

BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

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

In the Matter of the Application of Duke) Case No. 20-1445-EL-ATA
Energy Ohio, Inc., for Approval of Tariff)
Amendments)

DIRECT TESTIMONY OF

JAMES E. ZIOLKOWSKI

ON BEHALF OF

DUKE ENERGY OHIO, INC.

October 9, 2020

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Attachment:

JEZ-1 Revenue Requirement Forecast

I. INTRODUCTION

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

2 A. My name is James E. Ziolkowski, and my business address is 139 East Fourth
3 Street, Cincinnati, Ohio 45202.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by the Duke Energy Business Services LLC (DEBS) as Director,
6 Rates and Regulatory Planning. DEBS provides various administrative and other
7 services to Duke Energy Ohio, Inc., (Duke Energy Ohio or the Company) and other
8 affiliated companies of Duke Energy Corporation (Duke Energy).

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

11 A. I received a Bachelor of Science degree in Mechanical Engineering from the U.S.
12 Naval Academy in 1979 and a Master of Business Administration degree from
13 Miami University in 1988. I am also a licensed Professional Engineer in the state
14 of Ohio.

15 After graduating from the Naval Academy, I attended the Naval Nuclear
16 Power School and other follow-on schools. I served as a nuclear-trained officer on
17 various ships in the U.S. Navy through 1986. From 1988 through 1990, I worked
18 for Mobil Oil Corporation as a Marine Marketing Representative in the New York
19 City area.

20 I joined The Cincinnati Gas & Electric Company (CG&E) in 1990 as a
21 Product Applications Engineer, in which capacity I designed and managed some of
22 CG&E's demand side management programs, including Energy Audits and

1 Interruptible Rates. From 1996 until 1998, I was an Account Engineer and worked
2 with large customers to resolve various service-related issues, particularly in the
3 areas of billing, metering, and demand management. In 1998, I joined Cinergy
4 Services, Inc.'s, Rate Department, where I focused on rate design and tariff
5 administration. I was significantly involved with the initial unbundling and design
6 of CG&E's retail electric rates. I was appointed to my current position in January
7 2014.

8 **Q. PLEASE DESCRIBE YOUR DUTIES AS DIRECTOR, RATES AND**
9 **REGULATORY PLANNING.**

10 A. I am responsible for various rider filings, tariff administration, billing, and revenue
11 reporting issues in Ohio and Kentucky. I also prepare filings to modify charges and
12 terms in retail tariffs of Duke Energy Ohio and Duke Energy Kentucky, Inc., (Duke
13 Energy Kentucky) and develop rates for new services. During rate cases, I prepare
14 cost of service studies and help with the design of the new base rates. I assisted in
15 the development of the retail electric tariffs in the Company's Case No. 03-93-EL-
16 ATA, which established the Company's market-based standard service offer.
17 Additionally, I frequently work with customer contact and billing personnel of
18 Duke Energy Ohio and Duke Energy Kentucky to answer rate-related questions and
19 to apply the retail tariffs to specific situations. Occasionally, I meet with customers
20 and Company representatives to explain rates or provide rate training. I also
21 prepare reports that are required by regulatory authorities.

1 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC UTILITIES**
2 **COMMISSION OF OHIO?**

3 A. Yes, I have testified before the Public Utilities Commission of Ohio (Commission) in
4 many cases. For example, I provided testimony before the Commission in support of
5 Duke Energy Ohio's most recent electric distribution base rate case, Case Number 17-
6 32-EL-AIR. I was also a witness in the Company's Electric Security Plan case, filed
7 under Case Number 17-1263-EL-SSO and a number of energy efficiency cases, filed
8 under Case No. 13-753-EL-RDR, Case No. 14-457-EL-RDR, Case No. 15-534-EL-
9 RDR, Case No. 16-664-EL-RDR, 17-781-EL-RDR, 18-397-EL-RDR , 19-622-EL-
10 RDR, and 20-613-EL-RDR.

11 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
12 **PROCEEDING?**

13 A. The purpose of my testimony in this proceeding is to discuss the rate recovery
14 mechanism proposed to be utilized for the pilot portfolio of programs proposed in this
15 Application.

II. DISCUSSION OF THE PROPOSED RATE RECOVERY MECHANISM

16 **Q. WHAT RATE RECOVERY MECHANISM DOES THE COMPANY**
17 **PROPOSE IN THIS APPLICATION?**

18 A. Duke Energy Ohio proposes to establish a residential demand-side management
19 (DSM) rider (Rider DSM) for the recovery of implementation of the Company's
20 new energy efficiency (EE) / DSM portfolio of programs for calendar year 2021.
21 Rider DSM will allow the Company to recover the costs of its programs, as well as
22 an after-tax 4.5% Joint Benefit Recognition Mechanism.

1 **Q. HOW WILL THE JOINT BENEFIT RECOGNITION MECHANISM BE**
2 **CALCULATED?**

3 A. The Joint Benefit Recognition Mechanism, for the limited purpose of this
4 proceeding, is calculated by multiplying the total avoided transmission and
5 distribution costs by 0.0578 to achieve a 4.5% after-tax percentage.

6 **Q. WHAT IS THE PURPOSE OF RIDER DSM AND RIDER DSMR?**

7 A. Rider DSM describes the mechanism through which the revenue requirement and
8 its true-up is recovered from residential customers. Rider DSMR contains the results
9 of the calculations, *i.e.*, the retail recovery rates. Tariff sheets for these proposed
10 mechanisms are attached to the Company's Application in these proceedings.

11 **Q. WHAT WILL BE THE TOTAL REVENUE REQUIREMENT FOR THE**
12 **2021 PROGRAM PORTFOLIO?**

13 A. As depicted on Page 1 of Attachment JEZ-1, the total revenue requirement for the
14 2021 program portfolio is projected to be \$5,994,703. The revenue requirement
15 will be capped at \$7,000,000.

16 **Q. HOW WILL PROGRAM COSTS BE CALCULATED?**

17 A. As depicted on Page 2 of Attachment JEZ-1, the revenue requirement for program
18 costs will be calculated by beginning with the costs of each program and adding a
19 *credit* reflecting the cost and revenues associated with offering portfolio EE and
20 DSM resources into the PJM Capacity Auctions.

21 **Q. WHAT TYPES OF LOST MARGINS ARE INCLUDED IN YOUR**
22 **CALCULATIONS?**

23 A. No lost distribution margins are included in my calculations, because residential

1 customers are subject to the Company's decoupling rider, Rider DDR (Distribution
 2 Decoupling Rider), which was approved in Case No. 11-5905-EL-RDR and
 3 approved to continue for the duration of the Company's current electric security
 4 plan (ESP) in the consolidated proceedings of Case Nos. 17-32-EL-AIR, *et al.*
 5 However, if Rider DDR was modified or eliminated, it would be appropriate to
 6 include lost distribution margins in Rider DSM rates.

7 **Q. WHAT ARE THE ESTIMATED RIDER DSM RATES AND BILL**
 8 **IMPACTS RESULTING FROM THIS RATE DESIGN?**

9 A. The following table shows the calculation of the residential DSM rate using
 10 estimated annual kWh. It also shows the monthly Rider DSM charge at various
 11 usage levels.

	<u>Revenue Requirement</u>	<u>Estimated Billing kWh</u> 12 months Ended July 31, 2020	<u>Calculated DSM Rate</u> per kWh
Residential from Portfolio	\$5,994,703	7,459,117,437	\$0.000804
Total	\$5,994,703		

<u>Monthly Usage</u> Residential kWh	<u>Rider DSM Charge</u>
500	\$0.40
1,000	\$0.80
1,500	\$1.21
2,000	\$1.61

12 **Q. WHAT MAKES A RIDER AN APPROPRIATE AND NECESSARY COST**
 13 **RECOVERY MECHANISM FOR EE AND DSM PROGRAMS?**

14 A. First, rider recovery will allow annual adjustment and reconciliation. Annual
 15 reconciliations ensure that customers are paying no more and no less than the
 16 Company's approved Rider DSM revenue requirement. Also, as described in
 17 Company witness Trisha Haemmerle's testimony, this is particularly important for

1 EE and DSM programs because the recently revised EE rules require a portfolio
2 and cost recovery mechanism to be filed annually.

3 Second, rider recovery will be consistent with what customers have
4 previously experienced. The Company has operated EE programs for many years.
5 Cost recovery for the programs had been through riders with names such as Rider
6 DSM, Rider SAW, and Rider EE-PDRR. Thus, a separate Rider DSM will be in
7 line with the Company's Commission-approved past practices.

8 Third, if DSM costs were to be included in base rates, the costs could be
9 allocated to the various rate schedules through the cost of service study in the initial
10 rate case filing. Upon approval of the new base rates by the Commission, there
11 would be no opportunity to adjust the costs and allocations of the costs until the
12 Company's subsequent distribution base rate case filing. Base rate recovery would
13 make the implementation of new EE/DSM programs or elimination of such
14 programs out of sync with the actual recovery of costs of operating the programs.
15 Successive base rate cases filings might be many years apart.

III. RIDER DSM UPDATES

16 **Q. WHEN AND HOW WILL RIDER DSM BE UPDATED?**

17 A. First, Duke Energy Ohio proposes to file an updated tariff with an updated Rider
18 DSM as soon as the cost recovery mechanism proposed in this Application is
19 approved. Second, Duke Energy Ohio would begin recovering the associated rate
20 in bills rendered after January 1, 2021. Duke Energy Ohio will submit the
21 performance verification materials required by Rule 4901:1-39-05 for its 2021
22 programs by May 15, 2022 and file an annual update filing, including an annual

1 true-up of the prior year to reconcile any differences between the rates collected in
2 2021 and the actual revenue requirement based on program implementation. The
3 Rider DSM will then be updated based on the Commission's decision issued in that
4 update filing (which would incorporate any changes based on the outcomes of the
5 performance verification process, pursuant to Rule 4901:1-39-06(B)).

IV. CONCLUSION

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

7 A. Yes.

OHIO REVENUE REQUIREMENT (excluding Lost Revenues) WORKPAPER

in \$

Discount Rate	7.73%
Joint Benefit Recognition Mechanism(Pre-tax)	5.78%
Joint Benefit Recognition Mechanism(After tax)	4.50%
Tax	22.16%

Summary Revenue Requirement		2021
	Res from Portfolio	\$5,994,703
	NonRes from Portfolio	\$0
	Total	\$5,994,703

Total Portfolio	Avoided Costs: Energy	\$	2,970,001
	Avoided Costs: Capacity		\$7,295,953
	Avoided Costs: T&D		\$7,767,050
	- Program Costs & Overhead		\$5,545,689
	- M&V Costs		\$0
	Net System Benefit		\$18,033,004
	x Transmission and Distribution Joint Benefit Pool		\$7,767,050
	Joint Benefit Recognition Mechanism Percentage		5.78%
	+ Joint Benefit Recognition Mechanism		\$449,014
	+ Program Cost & Overhead Recovery		\$5,545,689
	M&V Cost Recovery		\$0
	Total Revenue Requirement		\$5,994,703

Res EE	- Avoided Costs: T&D		\$2,685,385
	- Program Costs & Overhead		\$4,305,449
	M&V Costs		\$0
	x Transmission and Distribution Joint Benefit Pool		\$2,685,385
	Joint Benefit Recognition Mechanism Percentage		5.78%
	+ Joint Benefit Recognition Mechanism		\$155,243
	+ Program Cost & Overhead Recovery		\$4,305,449
	M&V Cost Recovery		\$0
	Total Revenue Requirement		\$4,460,691

Res DR	- Avoided Costs: T&D		\$5,081,665
	- Program Costs & Overhead		\$1,240,240
	M&V Costs		\$0
	x Transmission and Distribution Joint Benefit Pool		\$5,081,665
	Joint Benefit Recognition Mechanism Percentage		5.78%
	+ Joint Benefit Recognition Mechanism		\$293,772
	+ Program Cost & Overhead Recovery		\$1,240,240
	M&V Cost Recovery		\$0
	Total Revenue Requirement		\$1,534,012

Duke Energy Ohio
2021 Portfolio Filing

Program	Annual KWH Gross FR @ Plant, Annualized	Annual KW Gross FR @ Plant, Annualized	Avoided T&D Costs NPV	Non-M&V Costs	M&V Costs	Total Program Costs	Transmission and Distribution Joint Benefit Pool	5.78% Joint Benefit Recognition Mechanism	Revenue Requirement with JBRM	Revenue Requirement (Program Costs)
Residential										
Energy Efficiency										
Home Energy Comparison Report	92,415,498	23,716	2,457,972	\$ 3,711,135	\$ -	\$ 3,711,135	\$ 2,457,972	\$ 142,096	\$ 3,853,231	\$ 3,711,135
Low Income Neighborhood Program	443,352	137	103,527	\$ 447,242	\$ -	\$ 447,242	\$ 103,527	\$ 5,985	\$ 453,226	\$ 447,242
Low Income Weatherization - Pay for Performance	1,446,919	218	123,886	\$ 267,072	\$ -	\$ 267,072	\$ 123,886	\$ 7,162	\$ 274,234	\$ 267,072
PJM Pilot Program - Residential	-	-	-	\$ (120,000)	\$ -	\$ (120,000)	\$ -	\$ -	\$ (120,000)	\$ (120,000)
Total	94,305,769	24,072	\$ 2,685,385	\$ 4,305,449	\$ -	\$ 4,305,449	\$ 2,685,385	\$ 155,243	\$ 4,460,691	\$ 4,305,449
Demand Response										
Power Manager*	-	48,588	5,081,665	\$ 1,240,240	\$ -	\$ 1,240,240	\$ 5,081,665	\$ 293,772	\$ 1,534,012	\$ 1,240,240
Total	0	48,588	\$ 5,081,665	\$ 1,240,240	\$ -	\$ 1,240,240	\$ 5,081,665	\$ 293,772	\$ 1,534,012	\$ 1,240,240
Total	94,305,769	72,660	\$ 7,767,050	\$ 5,545,689	\$ -	\$ 5,545,689	\$ 7,767,050	\$ 449,014	\$ 5,994,703	\$ 5,545,689

1 Credits relate to PJM payments for lighting installed in previous periods

OHIO LOST REVENUE ESTIMATE WORKPAPER

in \$

Line Losses

5.6%

		<u>2021</u>
SUMMARY	Res	0
	NonRes	0
	Total	0

Res EE	Vintage		
	2021	Lost Revenues	0
	Vintage		
	2021	KWH at Meter, Net FR	88,552,805
	Vintage		
	2021	Calculated \$/KWH	\$0.000000

Program/Portfolio Cost Effectiveness - 2021

Program	¹	UCT	TRC	RIM	PCT
Residential Programs - EE					
Home Energy Comparison Report		2.00	2.00	1.15	
Low Income Neighborhood Program		0.64	0.64	0.54	2.21
Power Manager ¹		7.95	16.85	7.95	
Low Income Weatherization - Pay for Performance		1.76	8.16	0.93	
Total		3.18	3.76	2.06	45.79

1 - Expected PJM credits have not been included in cost effectiveness.

Cumulative Cost-Based Avoided Elec Capacity	Cumulative Cost-Based Avoided Elec Production	Cumulative Avoided T&D Electric	NPV Avoided Ancillary	Cumulative Elec Lost Rev Net of Fuel NF	NPV Program Costs (incl. Incentives and EMV)	NPV Incentives	NPV Participant Costs(net)	NPV Participant Costs(gross)	Participant Elec Bill Savings(gross)
N	M	K	L	P	R	U	V	W	Z
2,313,020	2,642,354	2,457,972	-	2,745,918	3,711,135	-	-	-	9,801,609
87,617	96,115	103,527	-	89,038	447,242	264,309	264,000	264,000	317,822
4,781,907	-	5,081,665	-	-	1,240,240	656,945	-	-	-
113,329	231,531	123,886	-	235,164	367,072	209,629	-	-	839,421
7,295,953	2,970,001	7,767,050	-	3,070,119	5,665,689	1,128,883	264,000	264,000	10,958,851