

**BEFORE**

**THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application of Duke )  
Energy Ohio, Inc., for Recovery of )  
Program Costs, Lost Distribution Revenue ) Case No. 20-613-EL-RDR  
and Performance Incentives Related to its )  
Energy Efficiency and Demand Response )  
Programs.

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**DIRECT TESTIMONY OF**

**JAMES E. ZIOLKOWSKI**

**ON BEHALF OF**

**DUKE ENERGY OHIO, INC.**

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April 14, 2020

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## **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 prepare  
21 reports that are required by regulatory authorities.

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

3    A.    Yes. Recently, I provided testimony before the Public Utilities Commission of Ohio  
4       (Commission) in support of Duke Energy Ohio's electric distribution base rate case  
5       and Electric Security Plan, filed under Case Number 17-0032-EL-AIR and Case No.  
6       17-1263-EL-SSO, respectively. I was also a witness in the Company's Electric  
7       Security Plan case, filed under Case Number 14-841-EL-SSO and the Energy  
8       Efficiency cases, filed under Case Number 16-576-EL-POR, 13-753-EL-RDR, Case  
9       No. 14-457-EL-RDR, Case No. 15-534-EL-RDR, Case No. 16-664-EL-RDR, Case  
10      No. 17-781-EL-RDR, Case No. 18-397-EL-RDR and Case No. 19-622-EL-RDR.

11   **Q.    WHAT ARE THE ATTACHMENTS AND SCHEDULES FOR WHICH YOU**  
12       **ARE RESPONSIBLE?**

13   A.    I am sponsoring the following items:  
14       • Attachment JEZ-1 – Work papers showing the calculation of Rider EE-PDRR  
15       rates  
16       • Attachment JEZ-2 – Proposed Rider EE-PDRR tariff sheet – redlined  
17       • Attachment JEZ-3 – Proposed Rider EE-PDRR tariff sheet – clean

18   **Q.    WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**  
19       **PROCEEDING?**

20   A.    The purpose of my testimony in this proceeding is to: (i) describe the calculation of  
21       the Rider EE-PDRR rate update, including the true-up for the year 2019 and (ii)  
22       discuss the distribution decoupling mechanism, Rider DDR, as approved in Case No.  
23       11-5905-EL-RDR and its effect on lost margin recovery. The Company's electric

1 tariff contains two shared savings-related sheets. Rider EE-PDR describes the  
2 calculations of the shared savings recovery charges, and Rider EE-PDRR contains the  
3 results of the calculations, i.e., the retail recovery rates.

4 **Q. WHAT IS THE PURPOSE OF RIDER EE-PDR AND EE-PDRR?**

5 A. Rider EE-PDR is the mechanism through which the revenue requirement and its  
6 true-up is recovered from residential and non-residential customers. Rider EE-  
7 PDRR contains the results of the calculations, i.e., the retail recovery rates.

8 **Q. WHAT TIME PERIOD DOES THIS TRUE-UP COVER?**

9 A. This true-up analysis addresses the calendar year 2019. The proposed Rider EE-  
10 PDRR rate also includes expected 2020 costs. The 2020 results will be trued-up in  
11 next year's filing. As part of the true-up calculation, the reconciliation balances  
12 (i.e., actual costs including lost revenues, and actual EE-PDRR revenues) from  
13 2012, 2013, 2014, 2015, 2016, 2017, and 2018, as filed in Case No. 13-753-EL-  
14 RDR, Case No. 14-457-EL-RDR, Case No. 15-534-EL-RDR, Case No. 16-664-  
15 EL-RDR, Case No. 17-781-EL-RDR, Case No. 18-397-EL-RDR, and the pending  
16 Case No. 19-622-EL-RDR respectively, are carried forward and included in the  
17 revenue requirement.

18 **Q. DO YOUR CALCULATIONS TAKE INTO ACCOUNT THE FOUR**  
19 **PERCENT COST CAP IMPOSED BY THE COMMISSION IN ITS 2017**  
20 **OPINION AND ORDER, TO WHICH THE COMPANY'S CHALLENGE IS**  
21 **PENDING ON REHEARING?**

22 A. No, my calculations do not take into account the cost cap imposed by the  
23 Commission, which would require that program costs and shared savings not

1 exceed four percent of the Company's 2015 operating revenues.<sup>1</sup> I have performed  
2 my calculations in a manner consistent with the Ohio Supreme Court's decision in  
3 *In re Application of Ohio Edison Co.*, 2019-Ohio-4196, 158 Ohio St. 3d 27, in  
4 which the Court struck down a virtually identical cost cap. The total amount of  
5 program costs and shared savings in this Application exceeds four percent of the  
6 Company's 2015 operating revenues by \$1,847,610.

## **II. CALCULATION OF EE-PDR REVENUE REQUIREMENT**

7 **Q. WHAT LEVEL OF ACHIEVEMENT IS THE COMPANY CLAIMING?**

8 A. Duke Energy Ohio exceeded its efficiency and peak demand mandates for 2019.  
9 Per the stipulation in Case No. 16-576-EL-POR and the approved waiver, the  
10 Company earned the capped after-tax shared savings achievement of \$8 million.  
11 This equates to \$10,277,360 on a pre-tax basis.

12 **Q. IS THE COMPANY INCLUDING CARRYING COSTS ON LOST**  
13 **MARGINS IN THIS APPLICATION?**

14 A. No.

15 **Q. PLEASE EXPLAIN HOW DISTRIBUTION LOST MARGINS ARE**  
16 **CALCULATED.**

17 A. The DSM<sup>TM</sup> model calculates the kWh and kW reductions associated with each  
18 program measure. Based upon the units of participation and load reductions per  
19 program measure, the Company then applies lost margin rates to these reductions  
20 to calculate the lost margin dollars to be recovered.

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<sup>1</sup> *In the Matter of the Application of Duke Energy Ohio, Inc. for Approval of its 2017-2019 Energy Efficiency and Peak Demand Reduction Program Portfolio Plan*, Case No. 16-576-EL-POR, Finding and Order, pp. 15-16 (September 27, 2017).

1   **Q.    WHAT IS THE DIFFERENCE BETWEEN LOST REVENUES AND LOST**  
2       **MARGINS?**

3    A.    In general terms, lost margins equal lost revenues minus variable costs. For  
4       example, the lost margin associated with generation would be equal to the total  
5       generation revenue minus fuel costs (which are variable) minus any other variable  
6       O&M costs. Rider EE-PDR allows for the recovery of distribution lost margins,  
7       and the Company requests in this filing to recover distribution lost margins  
8       associated with Rider EE-PDR measures.

9   **Q.    WHAT TYPES OF LOST MARGINS ARE INCLUDED IN THIS TRUE-UP?**

10   A.    The calculated lost margins include only distribution margins associated with non-  
11       residential customers taking service under Rate DS, Rate DP, and Rate TS. The  
12       lost margins associated with these three non-residential rates are included under  
13       Rider EE-PDR since these non-residential customers are not subject to the  
14       Company's decoupling rider, Rider DDR (Distribution Decoupling Rider), which  
15       was approved in Case No. 11-5905-EL-RDR.

16   **Q.    DID THE DIRECT PROGRAM COSTS FOR 2019 INCLUDE INCENTIVE**  
17       **PAY?**

18   A.    Yes. The direct program costs for 2019 include \$292,925 of incentive pay. In past  
19       cases, Staff has distinguished between "non-financial" and "financial" incentives,  
20       and recommended exclusion of "financial incentives, based upon a utility's  
21       financial goals" from recovery.<sup>2</sup>

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<sup>2</sup> See *In the Matter of the Application of Duke Energy Ohio, Inc. for recovery of program costs, lost distribution revenue and performance incentives related to its Energy Efficiency and Demand Response Programs*, Case No. 18-397-EL-RDR, Staff's Review and Recommendation, pp. 1-2 (June 12, 2019).

1 **Q. WHAT PROPORTION OF THE INCENTIVE PAY INCLUDED IN**  
2 **DIRECT PROGRAM COSTS FOR 2019 IS TIED TO MEASURES OTHER**  
3 **THAN THE COMPANY’S FINANCIAL PERFORMANCE, SUCH AS**  
4 **OPERATIONAL GOALS, SAFETY GOALS, AND OTHER NON-**  
5 **FINANCIAL GOALS?**

6 A. \$98,415 of the total incentive pay is tied to the Company’s financial performance.  
7 \$194,510 of the total incentive pay is tied to non-financial measures and goals.  
8 Included within the \$194,510 is \$34,059 of restricted stock units (RSUs). Although  
9 Duke Energy employees receive RSUs for employee retention, and independent of  
10 the Company’s financial performance, the Staff has previously recommended  
11 exclusion of these costs as well. The following table shows the detail of the  
12 incentive pay that is included in the application:

	Amount	% Related to Financial Performance	Amount Related to Financial Performance	Amount Not Related to Financial Performance
Exec Short Term Incent	\$28,000	50%	\$14,000	\$14,000
Incentives Allocated	\$221,837	35%	\$77,643	\$144,194
Performance Award	\$9,029	75%	\$6,772	\$2,257
Restricted Stock Units	\$34,059	0%	\$0	\$34,059
Total	<b>\$292,925</b>		\$98,415	\$194,510

13  
14 **Q. DOES THE COMPANY AGREE WITH PAST RECOMMENDATIONS TO**  
15 **EXCLUDE “FINANCIAL” INCENTIVE PAY?**

16 A. No. Just like an employee’s salary, incentive pay comprises a part of each  
17 employee’s overall compensation package that is necessary to be competitive with  
18 other employers to attract and retain employees. Consequently, the Company  
19 believes that incentive pay is a necessary cost of providing safe and reliable utility  
20 service and should be recoverable. However, I am providing the components of

JAMES E. ZIOLKOWSKI DIRECT

1 incentive pay here in order to ensure that, if Staff continues recommending  
2 disallowance of “financial” incentives, it has an accurate breakdown of incentive  
3 pay components.

4 **Q. DOES THIS APPLICATION INCLUDE AVOIDED COSTS ASSOCIATED**  
5 **WITH THE MERCANTILE SELF-DIRECT PROGRAM?**

6 A. No. The Company included the energy and capacity savings from the Mercantile  
7 Self-Direct program in determining its performance against the benchmarks set  
8 forth in Section 4928.66, Ohio Revised Code, but it did not include any avoided  
9 costs or lost revenues from the Mercantile Self-Direct program in its Rider EE-PDR  
10 true-up calculations.

11 **Q. DID THE TRUE-UP CALCULATION INCLUDE ANY PRIOR-PERIOD**  
12 **TRUE-UP AMOUNTS?**

13 A. Yes. To maintain continuity of the true-up mechanism from one year to the next,  
14 the filing includes the net reconciliation balances from the prior years – 2012, 2013,  
15 2014, 2015, 2016, 2017, and 2018 in this case. The Company filed its 2012  
16 reconciliation numbers in Case No. 13-753-EL-RDR. The Company filed its 2013  
17 reconciliation numbers in Case No. 14-457-EL-RDR. The Company filed its 2014  
18 reconciliation numbers in Case No. 15-534-EL-RDR. The Company filed its 2015  
19 reconciliation numbers in pending Case No. 16-664-EL-RDR. The Company filed  
20 its 2016 reconciliation numbers in Case No. 17-781-EL-RDR. The Company filed  
21 its 2017 reconciliation numbers in Case No. 18-397-EL-RDR. The Company filed  
22 its amended 2018 reconciliation numbers in December 2019 in pending Case No.  
23 19-622-EL-RDR. Upon receipt of an order in Case No. 19-622-EL-RDR the

1 Company will make adjustments to this filing.

**III. RIDER EE-PDR RECONCILIATION RATE CALCULATION**

2 **Q. PLEASE EXPLAIN HOW THE COMPANY'S DISTRIBUTION**  
3 **DECOUPLING RIDER AFFECTS THE RIDER EE/PDR TRUE-UP**  
4 **CALCULATIONS.**

5 A. Rider DDR was approved on May 30, 2012 in Case No. 11-5905-EL-RDR. On  
6 January 1, 2012, the Company began tracking the authorized distribution revenues  
7 for each rate class covered by the rider against the actual revenues for the rate  
8 classes covered by the rider. On February 24, 2020, the Company filed an  
9 application in Case No. 11-5905-EL-RDR to update Rider DDR rates for each rate  
10 class. The Company refiled its application on March 17, 2020 in Case No. 20-574-  
11 EL-RDR. The latest Rider DDR filing covers the period January 1, 2019 through  
12 December 31, 2019. The updated Rider DDR rates will be effective on July 1,  
13 2020, absent any activity by the Commission. The lost margin dollars in this Rider  
14 EE-PDR true-up filing are based on lost kWh and kW for year 2019. Because Rider  
15 DDR does not apply to Rates DS, DP, and TS, only those three base rates are subject  
16 to lost margin recovery pursuant to Rider EE-PDRR.

17 **Q. PLEASE DESCRIBE IN DETAIL THE RIDER EE-PDRR RATE**  
18 **CALCULATIONS CONTAINED IN ATTACHMENT JEZ-1.**

19 A. Attachment JEZ-1 shows the calculation of the Rider EE-PDRR recovery rates.  
20 Page 1 shows the calculation of the Company's shared savings achievement tier.  
21 The Company earned a capped pre-tax shared savings amount of \$10,277,360.

22 Page 2 summarizes the Rider EE-PDRR revenue requirement data from

1 page 3. The total 2019 revenue requirement is \$44,403,946. This figure includes  
2 \$230,964 of Mercantile Self-Direct program cost recovery; however, no shared  
3 savings incentives are included for the self-direct program.

4 Page 3 of Attachment JEZ-1 shows the 2019 EE/PDR program details and  
5 results. The sheet shows the kWh and kW impacts, the shared savings calculations,  
6 the program cost recovery numbers, and the total revenue requirement associated  
7 with each of the residential and non-residential programs. The numbers are  
8 summarized on page 2.

9 Page 4 of Attachment JEZ-1 shows the lost distribution margins associated  
10 with program participants that take service under Rate DS, Rate DP, and Rate TS.  
11 As I previously mentioned, customers served under these three rates are not subject  
12 to Rider DDR. These customers are, however, subject to lost distribution margin  
13 recovery pursuant to Rider EE-PDRR.

14 Page 5 of Attachment JEZ-1 shows the expected 2020 program details and  
15 results. The sheet shows the kWh and kW impacts, the shared savings calculations,  
16 the program cost recovery numbers, and the total revenue requirement associated  
17 with each of the residential and non-residential programs.

18 Page 6 of Attachment JEZ-1 shows the expected 2020 prior-vintage lost  
19 margins associated with program participants that take service under Rate DS, Rate  
20 DP, and Rate TS. As stated earlier, customers served under these three rates are  
21 not subject to Rider DDR.

22 Page 7 of Attachment JEZ-1 shows the 2019 Rider EE-PDRR revenues by  
23 base rate class and month. Total revenue recovery during 2019 was \$45,266,057.

1           Page 8 of Attachment JEZ-1 shows the actual 2019 kWh usage by month  
2           for Rate DS, Rate DP, and Rate TS accounts. The total 2019 kWh numbers for  
3           these rates are used to calculate the lost revenue dollars included in Rider EE-PDRR  
4           associated with these three base rates.

5           Page 9 of Attachment JEZ-1 shows the forecasted kWh billing determinants  
6           for the period July 2020 through June 2021.<sup>3</sup> These kWh figures are used in the  
7           denominators of the final rate calculations that appear on page 10.

8           Page 10 shows the Rider EE-PDRR rate calculations that true-up 2019 costs  
9           and revenues and recover the 2020 expected costs. The total revenues to be  
10          recovered are grossed up by the Commercial Activity Tax factor of 1.0026068. As  
11          I previously discussed, the Company carries forward prior period reconciliation  
12          balances, including revenues. Upon receipt of a final order in Case No. 19-622-  
13          EL-RDR, the Company will adjust this filing if necessary, to reflect any changes to  
14          the as-filed numbers in that case.

#### IV. CONCLUSION

15   **Q.   HOW DOES THE COMPANY PROPOSE THAT ITS TARIFFS,**  
16   **INCLUDING THE PREVIOUSLY DISCUSSED RATES AND CHARGES,**  
17   **BE IMPLEMENTED?**

18   A.   Duke Energy Ohio proposes that the revised tariffs, including the rates and charges  
19          to be issued pursuant to the Commission's Order in this case, be effective for twelve  
20          months for all customers on a bills-rendered basis.

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<sup>3</sup>The Company is aware that the Commission has ordered utilities to wind-down their existing energy efficiency programs by December 31, 2020. However, the rate calculation assumes twelve months of recovery. A final reconciliation will be necessary to correct for this after 2020 programs are completed.

1   **Q.    WERE THE ATTACHMENTS DISCUSSED ABOVE PREPARED BY YOU**  
2           **OR UNDER YOUR SUPERVISION?**

3   A.    Yes.

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

5   A.    Yes.

Duke Energy Ohio  
2019 True Up  
Shared Savings Achievements and Revenue Requirement Compared to Cap

**Achievement Level**

	2019 Achievement from Shared Savings Portfolio	311,255
1	+ Use of Incentive Bank, if any	0
	= Total Claimed Impacts	311,255
	/ Mandate excluding Mercantile	197,723
	= Achievement	157%
	- Achievement for 2019	221,450
	= Impacts to Bank, if any	89,804

**Achievement Tiers**

Achievement of Annual Target	After-Tax Shared Savings
≤100	0.0%
>100-106	6.0%
≥106-112	9.0%
>112	12.0%

**Shared Savings Rate and Tax Gross-up**

	After-Tax Achievement Rate	12.0%
	/ Tax Grossup Factor	77.8410%
	= Pre-Tax Achievement Rate	15.42%

**Shared Savings Cap**

2	After-Tax Achievement Cap	\$8,000,000
	/ Tax Grossup Factor	77.8410%
	= Pre-Tax Achievement Cap	\$10,277,360

**Shared Savings, Capped**

	Shared Savings Achievement, Uncapped	\$20,664,281
	- Pre-Tax Achievement Cap	\$10,277,360
	= Shared Savings Achievement, Compared to Cap	\$10,386,921

Shared Savings Achievement, Capped \$10,277,360

**Revenue Requirement: Cost Recovery Revenue**

Cost Recovery Revenue \$30,222,323

Revenue Requirement, Cost Recovery Revenue \$30,222,323

Total Revenue (Cost + Shared Savings) \$40,499,683

**Bank**

	Starting Incentive Bank from Prior Year's True-up Filing	433,767
	- Use of Incentive Bank, if any	0
	+ Banked Impacts	89,804
	= Ending Incentive Bank	523,571

1 - Use of incentive bank to achieve incentive level is disallowed per settlement agreement in Case Nos. 14-0457-EL-RDR and 15-0534-EL-RDR.

2- Caps as set in order in Case No. 16-576-EL-POR

**Duke Energy Ohio**  
**2019 True Up**  
**Total Revenue Requirement**

	<b>Res</b>	<b>NonRes</b>	<b>Total</b>
Shared Savings Revenue	22,901,745	17,366,974	40,268,719
Lost Revenues	0	3,904,263	3,904,263
Mercantile Self-Direct Cost Recovery		230,964	230,964
<b>Total Revenue Requirement</b>	<b>22,901,745</b>	<b>21,502,201</b>	<b>44,403,946</b>

Unit Type	KWH date	KWH date	# of Measure Units date

Shared Services Bureau

Energy Efficiency Education Program for Schools	3,343,426	1,005	6,998
Home Energy Comparison Report	93,715,994	23,943	358,956

resident user of apartments	4,370,001	303	8,000
Smart Street Residential	128,596,863	14,196	2,461,092
<b>Total</b>	<b>233,884,080</b>	<b>39,308</b>	<b>2,553,363</b>

Non-Rates	
<b>Total</b>	<b>71,506</b>
Power Managers*	71,506

Category	2014	2015	2016
Small Business Energy Saver	11,336,843	10,260,212	9,208
Smart Saver® Non-Residential Custom	22,293,076	4,051	4,051

Source: [www.energystar.gov](http://www.energystar.gov)

	1990-1991	1992-1993	1994-1995	1996-1997	1998-1999	2000-2001	2002-2003	2004-2005	2006-2007	2008-2009	2010-2011	2012-2013	2014-2015	2016-2017	2018-2019	2020-2021	2022-2023	2024-2025	2026-2027	2028-2029	2030-2031	2032-2033	2034-2035	2036-2037	2038-2039	2040-2041	2042-2043	2044-2045	2046-2047	2048-2049	2050-2051	2052-2053	2054-2055	2056-2057	2058-2059	2060-2061	2062-2063	2064-2065	2066-2067	2068-2069	2070-2071	2072-2073	2074-2075	2076-2077	2078-2079	2080-2081	2082-2083	2084-2085	2086-2087	2088-2089	2090-2091	2092-2093	2094-2095	2096-2097	2098-2099	2100-2101	2102-2103	2104-2105	2106-2107	2108-2109	2110-2111	2112-2113	2114-2115	2116-2117	2118-2119	2120-2121	2122-2123	2124-2125	2126-2127	2128-2129	2130-2131	2132-2133	2134-2135	2136-2137	2138-2139	2140-2141	2142-2143	2144-2145	2146-2147	2148-2149	2150-2151	2152-2153	2154-2155	2156-2157	2158-2159	2160-2161	2162-2163	2164-2165	2166-2167	2168-2169	2170-2171	2172-2173	2174-2175	2176-2177	2178-2179	2180-2181	2182-2183	2184-2185	2186-2187	2188-2189	2190-2191	2192-2193	2194-2195	2196-2197	2198-2199	2200-2201	2202-2203	2204-2205	2206-2207	2208-2209	2210-2211	2212-2213	2214-2215	2216-2217	2218-2219	2220-2221	2222-2223	2224-2225	2226-2227	2228-2229	2230-2231	2232-2233	2234-2235	2236-2237	2238-2239	2240-2241	2242-2243	2244-2245	2246-2247	2248-2249	2250-2251	2252-2253	2254-2255	2256-2257	2258-2259	2260-2261	2262-2263	2264-2265	2266-2267	2268-2269	2270-2271	2272-2273	2274-2275	2276-2277	2278-2279	2280-2281	2282-2283	2284-2285	2286-2287	2288-2289	2290-2291	2292-2293	2294-2295	2296-2297	2298-2299	2300-2301	2302-2303	2304-2305	2306-2307	2308-2309	2310-2311	2312-2313	2314-2315	2316-2317	2318-2319	2320-2321	2322-2323	2324-2325	2326-2327	2328-2329	2330-2331	2332-2333	2334-2335	2336-2337	2338-2339	2340-2341	2342-2343	2344-2345	2346-2347	2348-2349	2350-2351	2352-2353	2354-2355	2356-2357	2358-2359	2360-2361	2362-2363	2364-2365	2366-2367	2368-2369	2370-2371	2372-2373	2374-2375	2376-2377	2378-2379	2380-2381	2382-2383	2384-2385	2386-2387	2388-2389	2390-2391	2392-2393	2394-2395	2396-2397	2398-2399	2400-2401	2402-2403	2404-2405	2406-2407	2408-2409	2410-2411	2412-2413	2414-2415	2416-2417	2418-2419	2420-2421	2422-2423	2424-2425	2426-2427	2428-2429	2430-2431	2432-2433	2434-2435	2436-2437	2438-2439	2440-2441	2442-2443	2444-2445	2446-2447	2448-2449	2450-2451	2452-2453	2454-2455	2456-2457	2458-2459	2460-2461	2462-2463	2464-2465	2466-2467	2468-2469	2470-2471	2472-2473	2474-2475	2476-2477	2478-2479	2480-2481	2482-2483	2484-2485	2486-2487	2488-2489	2490-2491	2492-2493	2494-2495	2496-2497	2498-2499	2500-2501	2502-2503	2504-2505	2506-2507	2508-2509	2510-2511	2512-2513	2514-2515	2516-2517	2518-2519	2520-2521	2522-2523	2524-2525	2526-2527	2528-2529	2530-2531	2532-2533
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Total	311,254,537	208,372	13,413,526
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Nonflares	Energy Efficiency	Nonflares
Marshall Is. Self-Direct	41%	1,219

<b>Total</b>	<b>3,122,202</b>	<b>415</b>	<b>1,219</b>
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Low Income Wealthier	372,249	100	35.3
<b>Total</b>	<b>372,249</b>	<b>100</b>	<b>35.3</b>

<b>Total</b>	314,748,908	208,687	13,415,298
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Res Total	39,908	2,355,716
NonRes Total	232,216,329	10,859,382
	14,966	82,492,659

Number Total	0	82,307	0
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[illegible]

Source: 2019 True Up, tab LR Rollup for Feit

Non-Res LR Rate calculation based upon prior period achievement and dollars

NR LR Rate 0.015918863  
Non-Res Totals \$ 3,904,264 593,273 245,260,159

Program	Product Code of Measure	Rate Class	Transaction Year	Last Revenue KWH Dollars	Monthly Last Revenue kW	Monthly Last Revenue kWh
Small Business Energy Saver	SSBDR	DM	2016	\$ 20,059	1,436.41	544,123.14
Small Business Energy Saver	SSBDR	DS	2016	\$ 47,932	7,214.39	2,855,181.78
Small Business Energy Saver	SSBDR	EH	2016	\$ 15,500	11,264.79	4,126,847.9
Smart Saver® Non Residential Custom	NPRSC	DM	2016	\$ 515	29.78	13,975.18
Smart Saver® Non Residential Custom	NPRSC	DS	2016	\$ 14,967	1,895.48	1,435,309.56
Smart Saver® Non Residential Custom	NPRSC	DS	2016	\$ 26,778	3,221.48	1,548,931.66
Smart Saver® Non Residential Custom	NPRSC	TS	2016	\$ -	1,950.47	1,397,194.28
Smart Saver® Non Residential Prescriptive	NRFS	DM	2016	\$ 59	2.22	1,588.22
Smart Saver® Non Residential Prescriptive	NRFS	DS	2016	\$ 513	110.96	49,167.51
Smart Saver® Non Residential Prescriptive	NRFS	DS	2016	\$ 871	91.54	51,545.57
Smart Saver® Non Residential Prescriptive	NRFS	EH	2016	\$ -	6.08	59.46
Smart Saver® Non Residential Prescriptive	NHRVAC	DM	2016	\$ 867	40.98	23,513.18
Smart Saver® Non Residential Prescriptive	NHRVAC	DS	2016	\$ 262	67.09	25,123.13
Smart Saver® Non Residential Prescriptive	NHRVAC	DS	2016	\$ 2,042	327.63	120,869.24
Smart Saver® Non Residential Prescriptive	NHRVAC	EH	2016	\$ -	8.16	2,909.53
Smart Saver® Non Residential Prescriptive	NHRVAC	TS	2016	\$ -	14.88	5,435.98
Smart Saver® Non Residential Prescriptive	NHT	DM	2016	\$ 1	0.03	22.68
Smart Saver® Non Residential Prescriptive	NHT	DS	2016	\$ 2	0.14	98.28
Smart Saver® Non Residential Prescriptive	NRLTG	DM	2016	\$ 44,574	2,753.08	1,209,155.68
Smart Saver® Non Residential Prescriptive	NRLTG	DS	2016	\$ 16,950	4,648.43	1,625,407.85
Smart Saver® Non Residential Prescriptive	NRLTG	DS	2016	\$ 180,294	27,787.34	10,646,469.77
Smart Saver® Non Residential Prescriptive	NRLTG	EH	2016	\$ -	892.01	330,249.09
Smart Saver® Non Residential Prescriptive	NRLTG	TS	2016	\$ -	1,715.08	668,789.56
Smart Saver® Non Residential Prescriptive	NPR&M	DS	2016	\$ 12	2.21	1,127.14
Smart Saver® Non Residential Prescriptive	NPR&M	DS	2016	\$ 1,178	139.63	69,650.92
Smart Saver® Non Residential Prescriptive	NPR&M	DS	2016	\$ -	29.31	15,051.48
Smart Saver® Non Residential Prescriptive	NPR&M	DS	2016	\$ 381	56.94	22,529.86
Small Business Energy Saver	SSBDR	DM	2017	\$ 20,252	1,450.84	549,381.57
Small Business Energy Saver	SSBDR	DS	2017	\$ 47,932	7,214.39	2,855,181.78
Small Business Energy Saver	SSBDR	EH	2017	\$ -	6.08	59.46
Smart Saver® Non Residential Custom	NPRSC	DM	2017	\$ 604	49.74	16,373.58
Smart Saver® Non Residential Custom	NPRSC	DS	2017	\$ 23,393	2,551.28	1,383,713.82
Smart Saver® Non Residential Custom	NPRSC	DS	2017	\$ -	11.15	4,808.08
Smart Saver® Non Residential Custom	NPRSC	TS	2017	\$ -	1,983.21	1,324,110.68
Smart Saver® Non Residential Prescriptive	NRFS	DM	2017	\$ 67	2.55	1,824.22
Smart Saver® Non Residential Prescriptive	NRFS	DS	2017	\$ 296	49.40	26,368.87
Smart Saver® Non Residential Prescriptive	NRFS	DS	2017	\$ 1,668	182.90	98,646.98
Smart Saver® Non Residential Prescriptive	NHRVAC	DM	2017	\$ 769	56.94	20,851.14
Smart Saver® Non Residential Prescriptive	NHRVAC	DS	2017	\$ 17	4.40	1,617.53
Smart Saver® Non Residential Prescriptive	NHRVAC	DS	2017	\$ 2,490	364.47	150,469.40
Smart Saver® Non Residential Prescriptive	NHRVAC	EH	2017	\$ -	26.77	9,785.69
Smart Saver® Non Residential Prescriptive	NHT	DM	2017	\$ 3	0.21	151.21
Smart Saver® Non Residential Prescriptive	NHT	DS	2017	\$ 37,699	2,617.68	1,022,867.60
Smart Saver® Non Residential Prescriptive	NRLTG	DM	2017	\$ 8,875	2,255.29	851,100.74
Smart Saver® Non Residential Prescriptive	NRLTG	DS	2017	\$ 116,795	19,062.31	6,909,517.53
Smart Saver® Non Residential Prescriptive	NRLTG	DS	2017	\$ -	778.01	294,340.13
Smart Saver® Non Residential Prescriptive	NRLTG	TS	2017	\$ -	554.69	221,690.27
Smart Saver® Non Residential Prescriptive	NPR&M	DS	2017	\$ 16	3.01	1,537.01
Smart Saver® Non Residential Prescriptive	NPR&M	DS	2017	\$ 2,333	276.59	138,028.93
Smart Saver® Non Residential Prescriptive	NPR&M	DS	2017	\$ 355	61.09	34,075.83
Smart Saver® Non Residential Prescriptive	NPR&M	DS	2017	\$ 1,495	233.63	86,449.70
Small Business Energy Saver	SSBDR	DM	2017	\$ 120,674	9,015.51	3,273,496.97
Small Business Energy Saver	SSBDR	DS	2017	\$ 146,266	24,651.60	8,651,748.81
Small Business Energy Saver	SSBDR	EH	2017	\$ 62.15	16.43	167,403.01
Smart Saver® Non Residential Custom	NPRSC	DS	2017	\$ 48,518	12,160.19	4,652,630.38
Smart Saver® Non Residential Custom	NPRSC	DS	2017	\$ 119,696	14,902.29	7,077,899.59
Smart Saver® Non Residential Custom	NPRSC	EH	2017	\$ -	101.21	53,531.29
Smart Saver® Non Residential Custom	NPRSC	TS	2017	\$ 14,561.31	10,287,950.53	
Smart Saver® Non Residential Prescriptive	NRFS	DM	2017	\$ 171	8.66	4,646.61
Smart Saver® Non Residential Prescriptive	NRFS	DS	2017	\$ 214	28.13	20,532.54
Smart Saver® Non Residential Prescriptive	NRFS	DS	2017	\$ 35,299	3,494.50	2,087,280.75
Smart Saver® Non Residential Prescriptive	NRFS	EH	2017	\$ -	7.88	4,309.72
Smart Saver® Non Residential Prescriptive	NRFS	TS	2017	\$ -	40.48	22,957.85
Smart Saver® Non Residential Prescriptive	NHRVAC	DM	2017	\$ 1,514	94.67	41,067.76
Smart Saver® Non Residential Prescriptive	NHRVAC	DS	2017	\$ 2,618	448.27	251,064.09
Smart Saver® Non Residential Prescriptive	NHRVAC	DS	2017	\$ 11,690	1,455.76	691,477.61
Smart Saver® Non Residential Prescriptive	NHRVAC	EH	2017	\$ -	69.26	33,886.30
Smart Saver® Non Residential Prescriptive	NHRVAC	TS	2017	\$ 475.51	1,475.51	176,282.66
Smart Saver® Non Residential Prescriptive	NRLTG	DS	2017	\$ 207,817	14,297.99	5,637,386.90
Smart Saver® Non Residential Prescriptive	NRLTG	DS	2017	\$ 16,475.74	5,610,813.82	
Smart Saver® Non Residential Prescriptive	NRLTG	DS	2017	\$ 685,066	113,509.66	40,522,081.05
Smart Saver® Non Residential Prescriptive	NRLTG	EH	2017	\$ -	1,578.01	1,296,509.06
Smart Saver® Non Residential Prescriptive	NRLTG	TS	2017	\$ 12,345.78	12,345.78	4,285,887.58
Smart Saver® Non Residential Prescriptive	NPR&M	DM	2017	\$ 850	44.32	23,066.76
Smart Saver® Non Residential Prescriptive	NPR&M	DS	2017	\$ 8,625	1,288.48	635,310.54
Smart Saver® Non Residential Prescriptive	NPR&M	DS	2017	\$ 9,620	1,448.06	569,013.00
Smart Saver® Non Residential Prescriptive	NPR&M	TS	2017	\$ 779.72	779.72	397,842.56
Smart Saver® Non Residential Prescriptive	NPR&M	DS	2017	\$ 1,117	349.85	107,016.24
Smart Saver® Non Residential Prescriptive	NPR&M	DS	2017	\$ 1,612	229.25	95,370.97
Power Manager® for Business - EE	SREDR	DS	2018	\$ 16,201	869.82	439,488.00
Power Manager® for Business - EE	SREDR	DS	2018	\$ 11,570	621.16	313,847.33
Power Manager® for Business - EE	SREDR	DS	2018	\$ 2,595	303.75	15,847.00
Power Manager® for Business - EE	SREDR	DS	2018	\$ 2,833	311.60	167,549.33
Power Manager® for Business - EE	SREDR	EH	2018	\$ -	3.45	1,744.00
Power Manager® for Business - EE	SREDR	TS	2018	\$ 547	5.47	2,741.33
Small Business Energy Saver	SSBDR	DM	2018	\$ 102,152	6,512.99	2,277,105.18
Small Business Energy Saver	SSBDR	DS	2018	\$ 36,408	2,588.83	1,047,319.22
Small Business Energy Saver	SSBDR	DS	2018	\$ 227	58.52	21,722.78
Small Business Energy Saver	SSBDR	DS	2018	\$ 206,187	27,100.28	12,196,101.85
Small Business Energy Saver	SSBDR	DS	2018	\$ 12,491.61	90,085	5,358,595.02
Small Business Energy Saver	SSBDR	EH	2018	\$ -	59.43	72,338.40
Small Business Energy Saver	SSBDR	TS	2018	\$ 97.07	97.07	59,751.00
Smart Saver® Non Residential Custom	NPRSC	DM	2018	\$ 62.57	18.23	1,525.75
Smart Saver® Non Residential Custom	NPRSC	DS	2018	\$ 877.46	877.46	665,792.29
Smart Saver® Non Residential Custom	NPRSC	DS	2018	\$ 3,703	28.93	100,463.08
Smart Saver® Non Residential Custom	NPRSC	DS	2018	\$ 102,566	12,724.27	9,893,636.11
Smart Saver® Non Residential Custom	NPRSC	DS	2018	\$ 1,142	1,390.43	1,070,453.52
Smart Saver® Non Residential Custom	NPRSC	DS	2018	\$ 155,520	14,059.08	9,199,102.78
Smart Saver® Non Residential Custom	NPRSC	DS	2018	\$ 8,995.59	5,284,158.09	
Smart Saver® Non Residential Custom	NPRSC	TS	2018	\$ 5,646.20	5,646.20	3,352,804.96
Smart Saver® Non Residential Custom	NPRSC	TS	2018	\$ (196.37)	-	91,990.47
Smart Saver® Non Residential Prescriptive	NRFS	DM	2018	\$ 89.66	65.476	65,476.56
Smart Saver® Non Residential Prescriptive	NRFS	DS	2018	\$ 32	1.18	858.90
Smart Saver® Non Residential Prescriptive	NRFS	DS	2018	\$ 77	20.31	7,411.51
Smart Saver® Non Residential Prescriptive	NRFS	DS	2018	\$ 382	78.63	36,591.35
Smart Saver® Non Residential Prescriptive	NRFS	DS	2018	\$ 7,761	844.97	459,092.29
Smart Saver® Non Residential Prescriptive	NRFS	DS	2018	\$ 13,601	1,375.63	804,565.65
Smart Saver® Non Residential Prescriptive	NRFS	EH	2018	\$ -	37.56	20,575.98
Smart Saver® Non Residential Prescriptive	NHRVAC	DM	2018	\$ 1,627	73.65	44,140.02
Smart Saver® Non Residential Prescriptive	NHRVAC	DS	2018	\$ 2,684	115.97	72,816.02
Smart Saver® Non Residential Prescriptive	NHRVAC	DS	2018	\$ 975	164.70	93,511.17
Smart Saver® Non Residential Prescriptive	NHRVAC	DS	2018	\$ 20,744	2,266.52	1,227,045.31
Smart Saver® Non Residential Prescriptive	NHRVAC	TS	2018	\$ 20,823	3,008.42	1,231,699.81
Smart Saver® Non Residential Prescriptive	NHRVAC	EH	2018	\$ -	16.25	9,681.67
Smart Saver® Non Residential Prescriptive	NHRVAC	TS	2018	\$ 2.14	2.14	1,281.52
Smart Saver® Non Residential Prescriptive	NHRVAC	TS	2018	\$ 42.48	42.48	25,162.62
Smart Saver® Non Residential Prescriptive	NHRVAC	TS	2018	\$ 262.73	262.73	41,932.62
Smart Saver® Non Residential Prescriptive	NHT	DM	2018	\$ 71	2.65	1,537.96
Smart Saver® Non Residential Prescriptive	NHT	DS	2018	\$ 35	2.81	2,051.16
Smart Saver® Non Residential Prescriptive	NHT	EH	2018	\$ -	0.31	228.00
Smart Saver® Non Residential Prescriptive	NRLTG	DS	2018	\$ 179,972	6,754.63	4,892,262.05
Smart Saver® Non Residential Prescriptive	NRLTG	DS	2018	\$ 43,856	1,649.65	1,189,696.96
Smart Saver® Non Residential Prescriptive	NRLTG	DS	2018	\$ 76,273	21,626.05	7,314,247.83
Smart Saver® Non Residential Prescriptive	NRLTG	DS	2018	\$ 19,040	6,219.08	1,825,895.08
Smart Saver® Non Residential Prescriptive	NRLTG	DS	2018	\$ 415,840	69,482.86	24,597,181.23
Smart Saver® Non Residential Prescriptive	NRLTG	DS	2018	\$ 179,973	33,653.91	10,646,509.28
Smart Saver® Non Residential Prescriptive	NRLTG	EH	2018	\$ -	369.55	207,102.45
Smart Saver® Non Residential Prescriptive	NRLTG	EH	2018	\$ -	89.13	13,943.12
Smart Saver® Non Residential Prescriptive	NRLTG	TS	2018	\$ 10,041.44	10,041.44	3,185,681.41
Smart Saver® Non Residential Prescriptive	NRLTG	TS	2018	\$ 2,607.44	2,607.44	851,196.37
Smart Saver® Non Residential Prescriptive	NPR&M	DS	2018	\$ 778.78	778.78	392,240.10
Smart Saver® Non Residential Prescriptive	NPR&M	DS	2018	\$ 8,089	969.36	478,443.05
Smart Saver® Non Residential Prescriptive	NPR&M	DS	2018	\$ 158	158	9,321.68
Smart Saver® Non Residential Prescriptive	NPR&M	EH	2018	\$ -	146.71	65,750.02
Smart Saver® Non Residential Prescriptive	NPR&M	TS	2018	\$ 189	14.78	5,122.62
Smart Saver® Non Residential Prescriptive	NPR&M	TS	2018	\$ 134	36.97	12,815.07
Smart Saver® Non Residential Prescriptive	NPR&M	TS	2018	\$ 1,815	313.03	109,513.36
Smart Saver® Non Residential Prescriptive	NPR&M	TS	2018	\$ 889	151.72	52,594.26
Smart Saver® Non Residential Prescriptive	NPR&M	TS	2018	\$ -	19.11	20,490.47
Smart Saver® Non Residential Prescriptive	NPR&M	TS	2018	\$ -	3,904,264	245,260,159

3. Power Manager<sup>®</sup> by Business has both an energy efficiency and demand response component. Credits have been allocated to EE and DR based on forecasted PAK.

Prior period LR through 2019 for 2020 with Rate Case assumptions

<u>Program</u>	<u>Product Code of Measure</u>	<u>Rate Class</u>	<u>Transaction Year</u>	<u>Lost Revenue KWH Dollars</u>	<u>Monthly Lost Revenue KW</u>	<u>Monthly Lost Revenue KWh</u>
Small Business Energy Saver	SSBDIR	DS	2017	1,327	244	81,841
Smart Saver® Non Residential Custom	NRPRSC	DS	2017	1,974	283	121,700
Smart Saver® Non Residential Prescriptive	NRFS	DS	2017	211	25	13,023
Smart Saver® Non Residential Prescriptive	NRHVAC	DS	2017	170	28	10,466
Smart Saver® Non Residential Prescriptive	NRLTG	DP	2017	875	245	88,244
Smart Saver® Non Residential Prescriptive	NRLTG	DS	2017	8,500	1,330	524,063
Smart Saver® Non Residential Prescriptive	NRP&M	DS	2017	346	43	21,314
Smart Saver® Non Residential Prescriptive	NRPROC	DP	2017	28	7	2,840
Smart Saver® Non Residential Prescriptive	NRPROC	DS	2017	70	13	4,313
Small Business Energy Saver	SSBDIR	DS	2017	67,293	11,758	4,148,869
Smart Saver® Non Residential Custom	NRPRSC	DP	2017	33,548	7,729	3,382,761
Smart Saver® Non Residential Custom	NRPRSC	DS	2017	84,110	11,830	5,185,699
Smart Saver® Non Residential Prescriptive	NRFS	DP	2017	136	19	13,688
Smart Saver® Non Residential Prescriptive	NRFS	DS	2017	30,522	3,151	1,881,778
Smart Saver® Non Residential Prescriptive	NRHVAC	DP	2017	993	194	100,091
Smart Saver® Non Residential Prescriptive	NRHVAC	DS	2017	7,790	931	480,295
Smart Saver® Non Residential Prescriptive	NRLTG	DP	2017	31,139	9,470	3,139,817
Smart Saver® Non Residential Prescriptive	NRLTG	DS	2017	372,451	62,973	22,963,100
Smart Saver® Non Residential Prescriptive	NRP&M	DP	2017	5,035	1,033	507,689
Smart Saver® Non Residential Prescriptive	NRP&M	DS	2017	4,224	528	260,425
Smart Saver® Non Residential Prescriptive	NRPROC	DP	2017	708	167	71,384
Smart Saver® Non Residential Prescriptive	NRPROC	DS	2017	767	130	47,260
Power Manager® for Business - EE	SBEEDR	DS	2018	2,489	304	153,472
Power Manager® for Business - EE	SBEEDR	DS	2019	5,290	645	326,128
Small Business Energy Saver	SSBDIR	DP	2019	1,293	351	130,337
Small Business Energy Saver	SSBDIR	DS	2018	197,815	27,100	12,196,102
Small Business Energy Saver	SSBDIR	DS	2019	141,202	19,738	8,705,660
Smart Saver® Non Residential Custom	NRPRSC	DP	2018	97,544	12,724	9,835,626
Smart Saver® Non Residential Custom	NRPRSC	DP	2019	22,189	2,940	2,237,363
Smart Saver® Non Residential Custom	NRPRSC	DS	2018	149,205	14,059	9,199,103
Smart Saver® Non Residential Custom	NRPRSC	DS	2019	238,269	26,124	14,690,259
Smart Saver® Non Residential Prescriptive	NRFS	DP	2018	74	20	7,417
Smart Saver® Non Residential Prescriptive	NRFS	DP	2019	744	154	75,046
Smart Saver® Non Residential Prescriptive	NRFS	DS	2018	7,446	845	459,092
Smart Saver® Non Residential Prescriptive	NRFS	DS	2019	20,721	2,199	1,277,510
Smart Saver® Non Residential Prescriptive	NRHVAC	DP	2018	927	165	93,511
Smart Saver® Non Residential Prescriptive	NRHVAC	DS	2018	19,902	2,257	1,227,045
Smart Saver® Non Residential Prescriptive	NRHVAC	DS	2019	49,707	9,954	3,064,614
Smart Saver® Non Residential Prescriptive	NRIT	DS	2018	33	3	2,052
Smart Saver® Non Residential Prescriptive	NRLTG	DP	2018	72,539	21,626	7,314,248
Smart Saver® Non Residential Prescriptive	NRLTG	DP	2019	37,196	12,838	3,750,604
Smart Saver® Non Residential Prescriptive	NRLTG	DS	2018	396,069	68,919	24,419,211
Smart Saver® Non Residential Prescriptive	NRLTG	DS	2019	345,570	67,389	21,305,748
Smart Saver® Non Residential Prescriptive	NRP&M	DP	2018	3,897	779	392,940
Smart Saver® Non Residential Prescriptive	NRP&M	DS	2018	7,760	969	478,443
Smart Saver® Non Residential Prescriptive	NRP&M	DS	2019	1,820		112,220
Smart Saver® Non Residential Prescriptive	NRPROC	DP	2019	305	89	30,756
Smart Saver® Non Residential Prescriptive	NRPROC	DS	2018	1,760	313	108,514
Smart Saver® Non Residential Prescriptive	NRPROC	DS	2019	972	173	59,938
				2,474,954		

DUKE ENERGY OHIO  
RIDER EE-PDRR REVENUES

Rider Revenue Rate 2019													
Sum of Row Labels	1/1/2019	2/1/2019	3/1/2019	4/1/2019	5/1/2019	6/1/2019	7/1/2019	8/1/2019	9/1/2019	10/1/2019	11/1/2019	12/1/2019	Grand Total
DM	\$72,557	\$71,371	\$66,625	\$58,821	\$56,450	\$63,191	\$204,247	\$203,798	\$290,814	\$262,486	\$226,248	\$269,520	\$1,846,129
DP	\$260,865	\$245,391	\$238,847	\$243,936	\$259,786	\$262,605	\$632,781	\$607,373	\$902,643	\$842,823	\$782,682	\$794,929	\$6,074,662
DS	\$904,180	\$862,163	\$828,882	\$807,478	\$835,024	\$915,376	\$2,138,290	\$2,075,948	\$3,118,572	\$2,859,177	\$2,555,537	\$2,667,256	\$20,567,883
EH	\$14,403	\$15,298	\$13,141	\$9,924	\$7,919	\$146	\$147	\$210	\$177	\$31,683	\$33,552	\$46,302	\$172,481
GF	\$3,490	\$3,490	\$3,490	\$3,490	\$3,490	\$3,490	\$8,831	\$8,880	\$13,201	\$13,201	\$13,201	\$13,201	\$91,457
OR	\$3,106	\$2,809	\$2,427	\$1,524	\$1,128	\$1,248	\$679	\$584	-\$528	-\$455	-\$649	-\$960	\$10,914
RS	\$2,533,547	\$2,506,287	\$2,183,941	\$1,678,573	\$1,484,766	\$1,872,844	\$1,097,716	\$1,087,802	-\$864,086	-\$752,957	-\$596,357	-\$818,093	\$11,413,983
SF	\$7	\$7	\$7	\$7	\$7	\$7	\$19	\$19	\$28	\$28	\$28	\$28	\$192
TD	\$105	\$101	\$95	\$65	\$52	\$64	\$39	\$41	-\$27	-\$30	-\$26	-\$33	\$447
TS	\$224,088	\$221,476	\$219,391	\$244,721	\$233,023	\$184,021	\$562,692	\$504,728	\$763,512	\$712,600	\$694,530	\$455,944	\$5,020,726
CUR	\$13,727	\$12,706	\$12,126	\$10,710	\$9,036	\$8,878							\$67,183
<b>Grand Total</b>	<b>\$4,030,075</b>	<b>\$3,941,100</b>	<b>\$3,568,973</b>	<b>\$3,059,251</b>	<b>\$2,890,681</b>	<b>\$3,311,870</b>	<b>\$4,645,441</b>	<b>\$4,488,963</b>	<b>\$4,224,307</b>	<b>\$3,968,556</b>	<b>\$3,708,746</b>	<b>\$3,428,094</b>	<b>\$45,266,057</b>

**DUKE ENERGY OHIO**  
**KWH BY MONTH AND RATE FOR RATES DS, DP, AND TS**  
**JANUARY 2019 - DECEMBER 2019**

Sum of	USAGE	Column Labels	DS	TS	Grand Total	LR Rate	Lost Rev
Row Labels	DP						
1/1/2019	166,281,243		541,817,102	278,907,572	987,005,917	\$ 0.000265	\$ 261,557
2/1/2019	156,786,543		516,613,885	262,698,466	936,098,894	\$ 0.000265	\$ 248,066
3/1/2019	152,910,133		496,587,966	261,088,440	910,586,539	\$ 0.000265	\$ 241,305
4/1/2019	158,057,965		483,508,104	283,136,681	924,702,750	\$ 0.000265	\$ 245,046
5/1/2019	169,669,833		500,083,832	268,229,343	937,983,008	\$ 0.000265	\$ 248,565
6/1/2019	172,277,270		548,159,244	140,944,480	861,380,994	\$ 0.000265	\$ 228,266
7/1/2019	203,709,568		619,319,203	305,682,943	1,128,711,714	\$ (0.000086)	\$ (97,069)
8/1/2019	190,961,731		596,933,046	395,736,356	1,183,631,133	\$ (0.000086)	\$ (101,792)
9/1/2019	190,779,589		609,653,294	283,639,932	1,084,072,815	\$ (0.000142)	\$ (153,938)
10/1/2019	176,224,118		553,512,056	168,455,296	898,191,470	\$ (0.000142)	\$ (127,543)
11/1/2019	161,753,271		494,498,625	354,169,916	1,010,421,812	\$ (0.000142)	\$ (143,480)
12/1/2019	165,256,491		516,955,969	286,156,204	968,368,664	\$ (0.000142)	\$ (137,508)
Grand Total	2,064,667,755		6,477,642,326	3,288,845,629	11,831,155,710		\$ 711,475

Duke Energy Ohio  
Energy Efficiency and Peak Demand Response Rider  
Summary of Billing Determinants

Year	July 2020 - June 2021
Projected Annual Electric Sales KWH	
Residential Rates RS, ORH, TD, RS3P, RSLI, TD-13	7,250,289,501
Non-Residential Rates DS, DP, DM, GS-FL, EH, SP, SFL-ADPL, TS, RTP, & CUR	12,590,479,817
Non-Residential Rates DS, DP, & TS	11,824,902,670

Duke Energy Ohio  
Energy Efficiency and Peak Demand Response Rider  
Summary of Calculations

2020 Annual Filing

Rate Schedule	2012-2014 Actual Program Costs & Shared Savings	2012-2014 Actual Lost Revenues (DS, DP, TS) Case No. 13-753, 14-457, 15-534 (c)	2012-2014 Actual Rider EE-PDRB / SAVR Revenues	2015-2016 Actual Program Costs & Shared Savings	2015-2016 Actual Lost Revenues (DS, DP, TS) Case No. 16-664, 17-781 (as filed)	2015-2016 Actual Rider EE-PDRB Revenues	2019 Expected Program Costs & Shared Savings	2019 Expected Lost Revenues (DS, DP, TS)	Total Revenue Requirements Plus CAT (b)	Estimated Billing Determinants	Effective July 2020 Energy Efficiency and Peak Demand Response Recovery Rider (EE-PDRR)
<b>Electric Rider DSM</b> Residential Rates RS, ORH, TD, RS3P, RSLL, TD-13	(d) \$ 57,060,033 \$	(a) \$ - \$	(48,028,993) \$	(d) \$ 23,862,643 \$	(a) \$ - \$	(49,952,525) \$	(d) \$ 20,171,313 \$	(a) \$ - \$	980,763 \$	7,250,289,501 MWh	0.000135 \$/MWh
Distribution Level Rates - Program Cost Recovery (Part A) Applies to Rates DS, DP, DM, GS-FL, EH, SFL-ADPL, TS, RTP, & CUR	\$ 52,451,573 \$	- \$	(46,708,059) \$	46,692,759 \$	- \$	(31,280,600) \$	22,032,224 \$	- \$	60,801,713 \$	32,590,479,817 MWh	0.004829 \$/MWh
Distribution Level Rates - Lost Revenue Recovery (Part B) Applies to Rates DS, DP, TS, & RTP	\$ 5,653,696 \$	5,653,696 \$	(6,770,213) \$	\$ 4,078,295 \$	4,078,295 \$	(6,451,585) \$	- \$	5,626,043 \$	5,143,778 \$	11,824,902,670 MWh	0.000435 \$/MWh
Total Recovery	\$ 109,511,666 \$	5,653,696 \$	(101,507,263) \$	76,055,402 \$	4,078,295 \$	(87,684,710) \$	42,201,538 \$	5,626,043 \$	66,752,245 \$		
	2017 Actual Program Costs & Shared Savings	2017 Actual Lost Revenues (DS, DP, TS) Case No. 18-525-EL-RDR (as filed)	2017 Actual Rider EE-PDRB Revenues	2018 Actual Program Costs & Shared Savings	2018 Actual Lost Revenues (DS, DP, TS) Case No. 19-622-EL-RDR (as filed, pending)	2018 Actual Rider EE-PDRB Revenues	2019 Actual Program Costs & Shared Savings	2019 Actual Lost Revenues (DS, DP, TS) Case No. 20-613-EL-RDR (as filed, pending)	2019 Actual Revenue Requirements Riders EE-PDRB Revenues	Adjustments From Orders in Case No. 14-457, 15-534 (Amounts Included in Column A)	Adjustments From Orders in Case No. 16-664, 17-781, 18-397 (Amounts Included in Column A)
<b>Electric Rider DSM</b> Residential Rates RS, ORH, TD, RS3P, RSLL, TD-13	(d) \$ 9,081,353 \$	(a) \$ - \$	(23,932,826) \$	23,856,863 \$	- \$	(26,861,932) \$	22,901,745 \$	- \$	(11,425,344) \$	\$ (1,863,446) \$	\$ (1,058,118) \$
Distribution Level Rates - Program Cost Recovery (Part A) Applies to Rates DS, DP, DM, GS-FL, EH, SFL-ADPL, TS, RTP, & CUR	\$ 42,361,306 \$	- \$	(35,032,339) \$	21,548,782 \$	- \$	(15,304,186) \$	17,597,938 \$	- \$	(33,129,238) \$	\$ (3,137,530) \$	\$ (593,514) \$
Distribution Level Rates - Lost Revenue Recovery (Part B) Applies to Rates DS, DP, TS, & RTP	\$ - \$	2,801,537 \$	(3,138,204) \$	- \$	3,345,900 \$	(3,207,852) \$	- \$	3,904,263 \$	(711,475) \$		
Total Recovery	\$ 51,451,660 \$	2,801,537 \$	(42,103,370) \$	45,205,625 \$	3,345,900 \$	(45,373,970) \$	40,499,683 \$	3,904,263 \$	(45,246,057) \$		
Total Charge for Residential Rates RS, ORH, TD, RS3P, RSLL, TD-2013											
Total Charge for Rates DM, GS-FL, EH, SFL-ADPL, & CUR (Part A Only)											
Total Charge for Rates DS, DP, TS, & RTP (Part A plus Part B)											
										\$ 0.000135 \$/MWh	\$ 0.0004829 \$/MWh
										\$ 0.000264 \$/MWh	\$ 0.000264 \$/MWh

Note: (a) Rider DDR (Distribution Decoupling Rider) does not apply to Rates DS, DP, and TS. These rates are therefore subject to lost distribution revenue recovery under Rider EE-PDR.

(b) Commercial Activity Tax (CAT) factor is 1.002668

(c) Includes adjustments ordered in Case No. 14-457-EL-RDR and 15-534-EL-RDR. Adjustments are shown in GO.

(d) May costs are included in the Shared Savings calculation per the order in Case No. 13-753-EL-RDR

Duke Energy Ohio  
139 East Fourth Street  
Cincinnati, Ohio 45202

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**RIDER EE-PDRR  
ENERGY EFFICIENCY AND PEAK DEMAND RESPONSE RECOVERY RATE**

The EE-PDRR rate shall be determined in accordance with the provisions of Rider EE-PDR, Energy Efficiency and Peak Demand Response Recovery rider, Sheet No. 120 of this Tariff.

The EE-PDRR rate to be applied to residential service customer bills beginning with the ~~September 2019~~ revenue month is ~~(\$0.001318)~~ \$0.000135 per kilowatt-hour.

The EE-PDRR rate to be applied to non-residential service customer bills, other than service under Rates DS, DP, TS, and RTP, beginning with the ~~September 2019~~ revenue month for distribution service is ~~\$0.005315~~ \$0.004829.

The EE-PDRR rate to be applied to non-residential service customer bills, for service under Rates DS, DP, TS, and RTP, beginning with the ~~September 2019~~ revenue month for distribution service is ~~\$0.005173~~ \$0.005264 per kilowatt-hour.

This Rider is subject to reconciliation, including, but not limited to, refunds or additional charges to customers, ordered by the Commission as the result of audits by the Commission in accordance with the December 19, 2018, Opinion and Order in Case No. 17-1263-EL-SSO, et al.

Filed pursuant to Orders dated ~~July 31, 2019~~ in Case No. ~~18-39720-613~~-EL-RDR before the Public Utilities Commission of Ohio.

Issued: ~~August 26, 2019~~

Effective: ~~August 29, 2019~~

Issued by Amy B. Spiller, President

Duke Energy Ohio  
139 East Fourth Street  
Cincinnati, Ohio 45202

P.U.C.O. Electric No. 19  
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**RIDER EE-PDRR  
ENERGY EFFICIENCY AND PEAK DEMAND RESPONSE RECOVERY RATE**

The EE-PDRR rate shall be determined in accordance with the provisions of Rider EE-PDR, Energy Efficiency and Peak Demand Response Recovery rider, Sheet No. 120 of this Tariff.

The EE-PDRR rate to be applied to residential service customer bills beginning with the \_\_\_\_\_ revenue month is \$0.000135 per kilowatt-hour.

The EE-PDRR rate to be applied to non-residential service customer bills, other than service under Rates DS, DP, TS, and RTP, beginning with the \_\_\_\_\_ revenue month for distribution service is \$0.004829.

The EE-PDRR rate to be applied to non-residential service customer bills, for service under Rates DS, DP, TS, and RTP, beginning with the \_\_\_\_\_ revenue month for distribution service is \$0.005264 per kilowatt-hour.

This Rider is subject to reconciliation, including, but not limited to, refunds or additional charges to customers, ordered by the Commission as the result of audits by the Commission in accordance with the December 19, 2018, Opinion and Order in Case No. 17-1263-EL-SSO, et al.

Filed pursuant to Orders dated \_\_\_\_ in Case No. 20-613-EL-RDR before the Public Utilities Commission of Ohio.

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Issued:

Effective:

Issued by Amy B. Spiller, President

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**in**

**Case No(s). 20-0613-EL-RDR**

Summary: Testimony Direct Testimony of James E. Ziolkowski on Behalf of Duke Energy Ohio, Inc. electronically filed by Carys Cochern on behalf of Duke Energy