***OCC EXHIBIT NO.\_\_\_\_\_\_\_***

**BEFORE**

**THE PUBLIC UTILITIES COMMISSION OF OHIO**

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| --- | --- | --- |
| In the Matter of the Application ofDuke Energy Ohio for Authority to Establish a Standard Service Offer Pursuant to Section 4928.143, Revised Code, in the Form of an Electric Security Plan, Accounting Modifications and Tariffs for Generation Service. | ))))))) | Case No. 14-841-EL-SSO |

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| In the Matter of the Application ofDuke Energy Ohio for Authority to Amend its Certified Supplier Tariff, P.U.C.O. No. 20. | )))) | Case No. 14-842-EL-AAM |

**DIRECT TESTIMONY**

of

**JAMES D. WILLIAMS**

**On Behalf of**

**The Office of the Ohio Consumers' Counsel**

*10 West Broad Street, Suite 1800*

*Columbus, Ohio 43215-3485*

***September 26, 2014***

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**ATTACHMENTS**

JDW-1 List of Previous Testimony Filed at the PUCO by James Williams

JDW-2 Duke Response to OCC-INT-11-304

JDW-3 Duke Response to OCC-INT-11-242

JDW-4 Duke Response to OCC-INT-11-246

JDW-5 Duke Response to OCC-INT-11-243

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JDW-16 Duke Response to OCC-INT-14-388

JDW-17 Duke Response to OCC-INT-11-308

# I. INTRODUCTION

***Q1. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND POSITION.***

***A1*.** My name is James D. Williams. My business address is 10 West Broad Street, 18th Floor, Columbus, Ohio, 43215-3485. I am employed by the Office of the Ohio Consumers’ Counsel (“OCC”) as a Senior Consumer Protection Research Analyst.

***Q2. PLEASE BRIEFLY SUMMARIZE YOUR EDUCATION AND PROFESSIONAL EXPERIENCE.***

***A2.*** I am a 1994 graduate of Webster University, in St. Louis, Missouri, with a Master in Business Administration, and a 1978 graduate of Franklin University, in Columbus, Ohio, with a Bachelor of Science, Engineering Technology. My professional experience includes a career in the Air Force and over 18 years of utility regulatory experience with the OCC.

Initially, I served as a compliance specialist with the OCC and my duties included the development of compliance programs for electric, natural gas, and water industries. Later, I was appointed to manage all of the agency compliance specialists who were developing compliance programs in each of the utility industries. My role evolved into the management of the OCC consumer hotline, the direct service provided to consumers to resolve complaints, and inquiries that involve Ohio utilities. More recently, as a Senior Consumer Protection Research Analyst, I am responsible for investigating and recommending policy positions on issues that affect residential consumers.

I have been directly involved in the development of comments in various rulemaking proceedings at the Public Utilities Commission of Ohio (“PUCO”) and the Ohio Development Services Agency (“ODSA”) advocating consumer protections, utility affordability, and the provision of reasonable access to essential utility services for residential consumers. Specifically related to my testimony in this proceeding, I helped formulate OCC positions in the Establishment of Credit Rules and the Disconnection of Gas, Natural Gas, or Electric Service for Residential Customers,[[1]](#footnote-1) set forth in Ohio Admin. Code 4901:1-17 and 4901:1-18. I routinely review various reports related to the poverty conditions in Ohio and in advocacy for utility bill payment assistance for low-income consumers.

Also regarding my testimony in this proceeding, my experience has involved helping formulate OCC positions in rulemakings such as the Electric Service Safety Standards,[[2]](#footnote-2) set forth in Ohio Admin. Code 4901:1-10. I routinely review inspection, repair, and replacement of distribution facilities plans filed by the Utilities pursuant to Ohio Admin. Code 4901:1-10-27 including the most recent revisions to such a plan filed by Duke.[[3]](#footnote-3) Finally, I have participated in the review of OCC case teams assigned to review the reasonableness of reliability performance standards proposed by Duke Energy Ohio (“Duke” or “Utility”).[[4]](#footnote-4)

***Q3. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY OR TESTIFIED BEFORE THE PUCO?***

***A3*.** Yes. The cases in which I have submitted testimony and/or have testified before the PUCO can be found in attachment JDW-1.

# II. PURPOSE OF MY TESTIMONY

***Q4*. *WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?***

***A4****.* I am recommending that the PUCO consider customer affordability and the impact on at-risk populations of Duke’s proposed electric security plan (“ESP III”).

In this regard I have identified charges proposed by the Utility that will unreasonably increase the costs of electric service to customers. One charge that will negatively impact affordability is the proposed Distribution Capital Investment Rider (“Rider DCI”). Because of the DCI’s impact on customers’ electric service affordability, I specifically recommend that the PUCO reject the Rider DCI. I also recommend that the DCI rider be rejected because it does not appear to constitute an infrastructure modernization program that is eligible for funding under an electric security plan.

# iii. AFFORDABILITY OF RETAIL ELECTRIC SERVICE

***Q5. DO THE STATE’S ELECTRIC SERVICE POLICIES REQUIRE THE PUCO TO CONSIDER CUSTOMER AFFORDABILITY IN APPROVING AN ESP?***

***A5.*** Yes. It is my understanding thatR.C. 4928.02(A) and (L) set forth State policies concerning reasonably priced retail electric service:

*It is the policy of this state to do the following throughout this state:*

1. *Ensure the availability to consumers of adequate, reliable, safe, efficient, nondiscriminatory, and* ***reasonably priced*** *retail electric service;*

and

1. ***Protect at-risk populations****, including, but not limited to, when considering the implementation of any new advanced energy or renewable energy resource*; (emphasis added).

From this, I conclude that the PUCO has a duty to ensure that the policies specified under this section of the Revised Code are being implemented through the utility’s proposed ESP. My understanding has been confirmed by counsel.

***Q6.* *HAS DUKE DEMONSTRATED THAT ITS PROPOSED ESP WILL COMPLY WITH STATE POLICIES OF PROMOTING AFFORDABLE ELECTRIC SERVICE AND PROTECTING AT-RISK POPULATIONS?***

***A6***. No. Nothing in the Duke ESP III Application addresses the affordability of rates for customers. To the contrary, Duke appears to be using the DCI Rider as a way to collect routine maintenance expenses from its customers on an expedited basis without considering the impact on affordability. This will ultimately increase the cost of electricity for all residential consumers, especially the at-risk populations.

***Q7.* *CAN YOU BRIEFLY DESCRIBE THE AT-RISK POPULATIONS OF DUKE’S OHIO CUSTOMERS THAT ARE LIKELY TO BE NEGATIVELY AFFECTED BY THE ESP III?***

***A7.*** The at-risk populations that are affected by the Utility’s proposed ESP III are Ohioans living in the Duke service territory with incomes that are at or below the federal poverty guidelines (“FPL”). A single-person household with a gross annual income of $11,670 would qualify at 100 percent of the FPL.[[5]](#footnote-5) A household of three persons with a gross annual household income of $19,790 would qualify at 100 percent of the FPL.[[6]](#footnote-6)

A review of The 2014 Ohio Poverty Report[[7]](#footnote-7) indicates that there are a significant number of individuals and Ohio families who are living in poverty. The number of Ohio families living in poverty is also higher than the national average. Specifically, approximately 16.3 percent of Ohioans were in poverty compared with a 15.9 percent nationwide.[[8]](#footnote-8) Even more alarming, the at-risk population of Ohioans living in poverty has increased from 10.6 percent since 1999.[[9]](#footnote-9) Family poverty has also increased dramatically from 8.3 percent in 1999 to 12.0 percent in 2012.[[10]](#footnote-10)

The at-risk population of Duke’s customers who live in counties where the poverty levels exceed the state average should be a concern for the PUCO. For example, the poverty level in Hamilton County -- the most populous county in Duke’s service territory -- is 17.1 percent, well in excess of the statewide poverty level of 16.3 percent. The at-risk population of Duke’s customers who live in cities should also be of concern to the PUCO because the level of poverty in urban areas has increased over the last 15 years in Ohio. For example, Cincinnati, the largest city served by Duke has a population of 285,778 residents and a poverty level of 29.4 percent in 2012, compared to 24.3 percent in 1999.[[11]](#footnote-11) Another city, Middletown, has a population of 49,919 and a poverty level of 23.8 percent in 2012, compared to a 15.4 percent poverty level reflected in 1999.[[12]](#footnote-12)

The extreme financial hardship currently faced by many customers in these cities and counties must be considered by the PUCO prior to allowing Duke to impose even more electric service increases on these at-risk populations. But there is simply no indication in the ESP III Application that Duke is protecting the at-risk population from the brunt of the proposed ESP III rate increases.

***Q8*. *ARE THERE OTHER AT-RISK POPULATION CONCERNS THAT THE PUCO SHOULD CONSIDER PRIOR TO APPROVING THE PROPOSED ESP?***

***A8.*** Yes. While high poverty rates throughout Duke’s service territory raise serious concerns regarding the viability of additional rate increases, the PUCO should also consider the affordability in a broader sense. For instance, the PUCO should consider the effect of the proposed ESP III on those customers whose incomes are close and slightly above the federal poverty level. This is also an at-risk population. I refer to this at-risk population as the “close to poverty level population.” This population can be especially adversely affected by the high costs of electric services (i.e. the lack of affordability for electric service) because they may not qualify for income-based assistance programs as explained later in this testimony. Table 1 provides a summary of the number of Ohioans with incomes close to the poverty level living in the largest counties served by Duke.

**Table 1: Ratio of Income to Poverty level for Counties Served by Duke**[[13]](#footnote-13)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Ohio County | Population[[14]](#footnote-14) | 100% Poverty | 125% Poverty | 150% Poverty | 185% Poverty | 200% Poverty |
| Brown | 43,969 | 12.8 | 18.9 | 24.3 | 32.8 | 37.5 |
| Butler | 355,778 | 13.6 | 17.7 | 21.5 | 27.1 | 29.2 |
| Clermont  | 195,403 | 10.3 | 13.8 | 17.5 | 22.5 | 25.2 |
| Clinton | 40,990 | 15.4 | 20.0 | 25.8 | 33.6 | 36.3 |
| Hamilton | 783,912 | 17.1 | 21.3 | 25.3 | 30.9 | 33.2 |
| Highland | 42,859 | 17.6 | 24.7 | 31.9 | 41.5 | 44.2 |
| Montgomery | 514,957 | 16.8 | 21.7 | 26.8 | 33.7 | 36.5 |
| Warren | 207,350 | 6.4 | 8.8 | 11.4 | 15.5 | 17.1 |

As can be seen in Table 1, a significant number of Ohioans living in counties served by Duke have incomes that are close to the poverty level. A third of the population of Hamilton County is designated as close to the poverty level. For the second largest county served by Duke (Montgomery County), 36.5 percent of the population is designated close to poverty level. While the incomes of some of these Ohioans may be slightly above the federal poverty level, these individuals are already facing significant drains on their incomes for basic living expenses such as shelter, food, transportation, health and safety. Increases in the cost of electric service have to be absorbed in budgets that are already stretched thin. There is no indication in the ESP III Application that Duke took steps to moderate the financial impact of the proposed ESP on this at-risk population.

***Q9.* *HAVE INCREASES IN DUKE’S CUSTOMERS’ ELECTRIC BILLS REMAINED CONSISTENT WITH INCREASES IN INFLATION OVER THE LAST DECADE.***

***A9****.* No. Duke’s customers’ electric bills have increased at a level of twice the rate of inflation over the last decade. In July 2014, a residential customer bill (based on 750 KWH) is $93.82.[[15]](#footnote-15) In July 2004, a residential customer bill (based on 750 KWH) was $60.71.[[16]](#footnote-16) Therefore, Duke’s customers’ electric bills have increased by 54.5 percent in just the last ten years. In contrast, the cumulative rate of inflation increased by only 26.1 percent during the same ten years.[[17]](#footnote-17) Had Duke’s rate increases remained consistent with the inflation rates, the July 2014 bill would have been $76.57 instead of $93.82. This example further demonstrates the negative impact that Duke’s electric rates are having on the at-risk populations.

***Q10.* *ARE THERE OTHER INDICATIONS THAT AFFORDABILITY OF RETAIL ELECTRIC SERVICE FOR RESIDENTIAL CUSTOMERS IN DUKE’S SERVICE TERRITORY IS AN ISSUE THAT SHOULD BE CONSIDERED IN DETERMINING RATES IN THIS CASE?***

***A10.***Yes. As can be seen on Table 2 below, a significant number of Duke’s residential customers are already struggling to afford electric service under existing ESP II rates. The proposed rates under Duke’s ESP III Application will cause customers’ rates to increase even more.

Table 2 provides a summary based on 2013 data of the number of Duke’s customers who were disconnected for non-payment, customers on the low-income Percentage Income Payment Plan (“PIPP”) Plus, and the average number of customers on a monthly basis who were on another payment plan compared with 2011 when the rates for the Duke ESP II went into effect.[[18]](#footnote-18) I define these customers as part of the at-risk population under the statute, R.C. 4928.02(L).

To qualify for PIPP Plus, customers must have a household income not exceeding 150 percent of the Federal Poverty Guidelines.[[19]](#footnote-19) Rather than paying the actual bill, PIPP Plus customers are billed six percent of their monthly household income for electricity (ten percent if all-electric), and the difference from the actual bill accrues as an arrearage.[[20]](#footnote-20) Customers who have household incomes that exceed the PIPP guidelines can apply for another payment plan such as the one-ninth, one-sixth, and one-third payment plans set forth in Ohio Admin. Code 4901:1-18-05(B).

**Table 2: Disconnections, PIPP Plus, Payment Plans[[21]](#footnote-21) (2011 - 2013)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Metrics | 2011 | 2013 | Percentage Change | Percentage of Total Customers[[22]](#footnote-22) |
| Disconnections for Non-payment | 69,844[[23]](#footnote-23) | 83,199[[24]](#footnote-24) | 19.1% | 13.5% |
| Average Number on PIPP Plus | 27,161 | 28,468 | 4.8% | 4.6% |
| Average Number of Customers on Payment Plans | 6,160 | 13,193 | 114.5% | 2.1% |

Table 2 demonstrates that approximately 83,199 (13.5%) of Duke’s customers were disconnected for non-payment in 2013. This is a 19.1 percent increase from the number of disconnections in 2011. This is a strong indicator that Duke’s customers are experiencing increasing difficulty paying their electric bills. In addition, approximately 28,468 (4.6%) of Duke’s low-income customers were on the specialized PIPP Plus payment programs to avoid loss of service.[[25]](#footnote-25) This is another strong indicator of the magnitude of Duke customers who need special assistance just to maintain electric service. Another 13,193 (2.1%) of Duke’s customers were on other payment plans during an average month in an attempt to avoid disconnection of service.[[26]](#footnote-26)

Thus, in total approximately 125,000 of Duke’s approximate 615,000 residential customers are struggling to pay their current electric bills. This represents approximately 20.3 percent of the total residential customers. These numbers show that affordability is a serious issue that the PUCO must address as it determines whether to accept or modify the proposed ESP III. The proposed ESP III will raise rates even higher and may make electric service unaffordable for many customers. Such a result would be inconsistent with the policies of the state, discussed above.

***Q11. HOW DOES THE NUMBER OF DUKE CUSTOMERS WHO ARE BEING DISCONNECTED FOR NON-PAYMENT COMPARE WITH THE NUMBER OF CUSTOMERS BEING DISCONNECTED BY OTHER OHIO ELECTRIC UTILITIES?***

***A11.*** During the period June 1, 2013 through May 31, 2014, Duke residential customers were twice as likely to be disconnected for non-payment than the residential customers of practically every other electric utility in the state. Table 3 provides a summary of the number of Duke customers who were disconnected for non-payment compared with the disconnection data for the other Ohio electric distribution utilities (“EDU’s”).

**Table 3: Disconnection of Duke Customers Compared to Other Ohio EDU’s**[[27]](#footnote-27)

|  |  |  |  |
| --- | --- | --- | --- |
| *Utility* | *Number of Residential Customers* | *Number of Disconnections* | *Disconnection Rate* |
| **Duke** | **615,738** | **88,199** | **14.3** |
| DP&L | 297,455 | 31,288 | 10.5 |
| AEP Ohio | 1,273,602 | 88,390 | 6.9 |
| Ohio Edison | 919,344 | 45,124 | 4.9 |
| Toledo Edison | 271,717 | 9,717 | 3.6 |
| CEI | 660,648 | 14,736 | 2.2 |

The extraordinarily high number of residential customers who are being disconnected for non-payment in the Duke service territory provides yet further evidence of the affordability issues that Duke customers are experiencing. Customers face serious health, safety, and financial consequences when their electric service is terminated for non-payment.[[28]](#footnote-28) Any additional increase in electric rates can have an adverse impact by further increasing the number of Duke residential customers who are disconnected – including the at-risk customers.

# Distribution Capital Investment Rider

***Q12. PLEASE DESCRIBE THE PROPOSED RIDER DCI?***

***A12.*** The proposed Rider DCI allows Duke to collect incremental distribution costs from customers sooner than it would otherwise be able to, through a distribution rate case. Duke claims that with such cost recovery through the DCI, it will be able to maintain and/or enhance the safety and reliability of its distribution system.[[29]](#footnote-29) The Utility has proposed a disjointed array of nineteen different programs that are to be included in its infrastructure modernization plan and funded through the Rider DCI.[[30]](#footnote-30) However, the Utility has proposed that the Rider DCI evolve over time to enable additional programs or revisions and modifications to be made based on technological advancements or changes in field conditions.[[31]](#footnote-31) Duke claims that even though customers appear to be satisfied with the Utility’s reliability and power quality, customer expectations can change.[[32]](#footnote-32) The Utility further contends that there is a challenge to fund new programs to meet customer expectations when resources are limited to revenues obtained through base rates.[[33]](#footnote-33) There is no indication that Duke has performed a cost-benefit analysis, or intends to perform a cost benefit analysis to determine the effectiveness of any of the programs that are included in the Rider DCI.

***Q13. HOW WILL THE DCI RIDER IMPACT CUSTOMER RATES AND AFFORDABILITY?***

***A13.*** As explained in the Direct Testimony of OCC Witness Mierzwa, the proposed DCI rider would impact the average residential customer through an increase in rates of nearly $100 per year by 2018.[[34]](#footnote-34) Affordability of electric bills is already an issue in the Duke service territory. An increase of $100 per year can result in even more customers being disconnected for non-payment, more customers ending up on PIPP Plus and other payment plans, and more at-risk customers being at-risk for potential health and safety issues.

***Q14. DOES DUKE CLAIM THAT THERE WILL BE A RELIABILITY BENEFIT TO CUSTOMERS ASSOCIATED WITH THE RIDER DCI?***

***A14.*** No. To the contrary, Duke acknowledges that it cannot guarantee that system reliability or customer satisfaction will improve as a result of the imposition of the DCI Rider.[[35]](#footnote-35) Yet elsewhere in his Direct Testimony, Mr. Arnold claims that the Rider DCI will allow the Utility to maintain or improve the Customer Average Interruption Duration Index (“CAIDI”), System Average Interruption Frequency Index (“SAIFI”), and System Average Interruption Duration Index (“SAIDI”). In response to discovery about which of the DCI programs will maintain reliability and which programs will improve reliability,[[36]](#footnote-36) the Utility changed its position as follows:

The programs proposed for Rider DCI are system integrity-based programs proposed to **maintain the current level** of system asset condition. The focus is on **maintaining the serviceable condition of the asset** and not specifically on improvements to reliability indices. The program may result in incidental improvement to reliability indices but the effect of such improvement cannot be measured.[[37]](#footnote-37) (Emphasis added.)

***Q15. SHOULD THE PUCO PERMIT THE UTILITY TO CHARGE CUSTOMERS IN AN ESP PROCEEDING FOR EXPENSES ASSOCIATED WITH MAINTAINING THE UTILITYS’S DISTRIBUTION SYSTEM?***

***A15.*** No. Duke claims that the proposed DCI Rider is an infrastructure plan and recovery mechanism permitted under R.C. 4928.143(B)(2)(a).[[38]](#footnote-38) However, it’s my understanding that this statute permits distribution expenses to be collected as part of an ESP if the distribution expenses relate to infrastructure modernization. Infrastructure modernization is different from maintaining a utility’s distribution system. Expenses associated with maintaining a utility’s distribution system are those which are generally considered to be included within existing base distribution rates or as part of a distribution rate case, which is governed by R.C. Chapter 4909. In fact, utilities are required to maintain necessary and adequate distribution facilities under R.C. 4905.22. My understanding has been confirmed by counsel.

***Q16. CAN YOU PROVIDE A FEW EXAMPLES OF PROGRAMS THAT DUKE HAS PROPOSED TO INCLUDE IN THE DCI RIDER WHICH APPEAR TO BE MAINTENANCE ACTIVITIES INSTEAD OF INFRASTRUCTURE MODERNIZATION?***

***A16.*** Yes. I believe all of the programs that were proposed by Duke are more maintenance types of programs rather than infrastructure modernization that might qualify for incentive ratemaking through the DCI Rider. For example, Duke claims that the Vegetation Clearing/ Right-of-Way Acquisition/ Facility Modification Program is intended to identify dead or high risk tree’s or vegetation within or along the right-of-way that pose a risk to overhead lines.[[39]](#footnote-39) Yet in response to OCC INT-11-242 (attached herein as JDW-3), the Utility claims that it already removes dead or high risk tree’s or vegetation within or along the right of way that can pose a danger for overhead lines as part of its on-going vegetation management program. Duke acknowledges that this program is a system-integrity-based program being proposed to *maintain* the current level of system asset condition.[[40]](#footnote-40) There is nothing new in this program other than Dukes proposal to expand the program to include the removal of emerald ash borer trees that are outside the annual cycle-based, tree-trimming schedule and that are outside of the 20’ wide clearing area.[[41]](#footnote-41)

The proposed Underground Cable Replacement Program is another example of Duke seeking to obtain incentive ratemaking to fund a replacement program that the Utility is already required to provide. Duke is required to establish and maintain programs related to the inspection, maintenance, repair and replacement of distribution circuits and equipment such that it can provide safe and reliable service.[[42]](#footnote-42) This program involves the replacement of underground cable that the Utility determines has reached the end of its useful life.[[43]](#footnote-43) In response to OCC-INT-11-253 (Attached herein as JDW-7), Duke acknowledges that this is system-integrity based program proposed to *maintain* the current level of system assets.

Another example is the Distribution Substation Protection Program that is intended to “upgrade” security measures at substations through the installation of cameras, higher fences, and other theft deterrents. However, according to the Utility response to OCC-INT-11-274 (Attached herein as JDW-8), this is a system-integrity-based program proposed to *maintain* the current level of system asset condition. The current maintenance provisions that the Utility is using to protect these facilities appear to be working well considering there have been no customer interruptions due to theft or vandalism in four of the last five years.[[44]](#footnote-44)

Mr. Arnold also testified that some components of the distribution facilities were installed in the 70’s and 80’s.[[45]](#footnote-45) However, in response to follow-up discovery, there Duke did not indicate that it is unable to provide safe and reliable service if the PUCO does not approve the Rider DCI. For example, in response to OCC-INT-14-376 (Attached herein as JDW-10), Duke was unaware of any distribution wood poles that need to be replaced where the replacement was to be made only if the PUCO approved Rider DCI. Similarly, Duke was unaware of any overhead or underground transformers that need to be replaced in order for Duke to provide safe and reliable service where the replacement was contingent upon PUCO approval of the Rider DCI.[[46]](#footnote-46) In response to OCC-INT-14-385 (attached herein as JDW-13), Duke was unaware of any switchgear that needs to be replaced in order for the Utility to provide safe and reliable service where the replacement was contingent upon PUCO approval of the Rider DCI.

***Q17. DOES DUKE CLAIM THAT THE RIDER DCI WILL RESULT IN REDUCTIONS IN OPERATIONS AND MAINTENANCE COSTS?***

***A17.*** Yes, Duke claims that the replacement of obsolete and aging infrastructure will eventually reduce outages and therefore reduce operating and maintenance (“O&M”) costs.[[47]](#footnote-47) However, Duke has not been able to identify the number of outages that are attributed to aged infrastructure and, therefore, the potential reductions in O&M expenses are speculative.[[48]](#footnote-48) Moreover, as noted by OCC Witness Mierzwa, Duke has indicated that these reductions to O&M will not flow through to customers until (and unless) the Utility files a distribution rate case.

***Q18. CAN YOU BRIEFLY DESCRIBE DUKE’S RELIABILITY INDICES AND HOW THESE STANDARDS WERE ESTABLISHED?***

***A18.*** Yes. Under R.C. 4928.11(A) the PUCO is required to adopt rules that include prescriptive standards for the inspection, maintenance, repair, and replacement of distribution equipment and specific standards for reliability. The PUCO has adopted rules in Ohio Admin. Code 4910:1-10-10 that require each electric utility to maintain a SAIFI standard and a CAIDI standard. SAIFI is a measure of the average number of outages that customers experience on an annual basis. CAIDI is a measure of the average duration of the outage. In addition, the PUCO rules require electric utilities to report on an annual basis the eight percent worst performing circuits based upon SAIFI, CAIDI, and SAIDI performance data.[[49]](#footnote-49) SAIDI, the System Average Interruption Duration Index, is a measure of the average duration of outages at the system level. In a reliability proceeding, the electric utility has the burden of proof to justify standards based on historical system performance, system design, technological advancements, service area geography, customer perception survey results and other relevant factors.[[50]](#footnote-50)

Duke’s reliability standards for 2014 are a SAIFI of 1.1 and a CAIDI of 121.25 minutes.[[51]](#footnote-51) For 2015 and 2016, the reliability standards are a SAIFI of 1.05 and a CAIDI of 122.81.[[52]](#footnote-52) It is important to note that these standards exclude outages that are associated with major events, transmission/generation outages, and those outages that have durations of less than five minutes. Thus the standards are applied to the normal performance of the distribution system when there are no other significant major events that can impact system reliability. Based on these standards, Duke has met or exceeded the reliability standards for each year since 2011.

***Q19. IS THE CUSTOMER PERCEPTION SURVEY THAT IS USED AS AN INPUT IN CALCULATING RELIABILITY PERFORMANCE STANDARDS A REASONABLE WAY TO MEASURE CUSTOMER EXPECTATIONS CONCERNING RELIABILITY?***

***A19.*** I believe so. Attached herein as JDW-15 is a copy of the PUCO’s Reliability Residential Survey Results that were used in establishing the current Duke reliability standards.[[53]](#footnote-53) The customer perception survey asks customers how many momentary and sustained interruptions they would find acceptable in a 12-month period and then inquires about how many momentary and sustained outages were actually experienced in the past 12 months. The vast majority of respondents would find three (or fewer) momentary outages (i.e., outages with durations of less than 5 minutes) in the previous 12 months to be acceptable.[[54]](#footnote-54) When asked about the number of momentary outages that were experienced in the previous 12 months, the vast majority of respondents reported having two (or fewer) momentary outages. These results indicate that Duke’s customers are generally satisfied with the level of momentary outages that are being experienced.[[55]](#footnote-55)

Regarding sustained outages (i.e., outages with durations greater than five minutes), the vast majority of respondents would consider two (or fewer) sustained outages in a 12 month period to be acceptable.[[56]](#footnote-56) The majority of respondents reported having either no outages or only one outage in the previous 12 months.[[57]](#footnote-57) These results indicate that Duke’s customers are generally satisfied with the number of sustained outages in the last 12 months.

The customer perception survey also asks customers the maximum amount of money that they would be willing to have included on their electric bill to avoid a one-hour or two-hour electric outage.[[58]](#footnote-58) The vast majority of respondents were unwilling to have any additional charge added to their bill to avoid outage durations of up to two hours.[[59]](#footnote-59) These results indicate that customers are unwilling to pay for a level of reliability that exceeds the reliability that customers are already receiving.

***Q20. DOES DUKE RELY UPON THE CUSTOMER PERCEPTION SURVEY TO DETERMINE CUSTOMER RELIABILITY EXPECTATIONS?***

***A20.*** No. Duke claims that the surveys are not used for planning purposes.[[60]](#footnote-60) Yet these are the very same surveys that Duke is required to use as an input for calculating new reliability performance standards.[[61]](#footnote-61) Based on follow-up discovery concerning why the surveys were not the basis for planning customer expectations the Utility claimed that the surveys do not meet Duke’s standards.[[62]](#footnote-62) But the Duke standards are not defined. The Utility claims that it only relies upon a J.D. Power and Associates survey for the purposes of consistency.[[63]](#footnote-63) However, these J.D. Power and Associates customer satisfaction results involve Ohio and Kentucky and are part of a Midwest Summary Presentation that is not Duke Ohio customer specific.[[64]](#footnote-64)

The J.D. Power and Associates survey may have some broad company-wide uses for Duke related to its services in several states. But the customer perception survey, which is required pursuant to the PUCO rules,[[65]](#footnote-65) should be used to help develop reliability performance standards for any distribution infrastructure improvements that impact reliability for Duke Ohio customers. The customer perception survey is conducted by polling actual Duke’s customers. The J.D. Power survey is not based on Duke customer responses, but on a more regional basis. The Ohio customer focus is especially important in determining whether Duke’s customers are willing or able to pay higher electric bills for additional reliability. In response to OCC-INT-11-308 (Attached herein as JDW-17), the Utility stated that it has conducted no customer surveys to determine to what extent customers are willing to pay higher rates in order to get better service quality. However, the PUCO required survey that was mentioned earlier in this testimony demonstrates an unwillingness by customers to pay more to avoid many of the non-major outages.

It’s my understanding that Ohio law requires the PUCO Commission to examine the reliability of an electric distribution system to determine if the customers’ and utilities’ expectations concerning reliability are aligned prior to approving an infrastructure modernization plan.[[66]](#footnote-66) To the extent that Dukes’ PUCO customer perception survey indicates that the Utility customers are unwilling to pay more to avoid non-major outages, customers’ and Dukes’ expectations concerning reliability are not aligned. Approval of the Rider DCI, as proposed by Duke, appears to contradict Ohio law.

***Q21. WHAT IS YOUR RECOMMENDATION CONCERNING THE RIDER DCI?***

***A21****.* Based upon the large number of at-risk customers in Duke’s service territory who would be hurt by unreasonable price increases in electric bills I recommend that the DCI rider be rejected. Additionally, I conclude that Duke has not demonstrated that the proposed rider DCI is an infrastructure modernization program as required by law. This is another reason for the PUCO to reject the proposed DCI Rider. Finally, I conclude that customers’ interests and the utilities’ interests are not aligned, which is a requirement under the statute. All of these conclusions lead me to recommend that the PUCO reject the DCI rider.

In the alternative, if the PUCO chooses to approve the Rider DCI, contrary to my recommendation otherwise, I recommend that the PUCO require Duke to conduct a cost- benefit analysis for each of the DCI programs to justify going forward with the program. I also recommend that for those programs that pass a cost benefit analysis, and are implemented, the Utility should annually quantify the improvements in reliability from the program prior to spending any additional customer money on the program.

# v. CONCLUSION

***Q22. DOES THIS CONCLUDE YOUR TESTIMONY?***

***A22.*** Yes. However, I reserve the right to incorporate new information that may subsequently become available through outstanding discovery or otherwise.

**CERTIFICATE OF SERVICE**

It is hereby certified that a true copy of the foregoing *Direct* *Testimony of James D. Williams on Behalf of the Office of the Ohio Consumers’ Counsel* has been served via electronic transmission this 26th day of September 2014.

 */s/ Maureen R. Grady*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Maureen R. Grady

 Assistant Consumers’ Counsel

**SERVICE LIST**

|  |  |
| --- | --- |
| Steven.beeler@puc.state.oh.usThomas.lindgren@puc.state.oh.usRyan.orourke@puc.state.oh.usdboehm@BKLlawfirm.commkurtz@BKLlawfirm.comjkylercohn@BKLlawfirm.comSchmidt@sppgrp.comJudi.sobecki@aes.comBojko@carpenterlipps.comAllison@carpenterlipps.comcmooney@ohiopartners.orgstnourse@aep.commjsatterwhite@aep.comyalami@aep.comasonderman@keglerbrown.commkimbrough@keglerbrown.comhussey@carpenterlipps.commhpetricoff@vorys.commjsettineri@vorys.comglpetrucci@vorys.comdmason@ralaw.commtraven@ralaw.comrchamberlain@okenergylaw.comchristime.pirik@puc.state.oh.usNicholas.wastra@puc.state.oh.us | Amy.Spiller@duke-energy.comElizabeth.watts@duke-energy.comRocco.dascenzo@duke-energy.comJeanne.Kingery@duke-energy.comhaydenm@firstenergycorp.comjmcdermott@firstenergycorp.comscasto@firstenergycorp.comjoliker@igsenergy.commswhite@igsenergy.comjoseph.clark@directenergy.comsam@mwncmh.comfdarr@mwncmh.commpritchard@mwncmh.comcallwein@wamenergylaw.comtdougherty@theOEC.orgdhart@douglasehart.comcloucas@ohiopartners.orggpoulos@enernoc.comswilliams@nrdc.orgtobrien@bricker.comghull@eckertseamans.comjvickers@elpc.org |

1. *In the Matter of the Commission’s Review of Its Rules for the Establishment of Credit for Residential Utility Services and the Disconnection of Gas, Natural Gas or Electric Services to Residential Customers Contained in Chapters 4901:1-17 and 4901:1-18 of the Ohio Administrative Code,* Case No. 13-274-AU-ORD. [↑](#footnote-ref-1)
2. *In the Matter of the Commission’s Review of Chapters 4901:1-10 of the Ohio Administrative Code Regarding Electric Companies,* Case No. 12-2050-EL-ORD. [↑](#footnote-ref-2)
3. *In the Matter of the Application of Duke Energy Ohio, Inc. to Revise and Amend its Circuit Inspection Program,* Case No. 12-1679-EL-ESS, Application (May 29, 2012). [↑](#footnote-ref-3)
4. *In the Matter of the Application of the Duke Energy Ohio, Inc. to Establish Minimum Reliability Performance Standards Pursuant to Chapter 4901:1-10, Ohio Administrative Code,* Case No. 09-757-EL-ESS and Case No. 13-1539-EL-ESS. [↑](#footnote-ref-4)
5. http://aspe.hhs.gov/poverty/14poverty.cfm. [↑](#footnote-ref-5)
6. Id. [↑](#footnote-ref-6)
7. http://www.development.ohio.gov/files/research/P7005.pdf. [↑](#footnote-ref-7)
8. Ohio Poverty Report at Table A1. [↑](#footnote-ref-8)
9. Ohio Poverty Report at page 6. [↑](#footnote-ref-9)
10. Ohio Poverty Report at page 8. [↑](#footnote-ref-10)
11. Ohio Poverty Report at Table A6. [↑](#footnote-ref-11)
12. Id. [↑](#footnote-ref-12)
13. Ohio Poverty Report at Table A7. [↑](#footnote-ref-13)
14. Persons for Whom Poverty Status was Determined. [↑](#footnote-ref-14)
15. Ohio Utility Rate Survey, A Report by the Staff of the PUCO (July 15, 2014). [↑](#footnote-ref-15)
16. Ohio Utility Rate Survey, A Report by the Staff of the PUCO (July 15, 2004). [↑](#footnote-ref-16)
17. http://www.usinflationcalculator.com/inflation/current-inflation-rates/. [↑](#footnote-ref-17)
18. *In the Matter of the Application of Duke Energy Ohio for Approval of a Market Rate Offer to Conduct a Competitive Bidding Process for Standard Service Offer Electric Generation Supply, Accounting Modifications, and Tariffs for Generation Service,* Case 10-2586-EL-SSO. [↑](#footnote-ref-18)
19. Ohio Admin. Code 122:5-3-02(B)(1). [↑](#footnote-ref-19)
20. Ohio Admin. Code 122:5-3-04. [↑](#footnote-ref-20)
21. *In the Matter of the Commission’s Review of Chapters 4901-1-17 and 4901:1-18, and Rules 4901:1-5-07, 4901:1-10-22, 4901:1-13-11, 4901:1-15-17, 4901:1-21-14, and 4901:1-29-12 of the Ohio Administrative Code*, Case No. 08-723-AU-ORD, PIPP Plus Metrics Data reported to the PUCO Staff. [↑](#footnote-ref-21)
22. 2013 Annual Report reflects 615,738 residential customers. [↑](#footnote-ref-22)
23. *In the Matter of the Annual Report of Service Disconnections for Nonpayment Required by Section 4933.123, Ohio Revised Code*, Case No. 12-1449-GE-UNC, Report of Service Disconnections of Duke Energy Ohio at 1 (July 24, 2012). [↑](#footnote-ref-23)
24. *In the Matter of the Annual Report of Service Disconnections for Nonpayment Required by Section 4933.123, ORC*, Case No. 14-846-GE-UNC, Duke Energy Ohio’s Service Disconnection for Nonpayment Report at 1 (June 10, 2014). [↑](#footnote-ref-24)
25. PIPP Plus Metrics Data for 2013 provided by the PUCO Staff. [↑](#footnote-ref-25)
26. PIPP Plus Metrics Data for 2013 provided by the PUCO Staff. [↑](#footnote-ref-26)
27. *In the Matter of the Annual Report of Service Disconnections for Nonpayment Required by Section 4933.123*, Revised Code, Case 14-846-GE-UNC. [↑](#footnote-ref-27)
28. Access to Utility Service, National Consumer Law Center, Fourth Edison, 2008. [↑](#footnote-ref-28)
29. Direct Testimony of Marc Arnold at 16 (May 29, 2014). [↑](#footnote-ref-29)
30. Direct Testimony of Marc Arnold at 18 (May 29, 2014). [↑](#footnote-ref-30)
31. Id. [↑](#footnote-ref-31)
32. Direct testimony of Marc Arnold at 15 (May 29, 2014). [↑](#footnote-ref-32)
33. Id. [↑](#footnote-ref-33)
34. Direct Testimony of Jerry Mierzwa at page 8. [↑](#footnote-ref-34)
35. Direct Testimony of Marc Arnold at 17 (May 29, 2014). [↑](#footnote-ref-35)
36. Duke Response to OCC INT-11-304 (Attached herein as JDW-2). [↑](#footnote-ref-36)
37. Id. [↑](#footnote-ref-37)
38. Direct Testimony of Marc Arnold at 15 (May 29, 2014). [↑](#footnote-ref-38)
39. Direct Testimony of Marc Arnold at 20 (May 29, 2014). [↑](#footnote-ref-39)
40. Duke Response to OCC-INT-11-246 (Attached herein as JDW-4). [↑](#footnote-ref-40)
41. Duke Response to OCC-INT-11-243 and OCC-INT-14-390 (Attached herein as JDW-5 and JDW-6). [↑](#footnote-ref-41)
42. Ohio Admin. Code 4901:1-10-27(E)(1). [↑](#footnote-ref-42)
43. Direct Testimony of Marc Arnold at 22 (May 29, 2014). [↑](#footnote-ref-43)
44. Duke response to OCC-INT-14-393 (Attached herein as JDW-9). [↑](#footnote-ref-44)
45. Direct Testimony of Marc Arnold at Attachment MVA-1 (May 29, 2014). [↑](#footnote-ref-45)
46. Duke response to OCC-INT-14-379 and 14-382 (Attached herein as JDW-11 and JDW-12). [↑](#footnote-ref-46)
47. Direct Testimony of Marc Arnold at 20 (May 29, 2014). [↑](#footnote-ref-47)
48. Duke Response to OCC INT-11-203 (Attached herein as JDW-14). [↑](#footnote-ref-48)
49. Ohio Admin. Code 4901:1-10-11(C)(1). [↑](#footnote-ref-49)
50. Ohio Admin. Code 4901:1-10-10(B)(4)(a). [↑](#footnote-ref-50)
51. *In the Matter of the Application of Duke Energy Ohio, Inc. for Approval of Proposed Reliability Standards,* Case 09-757-EL-ESS, Opinion and Order at 4 (July 29, 2010). [↑](#footnote-ref-51)
52. *In the Matter of the Application of Duke Energy Ohio, Inc. to Establish Reliability Standards,* Case 13-1539-EL-ESS, Opinion and Order at 4 (September 17, 2014). [↑](#footnote-ref-52)
53. Application Update of Duke Energy Ohio, Inc. Customer Perception Survey, Residential, Case 13-1539-EL-ESS, (July 28, 2013). [↑](#footnote-ref-53)
54. Id. [↑](#footnote-ref-54)
55. Id. [↑](#footnote-ref-55)
56. Id. [↑](#footnote-ref-56)
57. Application Update of Duke Energy Ohio, Inc. Customer Perception Survey, Residential, Case 13-1539-EL-ESS, (July 28, 2013). [↑](#footnote-ref-57)
58. Id. [↑](#footnote-ref-58)
59. Id. [↑](#footnote-ref-59)
60. Direct Testimony of Marc Arnold at page 14 (May 29, 2014). [↑](#footnote-ref-60)
61. Ohio Admin. Code 4901:1-10-10(B)(4)(b). [↑](#footnote-ref-61)
62. Duke response to OCC-INT-14-388 (Attached herein as JDW-16). [↑](#footnote-ref-62)
63. Id. [↑](#footnote-ref-63)
64. Direct testimony of Marc Arnold at page 13 (May 29, 2014). [↑](#footnote-ref-64)
65. Ohio Admin. Code 4901:1-10-10(B)(4)(b). [↑](#footnote-ref-65)
66. R.C. 4928.143(B)(2)(h). [↑](#footnote-ref-66)