

**BEFORE**

**THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application of Duke	)	
Energy Ohio, Inc., for Authority to Adjust	)	Case No. 19-1750-EL-UNC
its Power Forward Rider.	)	

In the Matter of the Application of Duke	)	
Energy Ohio, Inc., for Approval to Change	)	Case No. 19-1751-GE-AAM
Accounting Methods.	)	

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**DIRECT TESTIMONY OF**

**JAY P. BROWN**

**ON BEHALF OF**

**DUKE ENERGY OHIO, INC.**

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September 24, 2019

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**Attachment:**

**JPB-1 - Estimated Revenue Requirements**

## **I. INTRODUCTION**

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

2   A.   My name is Jay P. Brown, and my business address is 139 East Fourth Street,  
3       Cincinnati, Ohio, 45202.

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

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

9   **Q.   PLEASE BRIEFLY DESCRIBE YOUR EDUCATION AND**  
10   **PROFESSIONAL EXPERIENCE.**

11   A.   I earned a Bachelor of Science degree in Business Administration with a major in  
12       Business: Finance, Investment and Banking from University of Wisconsin -  
13       Madison. I began my career with The Alexander Companies, a real estate  
14       development company, as an Assistant Project Manager in January 2002  
15       managing and developing real estate. Subsequently, in December 2003 I began  
16       working for Dell Inc., mainly as a Financial Analyst in Worldwide Procurement  
17       Finance, accounting for and reporting on supplier rebates. In January 2008, I  
18       began working for Bigfoot Networks, a technology start-up. I was in charge of  
19       developing distribution, online and retail channels for a new networking product.  
20       Beginning in April 2009, I also served as a Financial Advisor for Edward Jones.  
21       In June 2011, I began working as a contractor for Progress Energy and since  
22       February 2012, I have been employed by, and worked for, companies under what

1 is now Duke Energy. The roles I've held include Sr. Business Finance Analyst  
2 and in December 2012, I took the position of Manager Nuclear Station Finance. I  
3 assumed my current role as Lead Rates & Regulatory Strategy Analyst in August  
4 of 2018.

5 **Q. PLEASE DESCRIBE YOUR DUTIES AS LEAD RATES &**  
6 **REGULATORY STRATEGY ANALYST.**

7 A. I am responsible for preparing financial and accounting data used in retail rate  
8 filings and various other rate recovery mechanisms for Duke Energy Ohio and  
9 Duke Energy Kentucky, Inc.

10 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC**  
11 **UTILITIES COMMISSION OF OHIO?**

12 A. Yes, I have filed written direct testimony in the Company's Rider CEP  
13 application in Case No. 19-0791-GA-ALT.

14 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THESE**  
15 **PROCEEDINGS?**

16 A. The purpose of my testimony is to provide an overview of the estimated revenue  
17 requirement being proposed for recovery through the PowerForward Rider (Rider  
18 PF) in this application. I also support the Company's request for deferral authority  
19 in this case to defer income statement recognition of certain Operation &  
20 Maintenance (O&M) expenses.

## **II. DISCUSSION**

1   **Q.   PLEASE EXPLAIN HOW THE COSTS ASSOCIATED WITH THE**  
2       **COMPANY'S CUSTOMER CONNECT PROGRAM WILL BE**  
3       **INCLUDED IN RIDER PF.**

4   A.   As outlined in the direct testimony of Company witness Retha Hunsicker, the  
5       estimated cost to Duke Energy Ohio's electric customers for the implementation  
6       of the Customer Connect Program is approximately \$79 million comprised of  
7       approximately \$40.2 million in capital costs and \$38.4 million in O&M expenses.  
8       As discussed later in my testimony, the Company is requesting deferral authority  
9       of O&M expenses incurred since January 1, 2018. A more detailed breakdown of  
10      these costs is shown in Attachment RH-1. As shown on Attachment JPB-1, Rider  
11      PF will include a return on net plant in service, net of associated retirements,  
12      accumulated depreciation, and accumulated deferred income taxes. It will also  
13      include recovery of O&M expenses incurred since January 1, 2018, ongoing  
14      depreciation expense and property tax expense associated with the Customer  
15      Connect program. The Company is proposing to amortize the O&M expenses  
16      incurred after January 1, 2018 over a five-year period.

17   **Q.   PLEASE EXPLAIN HOW THE COSTS ASSOCIATED WITH THE**  
18       **COMPANY'S LAND MOBILE RADIO PROGRAM WILL BE INCLUDED**  
19       **IN RIDER PF.**

20   A.   As outlined in the direct testimony of Company witness Randy Turner, the LMR  
21       project is approximately \$16.2 million in total electric and natural gas costs of  
22       which \$11.8 million is related to electric, comprised of approximately \$11.3

1 million in capital costs and approximately \$519,000 in O&M expenses. As shown  
2 on Attachment JPB-1, Rider PF will include a return on net plant in service, net of  
3 associated retirements, accumulated depreciation, and accumulated deferred  
4 income taxes. It will also include recovery of depreciation expense, property tax  
5 expense and O&M expenses associated with the LMR investment. The Company  
6 is proposing to amortize the O&M expenses over a five-year period.

7 **Q. PLEASE EXPLAIN HOW THE COSTS ASSOCIATED WITH THE**  
8 **COMPANY'S SMART CITIES INFRASTRUCTURE ACCELERATION**  
9 **PROGRAM WILL BE INCLUDED IN RIDER PF.**

10 A. As outlined in the direct testimony of Company witness Timothy Duff, the  
11 estimated cost to Duke Energy Ohio's electric customers for the implementation  
12 of the Smart Cities Program is \$5 million in capital costs. As shown on  
13 Attachment JPB-1, Rider PF will include a return on net plant in service, net of  
14 associated retirements, accumulated depreciation, and accumulated deferred  
15 income taxes. It will also include recovery of depreciation expense and property  
16 tax associated with the Smart Cities Program.

17 **Q. PLEASE EXPLAIN HOW THE COSTS ASSOCIATED WITH THE**  
18 **COMPANY'S ELECTRIC VEHICLE PROGRAM WILL BE INCLUDED**  
19 **IN RIDER PF.**

20 A. As outlined in the direct testimony of Company witness Lang Reynolds the  
21 estimated cost to Duke Energy Ohio's electric customers for the implementation  
22 of the Electric Vehicle (EV) Program is approximately \$15.8 million (\$11.3  
23 million in capital costs and \$4.5 million in O&M expenses). As shown on

1 Attachment JPB-1, Rider PF will include a return on net plant in service, net of  
2 associated retirements, accumulated depreciation, and accumulated deferred  
3 income taxes. It will also include recovery of depreciation expense, property tax  
4 expense and O&M expenses associated with the EV Program. The Company is  
5 proposing to amortize the O&M expenses over a five-year period.

6 **Q. ARE EXPENSES ASSOCIATED WITH RIDER PF INCLUDED IN**  
7 **CURRENT BASE RATES?**

8 A. No. All expenditures that the Company is proposing for recovery in Rider PF are  
9 incremental to base rates and are not being recovered through current riders.

10 **Q. WHAT RATE OF RETURN DO YOU PROPOSE TO USE FOR THE**  
11 **RIDER?**

12 A. The Company will use its current Commission-approved authorized rate of return.  
13 As approved in the most recent electric distribution base rate case, the Company  
14 will use a 9.84 percent rate of return on equity.

15 **Q. HAS THE PUBLIC UTILITIES COMMISSION OF OHIO GRANTED**  
16 **THE COMPANY RECOVERY OF THESE COSTS THROUGH RIDER**  
17 **PF?**

18 A. The Company is proposing that these costs be recovered through Rider PF as “the  
19 third component of Rider PF,” as outlined in the Stipulation and Recommendation  
20 in Cases No. 17-32-EL-AIR, *et al.* “for the recovery of cost related to an  
21 infrastructure modernization plan, which will be filed in a separate proceeding  
22 and subject to hearing.”

1    **Q.    WHAT DEFERRAL AUTHORITY RELATED TO ELECTRIC COSTS IS**  
2    **THE COMPANY REQUESTING IN THIS CASE?**

3    A.    The Company is requesting deferral authority to change its accounting procedures  
4    and permit the Company to defer the incremental electric O&M expenses incurred  
5    since January 1, 2018 associated with implementation of the four projects being  
6    requested for cost recovery in this case. Duke Energy Ohio proposes to record all  
7    costs as a regulatory asset on its balance sheet in Account 182.3, Other  
8    Regulatory Assets. The deferred costs would then be recovered through Rider PF  
9    as I have explained previously in my testimony and outlined on Attachment JPB-  
10   1.

11   **Q.    WHAT DEFERRAL AUTHORITY RELATED TO NATURAL GAS**  
12   **COSTS IS THE COMPANY REQUESTING IN THIS CASE?**

13   A.    The Company is requesting deferral authority to change its accounting procedures  
14   and permit the Company to defer the incremental natural gas O&M expenses  
15   incurred since January 1, 2018 associated with implementation of the CIS and  
16   LMR projects being requested for cost recovery in this case. These projects are  
17   common to both electric and gas operations and therefore the implementation  
18   cannot be separated. Duke Energy Ohio proposes to record all costs as a  
19   regulatory asset on its balance sheet in Account 182.3, Other Regulatory Assets.  
20   The Company would seek recovery of these costs in its next natural gas base rate  
21   case.



1   **Q.    HOW WILL DUKE ENERGY OHIO UPDATE ITS RIDER PF GOING**  
2   **FORWARD?**

3   A.   Duke Energy Ohio will file an application for any future adjustments to its Rider  
4   PF to account for changes and additional programs offered under its Infrastructure  
5   Modernization Plan through the term of the Company's recently approved ESP. In  
6   addition, as Rider PF has multiple components, to the extent any of the other two  
7   components are implicated by either a Commission directive (Component 1) or  
8   for recovery of the Company's Advanced Metering Infrastructure (Component 2)  
9   the Company will file a separate application to adjust Rider PF.

**III.   EXPLANATION OF ATTACHMENTS AND SCHEDULES**

10  **Q.    PLEASE EXPLAIN ATTACHMENT JPB - 1.**

11  A.   Attachment JPB-1 shows the projected revenue requirement associated with the  
12  investments being proposed for Rider PF recovery in this application. The  
13  Company is proposing that these costs would be included in the Company's first  
14  Rider PF filing in March 2021 for costs incurred through December 31, 2020. It  
15  includes a return on rate base and recovery of the related operating expenses.

**IV.   CONCLUSION**

16  **Q.    IS ATTACHMENT JPB-1 TRUE AND ACCURATE TO THE BEST OF**  
17  **YOUR KNOWLEDGE?**

18  A.   Yes.

19  **Q.    WAS ATTACHMENT JPB-1 PREPARED BY YOU OR UNDER YOUR**  
20  **DIRECTION AND CONTROL?**

21  A.   Yes.

1    **Q.     DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

2    **A.     Yes.**

**Juke Energy Ohio**  
**Estimated Revenue Requirement for Rider PF**

Line	Description	2020	2021	2022	2023	2024	2025
1	Gross Distribution Plant <sup>(a)</sup>	\$10,493,651	\$28,587,474	\$67,817,316	\$67,817,316	\$67,817,316	\$67,817,316
2	Accumulated Depreciation	(1,826,732)	(4,269,668)	(9,005,842)	(15,251,076)	(21,421,558)	(26,372,101)
3	Net Distribution Plant in Service	\$8,666,919	\$24,317,806	\$58,811,474	\$52,566,240	\$46,395,758	\$41,445,215
4	Accum Def Income Taxes on Distr Plant	(\$287,748)	(\$492,363)	(\$808,574)	(\$1,092,683)	(\$1,098,803)	(\$1,114,400)
5	Distribution Rate Base for Rider PF	<u>\$8,379,171</u>	<u>\$23,825,443</u>	<u>\$58,002,900</u>	<u>\$51,473,557</u>	<u>\$45,296,955</u>	<u>\$40,330,815</u>
6	Return on Rate Base (Pre-Tax %) <sup>(b)</sup>	8.97%	8.97%	8.97%	8.97%	8.97%	8.97%
7	Return on Rate Base (Pre-Tax)	\$751,276	\$2,136,189	\$5,200,540	\$4,615,119	\$4,061,325	\$3,616,061
8	Amortization of Deferred O&M <sup>(c)</sup>	\$ 1,795,786	\$ 2,805,967	\$ 4,122,324	\$ 7,676,804	\$ 8,267,812	\$ 6,472,025
9	Depreciation Expense	1,328,055	2,442,936	4,736,174	6,245,234	6,170,482	4,950,543
10	Annualized Property Tax Expense <sup>(d)</sup>	164,671	462,038	1,117,418	998,759	881,519	787,459
11	Revenue Requirement Before CAT (Lines 7 - 10)	<u>\$4,039,790</u>	<u>\$7,847,131</u>	<u>\$15,176,456</u>	<u>\$19,535,916</u>	<u>\$19,381,138</u>	<u>\$15,826,089</u>
12	Commercial Activities Tax	\$10,531	\$20,456	\$39,562	\$50,926	\$50,522	\$41,255
13	Total Rider PF Revenue Requirement	<u>\$4,050,320</u>	<u>\$7,867,586</u>	<u>\$15,216,017</u>	<u>\$19,586,841</u>	<u>\$19,431,660</u>	<u>\$15,867,344</u>
14	Annual Base Distribution Revenue	<u>\$452,055,948</u>	<u>\$452,055,948</u>	<u>\$452,055,948</u>	<u>\$452,055,948</u>	<u>\$452,055,948</u>	<u>\$452,055,948</u>
15	DEO Percentage of Base Distribution Revenue <sup>(e)</sup>	<u>0.896%</u>	<u>1.740%</u>	<u>3.366%</u>	<u>4.333%</u>	<u>4.299%</u>	<u>3.510%</u>

**Assumptions:**

- <sup>(a)</sup> Capital costs are assumed in service in the year spent
- <sup>(b)</sup> Weighted-Average Cost of Capital from Schedule D-1 in Case No. 17-032-EL-AIR, with ROE at 9.84%, grossed up for 21% FIT rate.
- <sup>(c)</sup> O&M amortized over 5 years and if deferrals are approved will include carrying costs at the long term debt rate of 5.16% approved in Case No. 17-032-EL-AIR.
- <sup>(d)</sup> Assumes 1.9% of net plant.

Project		Property, Plant and Equipment (Capital)									
	2019	2020	2021	2022	2023	2024	2025				
IS Program	\$1,512,855	\$0	\$0	\$32,237,441	\$0	\$0	\$0				
Cumulative Gross Plant	1,512,855	1,512,855	1,512,855	33,750,296	33,750,296	33,750,296	33,750,296				
epreciation Expense	50,428	\$100,857	\$100,857	\$1,175,438	\$2,250,020	\$2,250,020	\$2,250,020				
ccumulated Depreciation	(\$50,428)	(\$151,285)	(\$252,142)	(\$1,427,581)	(\$5,677,601)	(\$5,927,620)	(\$8,177,640)				
ccumulated Deferred Income Tax	(\$5,295)	(\$14,296)	(\$20,280)	(\$136,394)	(\$329,043)	(\$455,155)	(\$522,674)				
Project	2019	2020	2021	2022	2023	2024	2025				
Annual O&M	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
Amortize O&M over 5 Yrs After Spend											
2019 O&M											
2020 O&M											
2021 O&M											
2022 O&M											
2023 O&M											
mortization of O&M for Rider											
	\$0	\$0	\$0	\$0	\$0	\$0	\$0				
Book Life	Tax Life										
15.00	15.00										
15 Yr MACRS	Cap Additions	Tax Depreciation on									
		2019 Spend	2020 Spend	2021 Spend	2022 Spend	2023 Spend					
2019	5.00%	\$1,512,855	\$75,643	\$0							
2020	9.50%	-	143,721								
2021	8.55%	-	129,349	\$0							
2022	7.70%	32,237,441	116,490	-	\$1,611,872						
2023	6.99%	-	104,841	-	3,062,557	\$0					
2024	6.23%	-	94,251	-	2,756,301	-					
2025	5.90%	-	89,258	-	2,482,283	-					
2026	5.90%	#REF!	89,258	-	2,234,055	-					
2027	5.91%	#REF!	89,410	-	2,008,393	-					
2028	5.90%	#REF!	89,258	-	1,902,009	-					
2029	5.91%		89,410	-	1,902,009	-					
2030	5.90%		89,258	-	1,905,233	-					
2031	5.91%		89,410	-	1,991,419	-					
2032	5.90%		89,258	-	1,905,233	-					
2033	5.91%		89,410	-	1,991,419	-					
2034	2.95%		44,629	-	1,949,862	-					
2035			-	-	1,902,009	-					
2036			-	-	1,905,233	-					
2037			-	-	1,905,233	-					
2038			-	-	951,005	-					
2039	100.0%	#REF!	-	-	-	-					
			\$1,512,855	\$0	\$0	\$32,237,441	\$0				
							#REF!				
		Gross Plant		Book Depreciation		Accumulated Depreciation		Deferred Tax		ADIT	
2019		1,512,855	\$50,428	75,643	\$50,428	1,512,855	\$50,428	5,295	5,295		\$5,295
2020		1,512,855	100,857	143,721	100,857	1,512,855	151,285	9,001	9,001		14,296
2021		1,512,855	100,857	129,349	100,857	1,512,855	252,142	5,983	5,983		20,280
2022		33,750,296	1,175,438	1,728,362	1,175,438	33,750,296	1,427,581	116,114	116,114		136,394
2023		33,750,296	2,250,020	3,167,398	2,250,020	33,750,296	3,677,601	192,649	192,649		329,043
2024		33,750,296	2,250,020	2,850,552	2,250,020	33,750,296	5,927,620	126,112	126,112		455,155
2025		33,750,296	2,250,020	2,571,541	2,250,020	33,750,296	8,177,640	67,520	67,520		522,674
2026		#REF!	#REF!	2,323,313	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!
2027		#REF!	#REF!	2,097,802	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!
2028		#REF!	#REF!	1,991,267	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!
2029		#REF!	#REF!	1,991,419	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!
2030		#REF!	#REF!	1,994,491	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!
2031		#REF!	#REF!	1,991,419	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!
2032		#REF!	#REF!	1,994,491	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!
2033		#REF!	#REF!	1,991,419	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!
2034		#REF!	#REF!	1,949,862	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!
2035		#REF!	#REF!	1,902,009	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!
2036		#REF!	#REF!	1,905,233	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!
2037		#REF!	#REF!	1,905,233	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!
2038		#REF!	#REF!	951,005	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!
2039		#REF!	#REF!	-	#REF!	#REF!	#REF!	#REF!	#REF!		#REF!
				\$33,750,296							

Project	Property, Plant and Equipment (Capital)					
	2019	2020	2021	2022	2023	2025
IS Program	\$4,482,485	\$1,511,366	\$87,200	\$392,400	\$0	\$0
Cumulative Gross Plant	4,482,485	5,993,851	6,081,051	6,473,451	6,473,451	6,473,451
depreciation Expense	448,248	\$1,047,634	\$1,207,490	\$1,255,450	\$1,294,680	\$0
accumulated Depreciation	(\$448,248)	(\$1,495,882)	(\$2,703,372)	(\$3,958,822)	(\$5,253,513)	(\$6,473,451)
accumulated Deferred Income Tax	(\$94,132)	(\$238,829)	(\$271,217)	(\$199,291)	(\$102,295)	\$15,294

Project	Annual Spend (O&M)					
	2019	2020	2021	2022	2023	2025
Annual O&M						
Amortize O&M over 5 Yrs After Spend						
2019 O&M	\$8,851,315	\$4,773,815	\$4,001,990	\$16,058,861	\$2,595,869	\$0
2020 O&M		\$1,770,263.06	\$1,770,263.06	\$1,770,263.06	\$1,770,263.06	\$1,770,263.06
2021 O&M			954,763	954,763	954,763	954,763
2022 O&M				800,398	800,398	800,398
2023 O&M					3,211,772	3,211,772
2025 O&M						\$5,486,107
mortgage of O&M for Rider	\$0	\$1,770,263	\$2,725,026	\$3,525,424	\$6,737,196	\$7,256,370

	5 Yr. MACRS	Cap Additions	Tax Depreciation on					
			2019 Spend	2020 Spend	2021 Spend	2022 Spend	2023 Spend	
2019	20.00%	\$4,482,485	\$896,497					
2020	32.00%	1,511,366	1,434,395	\$302,273				
2021	19.20%	87,200	483,637		\$17,440			
2022	11.52%	392,400	516,382	290,182	27,904	\$78,480		
2023	11.52%	-	516,382	174,109	16,742	125,568		
2024	5.76%	-	258,191	174,109	10,045	75,341		\$0
2025		-	-	87,055	10,045	45,204		
2026		#REF!	-	-	5,023	45,204		
2027		#REF!	-	-	-	22,602		
2028		#REF!	-	-	-	-		
2029			-	-	-	-		
2030			-	-	-	-		
2031			-	-	-	-		
2032			-	-	-	-		
2033			-	-	-	-		
2034			-	-	-	-		
2035			-	-	-	-		
2036			-	-	-	-		
2037			-	-	-	-		
2038			-	-	-	-		
2039	100.0%	#REF!	\$4,482,485	\$1,511,366	\$87,200	\$392,400		\$0

uke Energy Ohio  
Estimated Revenue Requirement for Rider PF (Assumptions and Details of Calculations)

Project	Property, Plant and Equipment (Capital)				
	2019	2020	2021	2022	2023
MR Program	\$0	\$886,946	\$10,406,623	\$0	\$0
Cumulative Gross Plant	-	886,946	11,293,569	11,293,569	11,293,569
Depreciation Expense	-	\$29,565	\$406,017	\$752,905	\$752,905
Cumulative Depreciation	\$0	(\$29,565)	(\$435,582)	(\$1,188,487)	(\$3,447,200)
Cumulative Deferred Income Tax	\$0	(\$3,104)	(\$44,805)	(\$110,232)	(\$181,329)

Project	Annual Spend (O&M)				
	2019	2020	2021	2022	2023
Annual O&M	\$127,615	\$277,090	\$114,500	\$0	\$0
Amortize O&M over 5 yrs After Spend					
2019 O&M		25,523	25,523	25,523	25,523
2020 O&M			55,418	55,418	55,418
2021 O&M				22,900	22,900
2022 O&M					22,900
2023 O&M					
mortization of O&M for Rider	\$0	\$25,523	\$80,941	\$103,841	\$103,841

Book Life	Tax Life
15.00	15.00

15 Yr. MACRS	Cap Additions	Tax Depreciation on					Total Tax Depr	Book Depreciation	Gross Plant	Accumulated Depreciation	Deferred Tax	ADIT
		2019 Spend	2020 Spend	2021 Spend	2022 Spend	2023 Spend						
2019	5.00%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2020	9.50%	886,946	\$44,347	\$520,331	\$666,409	\$666,409	44,347	29,565	886,946	29,565	3,104	3,104
2021	8.55%	10,406,623	84,250	986,629	667,361	667,361	604,591	406,017	11,293,569	435,582	41,701	44,805
2022	7.70%	-	75,834	889,766	666,409	666,409	1,064,463	752,905	11,293,569	1,188,487	65,427	110,232
2023	6.93%	-	68,295	801,310	667,361	667,361	958,061	752,905	11,293,569	1,941,391	43,083	153,315
2024	6.23%	-	61,465	721,179	666,409	666,409	862,775	752,905	11,293,569	2,694,296	23,073	176,388
2025	5.90%	-	55,257	648,333	613,991	613,991	776,436	752,905	11,293,569	3,447,200	4,942	181,329
2026	5.90%	#REF!	52,330	613,991	613,991	613,991	700,662	#REF!	#REF!	#REF!	#REF!	#REF!
2027	5.91%	#REF!	52,330	613,991	613,991	613,991	666,321	#REF!	#REF!	#REF!	#REF!	#REF!
2028	5.90%	#REF!	52,418	613,991	613,991	613,991	666,409	#REF!	#REF!	#REF!	#REF!	#REF!
2029	5.91%	-	52,330	613,991	613,991	613,991	667,361	#REF!	#REF!	#REF!	#REF!	#REF!
2030	5.90%	-	52,418	613,991	613,991	613,991	666,409	#REF!	#REF!	#REF!	#REF!	#REF!
2031	5.91%	-	52,330	613,991	613,991	613,991	667,361	#REF!	#REF!	#REF!	#REF!	#REF!
2032	5.90%	-	52,418	613,991	613,991	613,991	666,409	#REF!	#REF!	#REF!	#REF!	#REF!
2033	5.91%	-	52,330	613,991	613,991	613,991	667,361	#REF!	#REF!	#REF!	#REF!	#REF!
2034	2.95%	-	52,418	613,991	613,991	613,991	666,409	#REF!	#REF!	#REF!	#REF!	#REF!
2035	-	-	26,165	613,991	613,991	613,991	641,196	#REF!	#REF!	#REF!	#REF!	#REF!
2036	-	-	-	306,995	306,995	306,995	306,995	#REF!	#REF!	#REF!	#REF!	#REF!
2037	-	-	-	-	-	-	-	#REF!	#REF!	#REF!	#REF!	#REF!
2038	-	-	-	-	-	-	-	#REF!	#REF!	#REF!	#REF!	#REF!
2039	100.0%	#REF!	\$0	\$886,946	\$10,406,623	\$0	\$11,293,569	#REF!	#REF!	#REF!	#REF!	#REF!



uke Energy Ohio  
Estimated Revenue Requirement for Rider PF (Assumptions and Details of Calculations)

Project	Property, Plant and Equipment (Capital)				
	2019	2020	2021	2022	2023
Smart Cities Program	\$0	\$0	\$3,000,000	\$2,000,000	\$0
Cumulative Gross Plant			3,000,000	5,000,000	5,000,000
Depreciation Expense		\$0	\$100,000	\$266,667	\$333,333
Cumulative Depreciation	\$0	\$0	(\$100,000)	(\$366,667)	(\$1,033,333)
Cumulative Deferred Income Tax	\$0	\$0	(\$10,500)	(\$35,350)	(\$79,534)

Project	Annual Spend (O&M)				
	2019	2020	2021	2022	2023
Annual O&M	\$0	\$0	\$0	\$0	\$0
Amortize O&M over 5 Yrs After Spend					
2019 O&M					
2020 O&M					
2021 O&M					
mortization of O&M for Rider	\$0	\$0	\$0	\$0	\$0

Book Life	Tax Life
15.00	15.00

15 Yr MACRS	Cap Additions	Tax Depreciation on			Total Tax Depr	Book Depreciation	Gross Plant	Accumulated Depreciation	Deferred Tax	ADIT
		2019 Spend	2020 Spend	2021 Spend						
2019	5.00%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2020	9.50%	-	-	-	-	150,000	3,000,000	100,000	10,500	10,500
2021	8.55%	3,000,000	-	\$150,000	-	385,000	5,000,000	266,667	24,850	35,350
2022	7.70%	2,000,000	-	285,000	\$100,000	446,500	5,000,000	333,333	700,000	59,115
2023	6.93%	-	-	256,500	190,000	402,000	5,000,000	333,333	23,765	73,535
2024	6.23%	-	-	231,000	171,000	361,900	5,000,000	333,333	14,420	79,534
2025	5.90%	-	-	207,900	154,000	325,500	#REF!	#REF!	5,999	#REF!
2026	5.90%	#REF!	-	186,900	138,600	301,600	#REF!	#REF!	#REF!	#REF!
2027	5.91%	#REF!	-	177,000	124,600	295,300	#REF!	#REF!	#REF!	#REF!
2028	5.90%	#REF!	-	177,000	118,000	295,300	#REF!	#REF!	#REF!	#REF!
2029	5.91%	-	-	177,300	118,000	295,300	#REF!	#REF!	#REF!	#REF!
2030	5.90%	-	-	177,000	118,200	295,300	#REF!	#REF!	#REF!	#REF!
2031	5.91%	-	-	177,300	118,000	295,300	#REF!	#REF!	#REF!	#REF!
2032	5.90%	-	-	177,000	118,200	295,300	#REF!	#REF!	#REF!	#REF!
2033	5.91%	-	-	177,300	118,000	295,300	#REF!	#REF!	#REF!	#REF!
2034	2.95%	-	-	177,000	118,200	295,300	#REF!	#REF!	#REF!	#REF!
100.0%	#REF!	\$0	\$0	\$2,734,200	\$1,704,800	\$4,439,000				

uke Energy Ohio  
estimated Revenue Requirement for Rider PF (Assumptions and Details of Calculations)

Project	Property, Plant and Equipment (Capital)				
	2019	2020	2021	2022	2023
V Program	\$0	\$2,100,000	\$4,600,000	\$4,600,000	\$0
Cumulative Gross Plant	-	2,100,000	6,700,000	11,300,000	11,300,000
Depreciation Expense	-	\$150,000	\$628,571	\$1,285,714	\$1,614,286
Cumulative Depreciation	\$0	(\$150,000)	(\$778,571)	(\$2,064,286)	(\$6,307,143)
Cumulative Deferred Income Tax	\$0	(\$31,519)	(\$145,561)	(\$327,307)	(\$346,157)

Project	Annual Spend (O&M)				
	2019	2020	2021	2022	2023
Annual O&M	\$0	\$0	\$2,465,293	\$1,713,543	\$0
Amortize O&M over 5 yrs After Spend					
2019 O&M	\$0	\$0	\$0	\$0	\$0
2020 O&M					
2021 O&M			493,059	493,059	493,059
2022 O&M			\$342,709	\$342,709	\$342,709
2023 O&M				71,833	71,833
2024 O&M				\$907,600	\$907,600

Book Life	Tax Life
7.00	7.00

7 Yr MACRS	Cap Additions	Tax Depreciation on					Total Tax Depr	Book Depreciation	Gross Plant	Accumulated Depreciation	Deferred Tax	ADIT
		2019 Spend	2020 Spend	2021 Spend	2022 Spend	2023 Spend						
2019	14.29%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2020	24.49%	2,100,000	\$300,090	\$657,340	\$657,340	\$657,340	300,090	150,000	2,100,000	150,000	31,519	31,519
2021	17.49%	4,600,000	514,290	1,126,540	1,126,540	1,126,540	1,171,630	628,571	6,700,000	778,571	114,042	145,561
2022	12.49%	4,600,000	367,290	804,540	804,540	804,540	2,151,170	1,285,714	11,300,000	2,064,286	181,746	327,307
2023	8.93%	-	262,290	574,540	574,540	574,540	2,193,370	1,614,286	11,300,000	3,678,571	121,608	448,915
2024	8.92%	-	187,530	410,780	410,780	410,780	1,566,610	1,614,286	11,300,000	5,292,857	(10,012)	438,903
2025	8.93%	-	187,320	410,780	410,780	410,780	1,172,640	1,614,286	11,300,000	6,907,143	(92,746)	346,157
2026	4.46%	#REF!	187,530	410,780	410,780	410,780	1,008,630	#REF!	#REF!	#REF!	#REF!	#REF!
2027	0.00%	#REF!	93,660	410,780	410,780	410,780	914,760	#REF!	#REF!	#REF!	#REF!	#REF!
2028	0.00%	#REF!	-	205,160	205,160	205,160	615,940	#REF!	#REF!	#REF!	#REF!	#REF!
2029	0.00%	-	-	-	-	-	205,160	#REF!	#REF!	#REF!	#REF!	#REF!
2030	0.00%	-	-	-	-	-	-	#REF!	#REF!	#REF!	#REF!	#REF!
2031	0.00%	-	-	-	-	-	-	#REF!	#REF!	#REF!	#REF!	#REF!
2032	0.00%	-	-	-	-	-	-	#REF!	#REF!	#REF!	#REF!	#REF!
2033	0.00%	-	-	-	-	-	-	#REF!	#REF!	#REF!	#REF!	#REF!
2034	0.00%	-	-	-	-	-	-	#REF!	#REF!	#REF!	#REF!	#REF!
100.0%	#REF!	\$0	\$2,100,000	\$4,600,000	\$4,600,000	\$4,600,000	\$11,300,000	#REF!				



Duke Energy Ohio	
Estimated Revenue Requirement for Rider PF	
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Pre-Tax Return	8.966%
Book Depreciation Life (yrs)	7
Tax Depreciation Life (MACRS) (yrs)	7
Property Tax Rate	1.90%
Base Distribution Revenue	\$452,055,948
Long Term Debt Rate	5.16%

	3 Yr MACRS	5 Yr MACRS	7 Yr MACRS	10 Yr MACRS	15 Yr MACRS	20 Yr MACRS
1	33.33%	20.00%	14.29%	10.00%	5.00%	3.750%
2	44.45%	32.00%	24.49%	18.00%	9.50%	7.219%
3	14.81%	19.20%	17.49%	14.40%	8.55%	6.677%
4	7.41%	11.52%	12.49%	11.52%	7.70%	6.177%
5		11.52%	8.93%	9.22%	6.93%	5.713%
6		5.76%	8.92%	7.37%	6.23%	5.285%
7			8.93%	6.55%	5.90%	4.888%
8			4.46%	6.55%	5.90%	4.522%
9				6.56%	5.91%	4.462%
10				6.55%	5.90%	4.461%
11				3.28%	5.91%	4.462%
12					5.90%	4.461%
13					5.91%	4.462%
14					5.90%	4.461%
15					5.91%	4.462%
16					2.95%	4.461%
17						4.462%
18						4.461%
19						4.462%
20						4.461%
21						2.231%
	100.000%	100.000%	100.000%	100.000%	100.000%	100.000%

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**Case No(s). 19-1750-EL-UNC, 19-1751-GE-AAM**

Summary: Testimony Direct Testimony of Jay P. Brown electronically filed by Mrs. Debbie L Gates on behalf of Duke Energy Ohio Inc. and D'Ascenzo, Rocco O. Mr. and Kingery, Jeanne W and Watts, Elizabeth H and Vaysman, Larisa