DUKE**  
9 **ENERGY OHIO PROPOSE TO OFFER IN THE NEW PORTFOLIO?**

10 A. Duke Energy Ohio's proposed Non-Residential DSM and EE offers consist of  
11 Business Energy Saver (BES), Power Manager<sup>®</sup> for Business, and PowerShare<sup>®</sup>.  
12 These programs were previously approved by the Commission in Duke Energy Ohio's  
13 Case No. 16-576-EL-POR. In order to reduce the overall budget for the new portfolio,  
14 these are the only programs being filed for inclusion in the new portfolio to begin  
15 January 1, 2021. Cost effectiveness, participant and cost data for the proposed  
16 portfolio of programs is included in the application to this filing.

17 **Business Energy Saver**

18 The objective of the BES is to enable the installation of high efficiency  
19 equipment in existing non-residential facilities. BES is designed to offer a  
20 convenient, turn-key process for non-residential customers. BES launched in  
21 November 2014 in Ohio and has been popular and successful with business  
22 customers since inception. A pipeline of potential applicants has not been difficult

1 to attain. Business owners typically lack the time, upfront capital, and technical  
2 expertise to facilitate the retrofit or replacement of older equipment within their  
3 facilities. This program effectively removes these barriers by offering a turn-key  
4 EE offering which facilitates the direct installation of EE measures, and minimizes  
5 financial obstacles with significant upfront incentives from Duke Energy Ohio  
6 which offset the cost of projects.

7 BES program eligibility is limited to all active non-residential Duke Energy  
8 Ohio electric customer accounts. Participants may be in owner-occupied or tenant  
9 leased facilities with owner permission.

10 All aspects of BES are managed by a Duke Energy Ohio-authorized  
11 program vendor or Duke Energy Ohio-authorized trade ally. Duke Energy Ohio  
12 may first provide a list of customers who meet the program eligibility requirements  
13 to the program vendor. The program vendor or trade ally then offers free, no-  
14 obligation facility energy assessments to qualifying non-residential customers.  
15 These assessments result in recommendations of EE measures to be installed at the  
16 facility along with the projected energy savings, costs of all materials and  
17 installation, and the incentive amount from Duke Energy Ohio. BES is designed as  
18 a pay-for-performance offering, meaning that the program vendor or trade ally is  
19 only compensated for energy savings produced through the installation of EE  
20 measures.

21 The BES program incentive amount is calculated per project, based upon  
22 the estimated energy savings of the EE improvements and the conditions found  
23 within the customer's facility. Incentivized measures address major end-uses in

1 lighting, refrigeration, process equipment and heating ventilation and air  
2 conditioning (HVAC) applications suited for non-residential facility types.

3 All LED lighting measures offered are Consortium for Energy Efficiency  
4 (CEE), ENERGY STAR, or Design Lights Consortium (DLC) qualified products.  
5 Refrigeration measures may include new electronically commutated (EC) motors,  
6 anti-sweat heater controls, evaporator fan controls, LED refrigeration case lighting,  
7 beverage machine/novelty cooler controls, and automatic door closers for walk-in  
8 freezers. Process equipment such as heat pump water heaters, cooking equipment  
9 and dishwashing equipment may be included. HVAC upgrades such as rooftop and  
10 unitary air conditioners and heat pump systems, packaged systems, advanced  
11 rooftop controls, variable frequency drives, programmable thermostats and  
12 efficient operation modifications may be included. In anticipation of technological  
13 advancements, Duke Energy Ohio proposes the flexibility to incentivize additional  
14 cost-effective measures where appropriate within the lighting, refrigeration,  
15 process equipment and HVAC fields. To encourage participation, Duke Energy  
16 Ohio provides an upfront customer incentive for up to 80 percent of the total cost  
17 of installed measures. Incentives are provided based on Duke Energy Ohio's cost  
18 effectiveness modeling to ensure cost effectiveness over the life of the measures.

19 Upon receiving the results of the assessment, if the customer chooses to  
20 move forward, the customer makes the final determination of project scope prior to  
21 installation. The program vendor or trade ally then installs the measures or works  
22 with local, qualified subcontractors for the installation services. The customer can  
23 schedule the installation for a convenient time. Duke Energy Ohio's incentive

1 payment for any installed measures is paid directly to the program vendor or trade  
2 ally upon verification that the EE measure(s) have been installed. All project costs  
3 above the incentive amount is the responsibility of the customer and paid based  
4 upon payment terms arranged between the customer and program vendor, trade ally  
5 or third party. Duke Energy Ohio intends for the program vendor, trade ally or third  
6 party to offer extended payment options to the customer to further minimize any  
7 upfront payments that may cause financial barriers to participation.

8 This program may be promoted through various marketing channels that  
9 include, but are not limited to:

- 10 • Direct mail (letters and postcards to qualifying customers);
- 11 • Duke Energy Ohio website;
- 12 • Community outreach events;
- 13 • Small Business Group outreach events;
- 14 • Paid advertising/mass media; and
- 15 • Social media promotions.

16 Marketing efforts will be designed to create customer awareness of this program,  
17 to educate customers on energy saving opportunities and to emphasize the  
18 convenience of participation in BES.

19 With BES, Duke Energy Ohio furthers its commitment to offering  
20 affordable and broad-reaching programs that simplify EE decisions for all  
21 customers.

22 **PowerShare®**

23 PowerShare® is Duke Energy Ohio's DSM program geared toward



1 commercial and industrial customers. The Company believes this program has  
2 been offered since approximately 2000, and it has been popular with customers to  
3 date. The primary offering under PowerShare<sup>®</sup> is named CallOption<sup>®</sup> and it  
4 provides customers a variety of offers that are based on their willingness to shed  
5 load during times of peak system usage. These credits are received regardless of  
6 whether an event is called or not. Energy credits are also available for participation  
7 (shedding load) during curtailment events. The notice to curtail under these offers  
8 is 30 minutes (to be consistent with the timing of an emergency event called by  
9 PJM) and there are penalties for non-compliance during an event.

10 The program is primarily marketed through the Large Account  
11 Management group of Duke Energy Ohio, a group of Account Executives who  
12 manage the relationship with the largest customers of Duke Energy Ohio. In  
13 addition, program information is made available on the Duke Energy Ohio website.

14 **Power Manager<sup>®</sup> for Business**

15 Power Manager<sup>®</sup> for Business is a non-residential program that provides  
16 business customers with the opportunity to participate in demand response (DR),  
17 earn incentives and realize optional EE benefits. This program is designed as a  
18 flexible offer that provides small-to-medium size business customers with options  
19 on device types as well as level of DR participation. Customers first select the type  
20 of device from two available options: thermostat or switch. This program has been  
21 offered since 2018, and the pipeline of potential participants has not been difficult  
22 to attain to date.

23 Customers who opt for the thermostat will have the ability to manage their

1 thermostat remotely via computer, tablet or smartphone. The thermostat comes  
2 with presets designed to help the business manager/owner set an efficient schedule  
3 that works for their business. This realizes additional benefits in the form of EE  
4 impacts/savings. Customers then select one of three levels of summer DR  
5 participation, and earn an incentive based upon that selection.

6 Both thermostat and switch customers have the same DR participation  
7 options and receive the same DR incentives.

8 Power Manager® for Business will be offered to business customers that  
9 meet the following program requirements: a qualifying air conditioning system,  
10 exhibit summer weekday energy usage and that have an adequate communication  
11 signal that can be received by the device used by the program. Customers must  
12 agree to have the control device installed on their A/C system, provide  
13 broadband/Wi-Fi internet to receive the thermostat and to allow Duke Energy Ohio  
14 to control their A/C system during Power Manager® events. Qualifying air  
15 conditioning systems include:

- 16 • Individual split air conditioning systems;
- 17 • Rooftop Units; and
- 18 • Packaged terminal air conditioners (PTACs).

19 Customers participating in this Program receive an incentive based upon the  
20 level of DR cycling they select:

- 21 • 30% cycling: \$50 per DR summer season (per device);
- 22 • 50% cycling: \$85 per DR summer season (per device); or
- 23 • 75% cycling: \$135 per DR summer season (per device).

1 The incentive will be paid out after installation of the device(s) and then annually.  
2 Devices are installed at the customer premise at no charge to the customer.

3 Power Manager® for Business will be marketed through targeted direct mail  
4 campaigns, targeted e-mail campaigns, outbound telemarketing, on Duke Energy  
5 Ohio's Web site and via cross selling with the BES Program.

6 Customers can enroll in Power Manager® for Business by: phone call, door-  
7 to-door canvassing, returning the enrollment form included in the marketing  
8 material or through Duke Energy Ohio's Web site. Duke Energy Ohio will contract  
9 with a third-party entity to install and perform field work associated with the load  
10 control devices and thermostats.

11 **Q. ARE THERE ANY NEW NON-RESIDENTIAL PROGRAMS DUKE**  
12 **ENERGY OHIO IS PROPOSING TO INCLUDE IN THE 2021**  
13 **PORTFOLIO?**

14 A. No. The 2021 portfolio does not currently include any new non-residential  
15 programs, but its existing programs do include several new measures and design  
16 enhancements. The Company will continue to evaluate potential programs and will  
17 review with the Duke Energy Collaborative any new programs the Company plans  
18 to offer during this timeframe.

19 **Q. WHY DID DUKE ENERGY OHIO SELECT THESE NON-RESIDENTIAL**  
20 **PROGRAMS FOR THE 2021 PORTFOLIO, WHILE ELIMINATING**  
21 **OTHER SMART \$AVER PROGRAMS?**

22 A. These programs specifically target the Small, Medium Business (SMB) class of  
23 non-residential customers, which tend to be harder to reach for participation in EE

1 / DSM programs, while offering these customers with a turn-key / direct install  
2 approach.

3 Also, specifically continuing the Power Manager for Business Program,  
4 will enable Duke Energy Ohio to maintain this DSM resource built up over the last  
5 few years (since inception in 2018). This filing for Power Manager for Business  
6 does not reflect Duke Energy Ohio adding many new participants. Discontinuing  
7 Power Manager for Business would not be prudent as Duke Energy Ohio would be  
8 abandoning the DSM capability invested in by Duke Energy Ohio's customers  
9 through the installation of the Wi-Fi-enabled thermostats.

10 **Q. WHY DID DUKE ENERGY INCLUDE DEMAND SIDE MANAGEMENT**  
11 **RELATED NON-RESIDENTIAL PROGRAMS IN THIS PORTFOLIO?**

12 A. Duke Energy Ohio has been entering the PJM Auctions for the purpose of lowering  
13 program costs for customers for several years. Continuing the PowerShare® and  
14 Power Manager® for Business programs is part of Duke Energy Ohio's plan to  
15 support the commitments made by selling resources into the PJM Base Residual  
16 Auction. In addition, many of the Summer Only participants in the PowerShare®  
17 program are school systems who use the proceeds to decrease their cost of  
18 operations.

19 **Q. DID DUKE ENERGY OHIO REFER TO ITS MARKET ASSESSMENT**  
20 **AND ACTION PLAN FOR ELECTRIC DSM, AS FILED WITH THE**  
21 **COMMISSION IN DEVELOPING THIS PORTFOLIO OF PROGRAMS?**

22 A. Yes.

**III. CONCLUSION**

1 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

2 **A. Yes.**

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Summary: Testimony Direct Testimony of Greg R. Tiernan on Behalf of Duke Energy Ohio, Inc. electronically filed by Carys Cochern on behalf of Duke Energy