

**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in Electric Distribution Rates.)))	Case No. 17-0032-EL-AIR
In the Matter of the application of Duke Energy Ohio, Inc., for Tariff Approval.))	Case No. 17-0033-EL-ATA
In the Matter of the Application of Duke Energy Ohio, Inc. for Approval to Change Accounting Methods.))	Case No. 17-0034-EL-AAM
In the Matter of the Application of Duke Energy Ohio, Inc. for Approval to Modify Rider PSR.)))	Case No. 17-0872-EL-RDR
In the Matter of the Application of Duke Energy Ohio, Inc. for Approval to Amend Rider PSR.)))	Case No. 17-0873-EL-ATA
In the Matter of the Application of Duke Energy Ohio, Inc. for Approval to Change Accounting Methods.)))	Case No. 17-0874-EL-AAM
In the Matter of the Application of Duke Energy Ohio, Inc. 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. 17-1263-EL-SSO
In the Matter of the Application of Duke Energy Ohio, Inc. for Authority to Amend Its Certified Supplier Tariff, P.U.C.O. No. 20.))))	Case No. 17-1264-EL-ATA
In the Matter of the Application of Duke Energy Ohio, Inc. for Authority to Defer Vegetation Management Costs.)))	Case No. 17-1265-EL-AAM

In the Matter of the Application of Duke)
Energy Ohio, Inc. to Establish Minimum)
Reliability Performance Standards) Case No. 16-1602-EL-ESS
Pursuant to Chapter 4901:1-10, Ohio)
Administrative Code.)

DIRECT TESTIMONY
OF
JAMES D. WILLIAMS
IN OPPOSITION TO THE JOINT STIPULATION AND RECOMMENDATION

On Behalf of
The Office of the Ohio Consumers' Counsel
65 East State Street, 7th Floor
Columbus, Ohio 43215-4213

June 25, 2018

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On Behalf of the Office of the Ohio Consumers' Counsel
PUCO Case No. 17-0032-EL-AIR et al.*

1 **I. INTRODUCTION**

2

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

4 ***A1.*** My name is James D. Williams. My business address is 65 East State Street, 7th
5 Floor, Columbus, Ohio 43215-3485. I am employed by the Office of the Ohio
6 Consumers' Counsel ("OCC") as a Senior Utility Consumer Policy Analyst.

7

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

10 ***A2.*** I am a 1994 graduate of Webster University, in St. Louis, Missouri, with a Master
11 of Business Administration, and a 1978 graduate of Franklin University, in
12 Columbus, Ohio, with a Bachelor of Science, Engineering Technology. My
13 professional experience includes a career in the United States Air Force and over
14 22 years of utility regulatory experience with the OCC.

15

16 Initially, I served as a Compliance Specialist with the OCC and my duties
17 included the development of compliance programs for electric, natural gas, and
18 water industries. Later, I was designated to manage all of the agency's specialists
19 who were developing compliance programs in each of the utility industries. My
20 role evolved into the management of OCC's consumer hotline, the direct service
21 provided to consumers to resolve complaints and inquiries that involved Ohio
22 utilities. More recently, following a stint as a Consumer Protection Research

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1 Analyst, I was promoted to a Senior Utility Consumer Policy Analyst. In this
2 role, I am responsible for developing and recommending policy positions on
3 utility issues that affect residential consumers.

4

5 I have been directly involved in the development of policy issues that impact
6 Ohio residential utility consumers involving natural gas, electric, water, and
7 telecommunications for many years. Specific to this proceeding, I have been
8 involved in the Public Utilities Commission of Ohio's ("PUCO") rulemaking
9 proceedings¹ where service quality standards were established pursuant to Ohio
10 law for ensuring that Ohio customers are provided with safe, reliable and
11 reasonably priced electric service.² In addition, I have been involved in the cases
12 where the specific reliability indices were established for measuring reliability
13 performance for all of the Ohio electric distribution utilities including Duke
14 Energy Ohio ("Duke" or "Utility").³ And I have been involved in the analysis of

¹ *In the Matter of the Commission's Review of Chapters 4901:1-9, 4901:1-10, 4901:1-21, 4901:1-22, 4901:1-23, 4901:1-24, and 4901:1-25 of the Ohio Administrative Code.*, Case No. 06-653-EL-ORD, Finding and Order (November 5, 2008). *In the Matter of the Commission's Review of Chapter 4901:1-10, Ohio Administrative Code, Regarding Electric Companies.* Case No. 12-2050-EL-ORD, Finding and Order (January 15, 2014).

² Ohio Revised Code 4928.11(A).

³ *In the Matter of Duke Energy Ohio, Inc.'s Application for Approval of Proposed Reliability Standards*, Case No. 09-757-EL-ESS, Opinion and Order (July 29, 2010). *In the Matter of the Application of Duke Energy Ohio, Inc., to Establish Reliability Targets*, Case No. 13-1539-EL-ESS, Opinion and Order June 28, 2013).

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1 Duke's most recent proposal to modify its minimum distribution reliability
2 performance standards.⁴

3
4 I have also been involved in the analysis of distribution modernization riders
5 proposed by the different Ohio electric utilities to help promote sufficient benefit
6 to consumers to warrant the additional charges on the electric bill. This includes
7 the Duke Distribution Capital Investment ("DCI") rider that was previously
8 authorized by the PUCO.⁵ Finally, my experience includes reviewing issues
9 related to the emergence of the competitive retail electric and gas markets in Ohio
10 and potential impacts on consumers. This includes review of riders that are used
11 for tracking uncollectible debt and purchase of receivables programs.

12
13 In this proceeding, I have assisted in the review of Duke's application to establish
14 new distribution base rates and the testimony of some Duke witnesses, Duke's
15 application to establish an electric security plan and the testimony of multiple
16 witnesses, and Duke's application to establish minimum reliability performance
17 standards. I also reviewed the PUCO Staff Report filed in the rate case, annual
18 reliability performance reports, annual system improvement plan reports, Duke

⁴ *In the Matter of the Application of Duke Energy Ohio, Inc. to Establish Minimum Reliability Performance Standards Pursuant to Chapter 4901:1-10, Ohio Administrative Code, Case 16-1602-EL-ESS Application (July 22, 2016).*

⁵ *In the Matter of Application of Duke Energy Ohio, Inc. for Authority to Establish a Standard Service Offer Pursuant to R.C.4928.143 in the Form of an Electric Security Plan, Accounting Modifications, and Tariffs for Generation Service, Case No. 14-841-EL-SSO, Opinion and Order (April 2, 2015).*

1 response to numerous interrogatories, and the Joint Stipulation and
2 Recommendation, hereafter referred to as “The Settlement.”
3

4 ***Q3. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY OR TESTIFIED***
5 ***BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO?***

6 ***A3.*** Yes. The cases that I have submitted testimony and/or have testified before the
7 PUCO can be found in Attachment JDW-1.
8

9 **II. SUMMARY OF MY TESTIMONY**
10

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

13 ***A4.*** The purpose of my testimony is to oppose certain provisions in the stipulation and
14 recommendation (“The Settlement”) between the PUCO Staff, Duke and some
15 other parties. In doing so, I will also support several of the OCC’s Objections to
16 the PUCO Staff Report of Investigation in this proceeding. Specifically, I provide
17 testimony supporting OCC Objection 1 related to Staff’s unreasonable support
18 and unlawful continuation of Rider DCI past May 31, 2018. Additionally, I
19 provide testimony supporting OCC Objection 9 regarding continuation of the
20 current purchase of receivables program.

1 ***Q5. PLEASE DESCRIBE THE PROVISIONS IN THE SETTLEMENT***
2 ***ADDRESSED IN YOUR TESTIMONY.***

3 ***A5.*** This Settlement, if approved by the PUCO, encourages the provision of unsafe
4 and unreliable service to Duke customers; while rewarding the Utility with the
5 ability to impose hundreds of millions of dollars in new and unsupported charges
6 on customers:

- 7 1) The Settlement eliminates any penalties associated with
8 Duke's failure to provide safe and reliable service to its
9 customers in 2016 and 2017;
- 10 2) The Settlement establishes reliability standards for 2018
11 that contradict Ohio law and PUCO orders which results in
12 customers having less reliable service with more frequent
13 and longer outages;
- 14 3) The Settlement establishes minimum reliability performance
15 standards for 2019 through 2025 that are not just and
16 reasonable, are not aligned with customer expectations and
17 lack definition and support;
- 18 4) Without regard for reliability, the Settlement permits Duke
19 to charge customers for over \$623 million in additional
20 charges through the continuation and expansion of the DCI
21 rider between 2018 and 2025;

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- 1 5) While reliability worsens for customers, the Settlement
2 enables Duke to establish a new rider to charge customers
3 an additional \$10 million annually for vegetation
4 management beyond the \$10.7 million test year expense
5 that was proposed in the rate case;
6 6) And while practically doubling the amount of money
7 customers pay Duke for annual tree-trimming, the
8 Settlement permits Duke to trim trees less frequently,
9 which can result in more outages for customers;
10 7) Finally, the Settlement enables Duke to retroactively charge
11 customers for additional tree-trimming costs.

12
13 ***Q6. PLEASE SUMMARIZE YOUR RECOMMENDATIONS.***

14 ***A6.*** I recommend that the PUCO reject the Settlement signed by the PUCO Staff,
15 Duke, City of Cincinnati, Ohio Energy Group the Ohio Hospital Association,
16 People Working Cooperatively, and the Ohio Partners for Affordable Energy
17 ("OPAE") because it violates all three prongs of the test that the PUCO uses in
18 evaluating settlements.

19
20 First, the Settlement, if approved by the PUCO, unlawfully rewards Duke for
21 providing unsafe and unreliable service to its customers. The Settlement
22 establishes a dangerous precedent regarding enforcement of reliability

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1 performance standards for the Ohio electric distribution utilities (“EDU’s”). The
2 reliability standards as proposed in the Settlement for 2018 through 2025 are
3 unjust and unreasonable lacking substance, definition, or support. In addition, the
4 lack of any specific methodology (as required by Ohio Adm. Code 4901:1-10-
5 10(B)) in the establishment of the standards makes future performance
6 evaluations and enforcement difficult if not impossible.

7

8 Second, the Settlement allows Duke to continue and expand the Rider DCI which
9 is unwarranted and likely will result in unreasonably priced retail electric service,
10 contrary to state policy. The dismal performance of the Rider DCI to provide
11 more reliable service over the last three years (as undeniably demonstrated in
12 Duke’s poor reliability performance) speaks volumes for why this massive drain
13 on customer wallets must end immediately. After all, DCI as an infrastructure
14 modernization program can only be authorized in an Electric Security Plan
15 (“ESP”) after the PUCO finds that there is an alignment between customer and
16 EDU expectations regarding reliability. The Settlement if approved by the PUCO
17 provides a blank check to the Utility that permits Duke to collect money from
18 customers to replace smart meters that were just deployed, battery storage
19 project(s) that are not defined, and to continue and expand the current DCI
20 programs that has made service less reliable for customers. Under the DCI, Duke
21 converts its customers into shareholders by shifting the risks associated with
22 financial investments that do not improve reliability onto its captive customers.

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1 Duke's implementation of its DCI rider is the poster child for why these risks
2 should be borne by shareholders and not customers.

3

4 Third, the Settlement allows Duke to change its vegetation management program
5 in a way that is likely to lead to less reliable service for customers. Duke's four-
6 year cycle-based tree-trimming program should not be amended. The PUCO has
7 long held that a cycle-based vegetation management program is one of the major
8 ways in which outages can be mitigated. The Settlement if approved by the
9 PUCO takes a step backwards in transitioning from a four-year cycle-based
10 vegetation management program to a five-year, cycle-based program.

11 If the PUCO approves the vegetation management rider (which it should not), the
12 expenses should be limited to verifiable incremental expenses to those already
13 collected from customers in base rates after the date in which the PUCO
14 authorizes the rider. And the PUCO should protect customers by limiting the
15 incremental amount of money Duke can collect from customers through the rider
16 in any year that Duke fails to meet its four-year, cycle-based, tree-trimming
17 program or fails to meet its reliability standards.

III. EVALUATION OF THE STIPULATION REGARDING THE THREE-PRONG TEST USED BY THE PUCO FOR JUDGING SETTLEMENTS

Q7. WHAT CRITERIA DOES THE PUCO USUALLY RELY UPON FOR CONSIDERING WHETHER TO ADOPT A STIPULATION?

A7. The PUCO will adopt a settlement only if it meets all three of the criteria below.

The PUCO must analyze the Settlement and decide the following:

1. Is the settlement a product of serious bargaining among capable, knowledgeable parties?
2. Does the settlement, as a package, benefit customers and the public interest?
3. Does the settlement package violate any important regulatory principle or practice?⁶

In addition, to these three criteria, the PUCO also routinely considers whether the parties to the settlement represent diverse interests.

Q8. DOES THE SETTLEMENT FILED IN THIS PROCEEDING MEET ALL THREE CRITERIA?

A8. No. The proposed Settlement fails to meet the three-prong test as I elaborate below.

⁶ *Consumers' Counsel v. Pub. Util. Comm'n.* (1992), 64 Ohio St.3d 123, 126.

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1 ***Q9. IS THE STIPULATION A PRODUCT OF SERIOUS BARGAINING AMONG***
2 ***CAPABLE, KNOWLEDGEABLE PARTIES REPRESENTING DIVERSE***
3 ***INTERESTS?***

4 ***A9.*** No. The settlement is not a product of serious bargaining between capable and
5 knowledgeable parties representing a diversity of interests.⁷ The Settlement is
6 largely an agreement between the PUCO Staff and Duke. But the Settlement fails
7 to adequately consider the impact it will have on customers. The Settlement
8 primarily focuses on the interests of Duke, the self-interests of a few signatory
9 parties, not the diverse interests of customers, including residential customers.
10 This is a particular concern for residential customers who are today receiving
11 unsafe and unreliable service, but must bear the burden of paying a significant
12 portion of the unjust and unreasonable charges associated with the Settlement.
13 Not one signatory party to the Settlement represents only the interests of all
14 residential customers across Duke's service territory.

15
16 Other than PUCO Staff and Duke, there is no other signatory or non-opposing
17 party in this Settlement that is participating in the reliability standards case (16-
18 1602-EL-ESS) or the previous reliability standards case (13-1359-EL-ESS). Yet
19 the Settlement resolves all service quality matters associated with the case directly

⁷ The PUCO takes into account the "diversity of interests" as part of the first part of the stipulation assessment. See *In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company for Authority to Establish a Standard Service Offer*, Case No. 10-388-EL-SSO, Opinion and Order at 48 (August 25, 2010).

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1 impacting residential customers. Duke has failed to provide OCC with even the
2 most basic information that would enable an evaluation of the CAIDI and SAIFI
3 standards as proposed in the Settlement. As shown in the Duke e-mail dated
4 February 8, 2018 (attached herein as JDW-2), during the settlement negotiations,
5 Duke refused to provide information that was needed by OCC, as the
6 knowledgeable party representing residential customers, to evaluate the
7 Settlement. The lack of transparency demonstrates that Duke was not bargaining
8 seriously - - at least with the OCC.

9
10 ***Q10. DO YOU HAVE REASON TO BELIEVE THAT OTHER PARTIES (AND***
11 ***THE PUBLIC IN GENERAL) MAY BE MISINFORMED BY DUKE***
12 ***REGARDING RELIABILITY PERFORMANCE STANDARDS IN 2017 AND***
13 ***2018?***

14 ***A10.*** Yes.

15
16 ***Q11. PLEASE EXPLAIN.***

17 ***A11.*** Duke is required to file by March 31 of each year an annual reliability
18 performance report pursuant to O.R.C. 4928.11(A) and PUCO rules in Ohio Adm.
19 Code 4901:1-10-01(C) that provides the reliability performance for the previous
20 year. This annual reliability report provides a comparison of the actual SAIFI and
21 CAIDI reliability performance with the SAIFI and CAIDI standards. On March
22 28, 2018, Duke filed its annual reliability report for 2017 in Case 17-0994-EL-

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1 ESS (attached herein as JDW-3). Duke's report shows the CAIDI performance
2 standard for 2017 as 122.81 minutes and the actual performance excluding major
3 events to be 127.28 minutes. Duke's report shows the SAIFI performance
4 standard for 2017 to be 1.05 and the actual performance excluding major events to
5 be 1.16. Duke missed both of its reliability performance standards in 2017. And
6 Duke missed its CAIDI performance standard in 2016 where the standard was
7 122.81 minutes and the actual performance was 136.42 minutes.⁸ Duke's failure
8 to meet its CAIDI reliability standard in 2016 and 2017 is a violation of Ohio
9 Adm. Code 4901:1-10-10(E) which states, "Failure to meet the same performance
10 standard for two consecutive years shall constitute a violation of this rule."

11
12 Duke's Annual Reliability Report for 2017 included a note that states:⁹

13 *There is currently no agreed-upon CAIDI and SAIFI performance*
14 *standards for Duke Energy Ohio. The numbers entered for CAIDI*
15 *and SAIFI performance standards are the previously agreed-upon*
16 *standards that ended in 2016.*

⁸ *In the Matter of the Annual Report of Electric Distribution System Reliability Pursuant to Rule 4901:1-10-10(C)*, Case No. 17-760-EL-ESS, March 30, 2017.

⁹ JDW-3 (at page 2).

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1 ***Q12. IS DUKE'S STATEMENT THAT THERE WAS NO AGREED UPON***
2 ***RELIABILITY PERFORMANCE STANDARD IN 2017 ACCURATE?***

3 ***A12.*** Absolutely not. O.R.C. 4928.11(A) requires each EDU to have reliability
4 standards. The 2016 reliability standards were established in Case No. 13-1539-
5 EL-ESS in which the OCC, Staff, and Duke were parties. By Entry dated
6 September 18, 2017 in Case No. 16-1602-EL-ESS, the attorney examiner honored
7 one of many requests made by Duke to continue the hearing. And the attorney
8 examiner made abundantly clear that the 2016 reliability standards would remain
9 in effect until such time as the PUCO orders otherwise.¹⁰

10

11 ***Q13. DID DUKE DISAGREE WITH THE AE RULING THAT THE 2016***
12 ***RELIABILITY STANDARDS WERE CONTINUED UNTIL NEW***
13 ***STANDARDS WERE ESTABLISHED BY THE PUCO?***

14 ***A13.*** No. A review of the docket card attached herein as JDW-4 revealed Duke did not
15 file an interlocutory appeal or any other pleading opposing or disagreeing with the
16 attorney examiners ruling.

¹⁰ Case No. 16-1602-EL-ESS, AE Entry (September 18, 2017 at 2)

1 ***Q14. SO THE RELIABILITY STANDARDS THAT WERE AGREED UPON BY***
2 ***OCC, STAFF, AND DUKE IN CASE NO. 13-1539-EL-ESS ARE THE***
3 ***RELIABILITY STANDARDS THAT WERE IN EFFECT IN 2017 AND THAT***
4 ***REMAIN IN EFFECT TODAY?***

5 ***A14.*** That is correct.

6

7 ***Q15. IS DUKE'S STATEMENT IN ITS PUBLICLY FILED RELIABILITY***
8 ***REPORT FOR 2017 ACCURATE?***

9 ***A15.*** I don't believe so. On May 18, 2018, Duke provided a letter including an action
10 plan that was required under O.A.C. 4901:1-10-10(D) associated with the missed
11 SAIFI and CAIDI reliability performance standards in 2017. The letter and 2017
12 Action Plan were provided to OCC in response to STIP-INT-03-039 (attached
13 herein as JDW-5). The letter was apparently provided to Staff in response to an
14 April 10, 2018 e-mail (attached herein as JDW-6) from Staff that was citing
15 Duke's failure to comply with reliability performance standards in 2017.

16

17 Duke made numerous statements in the letter that are factually incorrect. First,
18 Duke claimed that the 2017 reliability standards were not resolved. The letter
19 specifically says:

20 "As Duke Energy Ohio's application to establish compliance
21 standards is still pending, there remains an unresolved question as
22 to what standards pertain."

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1 The Attorney Examiner Entry makes it abundantly clear that the there are no
2 unresolved questions regarding the reliability standards that were in effect last
3 year and that are in effect right now. Second, the letter claims that Duke and the
4 PUCO Staff have developed a plan that includes increased investment in
5 reliability and a provision that non-compliance for 2016 and 2017 will not be used
6 to determine a penalty. But the signatory parties (including the Service
7 Monitoring Enforcement Department (“SMED”) were apparently not included in
8 the reliability planning or in the determination that the PUCO Staff would not
9 enforce Duke’s reliability standards. The letter is informing the Director of
10 SMED that the reliability standards in 2016 and 2017 will not be enforced. Yet,
11 SMED is the department that handles reliability and enforcement of the PUCO
12 standards under Ohio Adm. Code 4901:1-10-10. Duke than informed the Director
13 SMED that the Utility met the 2017 CAIDI standard when in fact it didn’t.
14 Duke’s letter claims:

15 “...the Company did meet the Customer Average Interruption
16 Duration Index (CAIDI) standard for 2017, but narrowly missed on
17 the System Average Interruption Frequency Index (SAIFI).”

18
19 Duke’s CAIDI standard for 2017 was 122.81 minutes. Duke’s reliability
20 performance was 127.28 minutes meaning that Duke undeniably missed its 2017
21 CAIDI standard by almost five minutes. Duke also missed its 2017 SAIFI
22 reliability standard. Duke’s inclusion of the provision in the Settlement that

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1 non-compliance in 2016 and 2017 would not be used to penalize the Utility would
2 seem to confirm Duke's knowledge of the missed standards.

3

4 ***Q16. DO YOU HAVE OTHER CONCERNS RELATED TO THE 2018***

5 ***RELIABILITY STANDARDS IN THE MAY 8, 2018 LETTER TO STAFF?***

6 ***A16.*** Yes. The letter informs the Director SMED that the "Company has set its goals
7 for achievement of compliance in 2018 in order to comply with the terms of the
8 Stipulation." The Settlement supports a CAIDI standard of 134.34 in 2018 and a
9 SAIFI of 1.12. The AE Entry¹¹ in Case 16-1602-EL-ESS had directed Duke to
10 continue the 2016 reliability standards until such time as the PUCO orders
11 otherwise. And the AE Entry adopted a Staff recommendation that it was not
12 opposed to continuing the hearing provided that Duke comply with the reliability
13 standards established in Case No. 13-1539-EL-ESS.¹² Duke appears to be now
14 managing and maintaining its distribution system in accordance with its proposed
15 Settlement standards when in fact Duke was directed to continue with the
16 standards approved in 2016.

17

18 The PUCO has not adopted this Settlement and OCC recommends that it not be
19 adopted. Duke is required to maintain its system in 2018 to comply with a 122.81

¹¹ Case No. 16-1602-EL-ESS, Attorney Examiner Entry (September 18, 2017).

¹² Case No. 16-1602-EL-ESS, Memorandum Contra Motion of Duke Energy Ohio, Inc. to Continue the Hearing Set for September 26, 2017 Submitted on Behalf of the Staff of the Public Utilities Commission of Ohio, (September 13, 2017).

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1 CAIDI standard and a 1.05 SAIFI. While Duke may want to adopt the less
2 stringent reliability standards reflected in the settlement for 2018, it does not have
3 the authority to do so. And to the extent that Duke is monitoring and maintaining
4 its distribution system to the less stringent 134.34 minute CAIDI and 1.12 SAIFI
5 reflected in the settlement, the Utility is not complying with R.C. 4928.11(A) and
6 PUCO orders and would be furnishing customers with inadequate, unsafe, and
7 unreliable service today.

8
9 ***Q17. CAN YOU EXPLAIN THE PURPOSE OF THE ACTION PLANS THAT ARE***
10 ***SUBMITTED TO THE PUCO STAFF ASSOCIATED WITH MISSING***
11 ***RELIABILITY STANDARDS?***

12 ***A17.*** Yes. Ohio Adm. Code 4901:1-10-10(D) requires if a Utility does not meet the
13 annual reliability performance standards, an action plan will be submitted to the
14 PUCO SMED Department. The action plan must contain an explanation of the
15 factors that contributed to the failure, a proposal for improving the reliability
16 performance, and status updates as required by Staff. A copy of the letter/ action
17 plan that was submitted to the PUCO Staff associated with the missed 2016
18 CAIDI standard is attached herein as JDW-7. As can be seen in JDW-7, Duke
19 made a number of proposals for improving reliability performance to the required
20 level. However, Duke's action plan was inadequate given the Utility missed the
21 CAIDI standard again in 2017. There is no documentation that Duke kept the

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1 PUCO Staff informed about the implementation of the 2016 action plan.¹³ And
2 there is no indication that an investigation was conducted by Staff regarding the
3 ineffective 2016 action plan.

4

5 ***Q18. WHEN CONFRONTED BY OCC, IS DUKE NOW DISAVOWING MUCH OF***
6 ***THE INFORMATION CONTAINED IN THE MAY 8, 2018 LETTER TO***
7 ***STAFF?***

8 ***A18.*** Yes. OCC inquired in OCC STP-INT-06-141 (attached herein as JDW-9) about
9 several statements made in the May 8, 2018 letter. First, OCC inquired about the
10 CAIDI standard that was purportedly met by Duke in 2017 and Duke responded
11 that:

12 The Company did not have standards pertaining to 2017 as the
13 Company's application to establish new standards is still
14 pending.¹⁴

15

16 OCC inquired about the SAIFI standard that was "narrowly missed in 2017 and
17 Duke responded:

¹³ Duke Response to OCC STIP POD 03-040 (attached herein as JDW-8).

¹⁴ JDW-8 (at a).

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1 This response to the Commission Staff was in error since there
2 were no standards established at that time.¹⁵

3
4 OCC inquired about the person(s) from the PUCO Staff and Duke that were part
5 of the purported discussion involving the Utility meeting the CAIDI standard for
6 2017, narrowly missing SAIFI, the date of the discussions, and other
7 communications. And Duke responded that:

8 The correspondence was produced. There was no additional
9 discussion.¹⁶

10
11 OCC inquired if the PUCO had issued any entry or order approving reliability
12 standards for 2016 and 2017?

13 Duke responded by citing the Opinion and Order for Case No. 13-
14 1539-EL-ESS in which OCC was a signatory party.¹⁷

15
16 ***Q19. DID DUKE REFERENCE THE SEPTEMBER 18, 2017 AE ENTRY IN CASE***
17 ***16-1602-EL-ESS IN WHICH THE EXISTING STANDARDS WERE***
18 ***CONTINUED UNTIL NEW STANDARDS WERE ESTABLISHED?***

19 ***A19.*** No.

¹⁵ JDW-8 (at b).

¹⁶ JDW-9.

¹⁷ *Id.*

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1 ***Q20. WOULD IT BE UNLAWFUL FOR DUKE TO NOT HAVE HAD APPROVED***
2 ***RELIABILITY STANDARDS IN 2017?***

3
4 ***A20.*** Yes. My understanding of Ohio Revised Code 4928.11(A) is that it specifically
5 requires for the protection of consumers in the state, that the PUCO establish rules
6 to specify the minimum service quality, safety, and reliability requirements for
7 noncompetitive retail electric service. Furthermore, R.C. 4928.11(B) requires
8 each electric utility to report annually to the commission on and after the starting
9 date of competitive retail electric service, its compliance with the rules. As the
10 PUCO Staff had correctly concluded in the April 18, 2018 e-mail (JDW-6), Duke
11 missed the 2017 reliability standards.

12
13 ***Q21. ARE ALL OF THE SIGNATORY PARTIES KNOWLEDGABLE ABOUT THE***
14 ***RELIABILITY PROVISIONS IN THE SETTLEMENT?***

15 ***A21.*** No. In providing support for the Settlement, Mr. Wathen claims that “The
16 Stipulation should be viewed as a global settlement of all the cases and, for each
17 signatory party, the individual concessions or benefits should not be viewed
18 independently but, only as part of a global settlement.”¹⁸ But the Settlement
19 includes matters that go well beyond the matters addressed in the ten cases. As I
20 explained earlier, Duke has failed to acknowledge that it provided unreliable
21 service to customers in 2016 and 2017 as demonstrated by its failure to meet the

¹⁸ Wathen at 2-3.

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1 minimum the reliability performance standards. This matter should be addressed
2 as part of a compliance proceeding under R.C. 4928.16 that the PUCO has yet to
3 initiate. Duke's inclusion of a provision in the settlement stating "Duke Energy
4 Ohio's Customer Average Interruption Duration Index (CAIDI) and System
5 Average Interruption Frequency Index (SAIFI) performance for 2016 and 2017,
6 will not be used to determine any penalty for non-compliance with Ohio Adm.
7 Code 4901:1-10-10(E) is an attempt to avoid any consequences from its failure to
8 meet 2016 and 2017 reliability standards.¹⁹

9
10 The reliability standards case (16-1602-EL-ESS) involves an application to
11 establish future reliability standards and has nothing to do with the enforcement of
12 continued reliability standards from Case No. 13-1539-EL-ESS. Any benefit or
13 concession associated with the PUCO not enforcing the reliability standards for
14 2016 and 2017 has nothing to do with the cases included in the global settlement.
15 Signatory parties in this Settlement that may be are unaware of Dukes reliability
16 performance during 2016 and 2017 lack sufficient knowledge to represent
17 residential customers whose health and safety are being placed at risk because
18 Duke is failing to manage its distribution system in accordance with the reliability
19 standards set by the PUCO. Signatory parties in this Settlement, who may not
20 have knowledge of the process for establishing reliability standards, should not be

¹⁹ Settlement at 13.

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1 agreeing to establish standards that determine system reliability that residential
2 customers will receive in the future.

3

4 ***Q22. ARE RESIDENTIAL CUSTOMERS' INTERESTS REPRESENTED IN THIS***
5 ***SETTLEMENT?***

6 ***A22.*** I don't believe so.

7

8 The PUCO should find that settling a case that gives Duke hundreds of millions
9 of dollars while not enforcing existing reliability standards and then relaxing
10 future reliability standards violates the PUCO settlement standard because the
11 potential harm to consumers is not in the public interest as discussed below. The
12 provision of safe and reliable electric service to protect the health and safety for
13 Ohio residential customers must never be compromised or sacrificed.

14

15 ***Q23. DOES THE SETTLEMENT, AS A PACKAGE, BENEFIT***
16 ***CUSTOMERS AND THE PUBLIC INTEREST?***

17 ***A23.*** No. The Settlement provisions to continue and expand the DCI rider through May
18 31, 2025 is not in the public interest.

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1 **Q24. CAN YOU BRIEFLY EXPLAIN THE PURPOSE OF THE CURRENT DCI**
2 **RIDER?**

3 **A24.** Yes. The PUCO authorized the DCI rider as a mechanism to enable Duke
4 to collect the incremental revenue requirement on certain plant related
5 distribution investments to prevent reliability performance standards from
6 taking a negative turn.²⁰ And to help ensure that these objectives were
7 met, the PUCO authorized Duke to collect \$169 million from customers
8 through the rider between 2015 and May 31, 2018.²¹ To further
9 emphasize the inseparable relationship between the DCI Rider and
10 reliability, the PUCO specifically stated:

11 *The Commission further finds that the Company is dedicating*
12 *sufficient resources towards reliability. Duke is correct to aspire to*
13 *move from a reactive to a more proactive maintenance program.*
14 *As we have noted with other, similar programs, we believe it is*
15 *detrimental to the state's economy to require the utility to be*
16 *reactionary or allow the performance standards to take a negative*
17 *turn before we encourage the EDU to proactively and efficiently*
18 *replace and modernize infrastructure and, therefore, we find it*
19 *reasonable to permit the recovery of prudently incurred*
20 *distribution infrastructure investment costs...The Commission*

²⁰ Case 14-841-EL-SSO, Opinion and Order, Opinion and Order (April 2, 2015 at 66-72).

²¹ *Id.*

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1 *finds the adoption of Rider DCI and the improved service that will*
2 *come with the replacement of aging infrastructure will facilitate*
3 *improved service reliability and further align the Company's and*
4 *its customers' expectations.*²²

5
6 Given that the purpose of the DCI Rider is to provide customers with
7 improved service reliability, Duke's failure to meet its reliability standards
8 demonstrates conclusively that Duke is not complying with the PUCO
9 objectives for the DCI rider.

10
11 As I will show later in my testimony, despite the additional DCI funding,
12 Duke's reliability performance took that negative turn that motivated the
13 PUCO approval of the rider in the first place. The PUCO approval of an
14 extension, expansion and/or modification of the DCI Rider past May 31,
15 2018 would only serve to reward Duke for providing poor service
16 reliability for its customers. Such an outcome is not in the public interest
17 and would be unjust and unreasonable for customers.

²² Id at page 71-72.

Q25. IS DUKE CONTINUING TO MEET THE SAIFI AND CAIDI RELIABILITY STANDARDS?

A25. No. Table 1 provides a comparison of the current SAIFI and CAIDI reliability standards with Duke's actual performance during the years 2014 through 2017.

Table 1: Duke Reliability (2014 – 2017)

	2014	2015	2016	2017
Standard SAIFI	1.17	1.05	1.05	1.05
Performance SAIFI	.99	1.04	1.05	1.16
Standard CAIDI	121.25	122.81	122.81	122.81
Performance CAIDI	108.28	117.32	136.42	127.28

Table 1 shows the consistent decline in Duke's reliability performance since 2014 (the year prior to DCI). While Duke met its SAIFI reliability standard for 2014 through 2016, Duke failed to meet the SAIFI standard in 2017. The actual SAIFI performance has declined from .99 in 2014 (pre-DCI) to 1.16 in 2017 (post-DCI). SAIFI is a measure of the number (or frequency) of sustained outages that an average customer will experience during a year. There can be no doubt that customers are experiencing more frequent outages on an annual basis since the DCI rider was approved. Table 1 also shows that Duke missed its CAIDI reliability standard by almost 14 minutes in 2016 and by almost five minutes in 2017. While Duke may have met its CAIDI standard in 2014 and 2015, the actual performance declined between 2014 and 2017 to the point where average outage

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1 durations are now 19 minutes longer (post DCI) than they were in 2014 (pre-
2 DCI). Table 1 demonstrates conclusively that Duke customers are having more
3 frequent outages and much longer outage durations since the DCI Rider was
4 approved.

5

6 And considering that the reliability standards are based in part on customer
7 perception survey data,²³ there is no doubt that the alignment of customer and
8 Utility expectations for reliability that supported the PUCO decision to authorize
9 the DCI Rider no longer exists.

10

11 And because the PUCO approved the DCI Rider for the term of the current Duke
12 ESP based on the alignment of customer and Duke's expectations for reliability, it
13 would be unjust and unreasonable for the PUCO to approve the Settlement and
14 greatly expand the amount of money customers spend for this misguided program.

15

16 ***Q26. CAN YOU EXPAND UPON THE PUCO AUTHORIZATION FOR THE DCI***
17 ***RIDER BEING CONDITIONED UPON THE STATUTORY ASSURANCE***
18 ***THAT CUSTOMER AND DUKE EXPECTATIONS REGARDING***
19 ***DISTRIBUTION RELIABILITY PERFORMANCE WERE ALIGNED?***

20 ***A26.*** Yes. As required pursuant to Ohio Revised Code 4928.143(B)(2)(h), the PUCO
21 approved the DCI Rider based on the acceptance of PUCO Staff examination of

²³ Ohio Admin. Code 4901:1-10-10(B)(4)(b).

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1 the reliability of the Duke distribution system. And this examination was required
2 to ensure that, among other things, there was an alignment of the Utility and
3 customer expectations concerning reliability. An excerpt from the PUCO
4 Opinion and Order in the case read:

5 *In deciding whether to approve an ESP that contains any provision*
6 *for distribution service, R.C. 4928.143(B)(2)(h) directs the*
7 *Commission, as part of its determination, to examine the reliability*
8 *of the EDU's distribution system and ensure that customers and the*
9 *EDU's expectations are aligned and that the EDU is placing*
10 *sufficient emphasis on and dedicating sufficient resources to the*
11 *reliability of its distribution system.*²⁴

12
13 The PUCO supported approving the DCI Rider for the three-year term of the ESP
14 (June 1, 2015 – May 31, 2018) because it found that the Duke expectations for
15 reliability were sufficiently aligned with its customers. The PUCO Opinion and
16 Order specifically stated:

17 *The Commission finds that Duke's expectations and customers'*
18 *expectations are sufficiently aligned. In examining the reliability of*
19 *the Company's distribution system, the Commission notes that*
20 *Duke consistently meets the SAIFI and CAIDI standards.*²⁵

²⁴ Case No. 14-841-EL-SSO, Opinion and Order (April 2, 2015 at 71).

²⁵ *Id.*

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1 As noted earlier, Duke has now consistently failed to meet its reliability
2 performance standards since the DCI rider was approved.
3

4 ***Q27. HAS DUKE INACCURATELY REPORTED ON THE CONDITION OF ITS***
5 ***DISTRIBUTION SYSTEM IN ITS ANNUAL SYSTEM IMPROVEMENT***
6 ***PLAN REPORT FILED PURSUANT TO OHIO ADM. CODE 4901:1-10-26?***

7 ***A27.*** Yes. Ohio Adm. Code 4901:1-10-26 requires each electric utility to file an annual
8 report by March 31 each year regarding its compliance with the minimum service
9 quality, safety, and reliability requirements for noncompetitive retail electric
10 services.²⁶ The content is specific and includes substantial information including
11 a qualitative characterization of the condition of the utility distribution system.²⁷
12 Duke filed its annual report pursuant to Ohio Adm. Code 4901:1-10-26(B) for
13 2017 system performance in Case No. 18-999-EL-ESS on March 29, 2018.
14 Duke's characterization of its distribution system is as follows:

15 The condition of the Duke Energy Ohio electric system meets or
16 exceeds industry standards and customer expectations for delivery
17 of safe and reliable electric service. Duke Energy Ohio recognizes
18 that the electric system infrastructure continues to age, and on-
19 going preventive maintenance and corrective actions are necessary.
20 Duke Energy Ohio continues to strive to provide safe and reliable

²⁶ Ohio Adm. Code 4901:1-10-26(A).

²⁷ Ohio Adm. Code 4901:1-10-26(B)(3)(a).

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1 electric service to our customers at a reasonable price. The quality
2 of electric service and the condition of the electric system will
3 parallel each other. Therefore, the quality of electric service can be
4 used to measure the condition of the electric system.²⁸

5
6 While Duke claims that it met reliability standards in 2017, I have already shown
7 that it did not. In addition, this report claims that customer expectations for
8 reliability were met. That is also inaccurate. Customer expectations for reliability
9 were examined by the PUCO Staff prior to initiating the DCI rider in 2015.
10 Dukes failure to meet the minimum reliability performance standards should
11 demonstrate that customers' and Duke's expectations for reliability are not
12 aligned as required under Ohio Revised Code 4928.143(B)(2)(h).

13
14 ***Q28. DID THE STAFF INVESTIGATE THE LACK OF DEMONSTRATED***
15 ***RELIABILITY BENEFITS UNDER THE DCI RIDER?***

16 ***A28.*** Unfortunately not. OCC objected to the Staff Report failure to reasonably
17 examine the impact of the DCI rider on customer reliability. My concern is that
18 the Staff Report recommended continuing the DCI Rider, yet the PUCO Staff
19 recommendation and support for the settlement was reached without performing
20 an evaluation and without providing support for why the rider should be
21 continued. Staff recommended that if the PUCO continues the DCI rider, the

²⁸ Case No. 18-999-EL-ESS, March 29, 2018, page 12.

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1 rider should end on May 31, 2024. Staff further recommended revenue caps
2 totaling over \$331 million dollars between 2018 and May 31, 2024.²⁹ The Staff
3 recommendations to continue the DCI rider is made with no substantive support
4 or facts for consideration of this decision that unnecessarily imposes hundreds of
5 millions of dollars on consumers over the next several years. My concerns with
6 the Staff Report recommendations and Settlement include:

- 7 • Staff supported continuing the DCI rider without
8 examining the Duke distribution system to ensure that
9 Duke and its customer's expectations regarding reliability
10 are aligned as required prior to the approval of an
11 infrastructure modernization program in Ohio Revised
12 Code 4928.143(B)(2)(h).³⁰
- 13 • Staff supported continuing the DCI rider without
14 performing an analysis of the cost effectiveness and
15 benefits of the programs that were previously authorized by
16 the PUCO.³¹

²⁹ The Staff Report recommended revenues caps for the DCI rider at the following level: \$14 million for 2018 (full year); \$28 million for 2019, \$42 million for 2020, \$56 million for 2021, \$69 million for 2022, \$83 million for 2023, and \$41 million through May 31, 2024.

³⁰ Staff Report at 9-10.

³¹ *Id.*

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- 1 • Staff supported continuing the DCI rider without
2 examining the cost effectiveness and benefits of new
3 programs that Duke now proposes.³²
- 4 • Staff supported continuing the DCI rider without
5 recommending that customers be shielded from paying
6 unreasonable costs associated with the “Business
7 Continuity Effort” and an AMI Transition Plan involving
8 Duke’s smart grid program.³³
- 9 • Staff supported continuing the rider DCI without
10 considering the impact that the proposed revenue spending
11 caps will have on customer bills and overall affordability of
12 service.³⁴

13

14 ***Q29. CAN YOU BRIEFLY EXPLAIN WHY STAFF SHOULD HAVE EXAMINED***
15 ***THE RELIABILITY OF THE DUKE DISTRIBUTION SYSTEM BEFORE***
16 ***ESSENTIALLY RECOMMENDING CONTINUATION OF THE DCI***
17 ***RIDER?***

18 ***A29.*** Yes. The PUCO authorized the DCI Rider in Duke’s current ESP, and this ESP
19 was scheduled to expire on May 31, 2018. As outlined in Ohio Revised Code

³² *Id.*

³³ *Id.*

³⁴ *Id.*

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1 4928.143(B)(2)(h), PUCO approval of the DCI rider was based on an acceptance
2 of an examination of the reliability of the Duke distribution system. Performance
3 ratemaking incentives like the DCI rider benefit Duke by expediting the collection
4 of investment costs. However, the DCI rider is also intended to benefit
5 customers. And this examination of Duke's distribution system was to ensure that
6 among other things, Utility and customer expectations concerning reliability were
7 aligned. An excerpt from the PUCO Opinion and Order in the case said:

8 *In deciding whether to approve an ESP that contains any provision*
9 *for distribution service, R.C. 4928.143(B)(2)(h) directs the*
10 *Commission, as part of its determination, to examine the reliability*
11 *of the EDU's distribution system and ensure that customers and the*
12 *EDU's expectations are aligned and that the EDU is placing*
13 *sufficient emphasis on and dedicating sufficient resources to the*
14 *reliability of its distribution system.*³⁵

15
16 The PUCO supported approving the DCI rider for the term of the ESP because it
17 found that Duke's expectations for reliability were sufficiently aligned. The
18 Opinion and Order specifically stated:

19 *The Commission finds that Duke's expectations and customers'*
20 *expectations are sufficiently aligned. In examining the reliability of*

³⁵ Case No. 14-841-EL-SSO, Opinion and Order (April 2, 2015) at 71.

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1 *the Company's distribution system, the Commission notes that*
2 *Duke consistently meets the SAIFI and CAIDI standards.*³⁶

3
4 SAIFI represents the average number (frequency) of interruptions per year.³⁷
5 Customer average interruption duration index CAIDI represents the average time
6 to restore service (outage duration).³⁸ These two standards represent the
7 minimum acceptable reliability that customers have a right to receive.

8
9 ***Q30. DID THE PUCO STAFF EXAMINE WHY THE PROGRAMS INCLUDED IN***
10 ***THE DCI RIDER WERE NOT CONTRIBUTING TO BETTER***
11 ***RELIABILITY?***

12 ***A30.*** No. The Staff Report and the Settlement were silent on this topic. However, Staff
13 should have conducted an examination into the Utility's reliability. The PUCO
14 authorized the DCI rider based on a specific representation by that there were 19
15 programs that Duke considered vital to maintaining customer reliability.³⁹
16 According to the Duke response to OCC-INT-04-090, attached as JDW-10, a
17 listing of the 19 programs supported by the DCI rider. As can be seen in JDW-10,
18 the projected expenditures for these programs between 2015 and 2018 is well over
19 \$250 million. And considering that the Duke reliability has actually degraded not

³⁶ *Id.*

³⁷ Ohio Admin. Code 4901:1-10-10(B)(1).

³⁸ *Id.*

³⁹ Case 14-841-EL-SSO, Opinion and Order (April 2, 2015 at 66).

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1 improved, the prudence and the usefulness of the investments that Duke is
2 collecting through the DCI investments should have been examined by Staff.
3 And this examination should have been included in the Staff Report given that
4 Staff is recommending continuing the rider.

5
6 ***Q31. DID THE STAFF EXAMINE NEW PROGRAMS THAT DUKE IS***
7 ***PROPOSING TO FUND THROUGH THE DCI RIDER?***

8 ***A31.*** Again the Staff Report and settlement were silent. Duke proposed two new
9 programs to be funded through the DCI Rider. These programs are titled Self-
10 Optimizing Grid and Targeted Undergrounding.⁴⁰ Duke intends to spend an
11 additional \$10 million annually for the self-optimizing grid over the next six
12 years.⁴¹ Additionally, Duke intends to spend another \$70 million between 2018
13 and 2022 for the targeted undergrounding program. Both of these programs
14 would result in increases in the DCI rider charges that will be passed onto
15 customers. Yet, Staff performed no analysis of the projected impact these
16 programs would have on customer reliability. Neither program should be initiated
17 through these proceedings. Furthermore, customers should not be required to pay
18 for either program until and unless an evaluation is performed that demonstrates
19 conclusively that the DCI programs will have a positive impact on improving the
20 SAIFI and CAIDI reliability standards.

⁴⁰ Direct Testimony of Cicely Hart.

⁴¹ *Id.* at 12.

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1 Self-healing teams are intended to automatically reroute power during an
2 outage event so that fewer customers are interrupted. Duke installed 30
3 self-healing teams as part of the Duke smart grid program. Another three
4 self-healing teams were installed in 2016 funded through the DCI rider.
5 These self-healing teams have not operated successfully when they were
6 called upon to operate as shown in Table 3.

7 **Table 2: Self-Healing Team Performance**⁴²
8

	Self-Healing Teams	# of Operations	# Successful Operations	Failed Operations	Success Rate
2011	17	8	8		-
2012	24	10	10		-
2013	30	42	27	15	64%
2014	30	75	55	20	73%
2015	30	82	69	19	84%
2016	33	109	88	21	80%

9
10 As can be seen in Table 3, the self-healing teams operated successfully about 80%
11 of the time when they were called upon in 2016. Duke did not track self-healing
12 team performance in 2017.⁴³ The success rate in many of the other years was
13 even worse. While my understanding is that the self-optimizing grid is different
14 from self-healing teams, I believe that the application of the distribution
15 automation technology used in both should be demonstrated to be used and useful
16 with a much higher success rate before customers are burdened with any
17 additional costs. In Case No. 14-1051-GE-RDR, the PUCO did not accept a

⁴² Duke Energy Ohio SmartGrid Non-Financial Meters 2016 Annual Report (Attached herein as JDW-11).

⁴³ According to the Duke response to OCC-POD-06-050 (attached herein as JDW-12).

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1 recommendation tying collection of costs associated with self-healing teams to at
2 least a 90 percent success rate.⁴⁴ While the performance of the self-healing teams
3 may have marginally improved since that time, customers should not be required
4 to pay for imprudent investments that Duke is making in equipment that is not
5 proving to be used or useful. Further deployments of self-healing teams and/or
6 self-optimizing grid should demonstrate specific performance requirements before
7 costs are collected from customers.

8

9 ***Q32. HOW WAS THE DCI RIDER ADDRESSED IN THE SETTLEMENT***
10 ***BETWEEN THE PUCO STAFF, DUKE, AND SOME SIGNATORY***
11 ***PARTIES?***

12 ***A32.*** The Settlement supported extending the DCI rider through May 31, 2025. The
13 revenue caps were significantly increased from the \$333 million that Staff
14 implicitly supported in the Staff Report to over \$623 million⁴⁵ between 2018 and
15 2025 under the Settlement.

⁴⁴ *In the Matter of the Application of Duke Energy Ohio, Inc. to Adjust Rider DR-IM and Rider AU for 2013 SmartGrid Costs.* Case No. 14-1051-GE-RDR, Opinion and Order (April 8, 2015 at 6).

⁴⁵ According to the Settlement at page 11, the revenue cap for 2018 is \$32 million, 2019 is \$42.1 million, 2020 is \$56.1 million, 2021 through 2024 the DCI revenue cap will be increased an additional \$18.7 million each year, 2025 is \$62.4 million.

1 **Q33. DID STAFF PERFORM ANY ANALYSIS OF THE SETTLEMENT, THE**
2 **COST EFFECTIVENESS, OR RELIABILITY IMPACT ASSOCIATED WITH**
3 **THE \$623 MILLION DCI RIDER?**

4 **Q33.** No. The Settlement merely requires Duke to work with the Staff to develop an
5 annual plan to emphasize proactive distribution maintenance.⁴⁶ And the plan is
6 supposed to include identification of expenditures that will help reduce customer
7 minutes interrupted.⁴⁷ There is no requirement for the DCI work plan to quantify
8 or verify reliability impacts on an annual basis. The annual audit identified in the
9 Settlement⁴⁸ is a financial audit and does not evaluate if programs being
10 implemented as part of the DCI work plan are benefiting customers. The plan
11 will not be submitted to Staff until December 1, 2019 and each December
12 thereafter.⁴⁹ Yet customers under the Settlement are required to pay for the DCI
13 well before the plan is even drafted.⁵⁰ Furthermore, the plan is not publicly filed,
14 and Duke is not making copies available to parties other than Staff.⁵¹ Therefore,
15 other parties will not have the opportunity to question the work plan, the priority
16 of spending under the plan, or to contest the lack of quantified benefits to the
17 PUCO.

⁴⁶ Settlement at page 14.

⁴⁷ *Id.*

⁴⁸ Settlement at 11.

⁴⁹ *Id.*

⁵⁰ Duke response to OCC STIP INT-02-008 (attached herein as JDW-13).

⁵¹ *Id.*

Q34. WHAT ARE THE RELIABILITY STANDARDS THAT WERE AGREED UPON BY THE PUCO STAFF, DUKE, AND THE OTHER SIGNATORY PARTIES IN THE SETTLEMENT?

A34. If approved by the PUCO, the agreed upon CAIDI and SAIFI standards for 2018 through 2025 are:

<u>Year</u>	<u>CAIDI</u>	<u>SAIFI</u>
2018	134.34	1.12
2019	134.34	1.00
2020	134.34	0.91
2021	134.34	0.83
2022	135.52	0.83
2023-2025	137.00	0.75

Q35. IS DUKE REQUIRED TO MEET THE RELIABILITY PERFORMANCE STANDARDS BETWEEN 2018 AND 2025 AS A CONDITION FOR CHARGING CUSTOMERS FOR INVESTMENTS BEING COLLECTED THROUGH THE DCI RIDER?

A35. No. Duke's reliability performance has no impact on the revenue caps. However, by meeting the minimum reliability performance standards in 2018, Duke can be eligible to increase the revenue cap by an additional \$4.7 million for 2019 from \$42.1 million to \$46.8 million. By meeting the minimum reliability performance

1 standards in 2019, the Utility would be able to increase the revenue cap by an
2 additional \$4.7 million for 2020 from \$56.1 million to \$60.8 million.

3

4 ***Q36. ARE THE PROPOSED RELIABILITY STANDARDS IN THE***
5 ***SETTLEMENT REFLECTIVE OF RESIDENTIAL CUSTOMERS'***
6 ***EXPECTATIONS FOR RELIABILITY?***

7 ***A36.*** No. Based on a recent customer perception survey, the vast majority of Duke
8 residential customers consider 2-3 interruptions of more than 5 minutes per year
9 as being acceptable.⁵² The vast majority of customers consider an acceptable
10 duration for a non-storm related outage to be less than two hours.⁵³ The reliability
11 standards proposed under the settlement support much longer outage durations
12 than considered acceptable by customers.

13

14 ***Q37. ARE THERE ANY OTHER ENFORCEMENT MECHANISMS ADDRESSED***
15 ***IN THE SETTLEMENT IF THE COMPANY FAILS TO MEET THE***
16 ***AGREED UPON RELIABILITY PERFORMANCE STANDARDS?***

17 ***A37.*** No.⁵⁴ Customers are required to pay the DCI rider even if Duke fails to meet its
18 reliability performance standards between 2018 and 2025.

⁵² Case No. 16-1602-EL-ESS, Duke response to OCC-POD-01-002(b) (attached herein as JDW-14).

⁵³ *Id.*

⁵⁴ Duke response to OCC STIP INT-02-006 (attached herein as JDW-15).

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1 ***Q38. ARE THERE OTHER REASONS THE PUCO SHOULD CONSIDER IN***
2 ***ENDING THE DCI RIDER IMMEDIATELY?***

3 ***A38.*** Yes. Duke revealed in the Direct Testimony of Mr. Don Schneider that the Utility
4 is replacing 80,000 Echelon meters with Itron meters as part of an effort to sustain
5 its failing smart grid program. The total capital expense planned for replacing the
6 80,000 Echelon meters is just over \$10 million. Based on the Duke response to
7 OCC INT-09-184 (attached as JDW-16), Duke contends that if the capital costs
8 are in FERC distribution capital accounts, they will be included in Rider DCI.

9
10 Furthermore, the PUCO Staff, Duke and signatory parties agreed that Duke could
11 spend up to \$20 million through the DCI rider to install a battery storage
12 project(s) for the purpose of deferring circuit investments or addressing
13 distribution reliability issues. Duke has provided no further support for the \$20
14 million investment. Furthermore, Duke has provided no assurance that the battery
15 storage project(s) will support reliability improvement on the distribution system.
16 And Duke intends to install the battery storage project to “show the value of
17 distributed battery storage can provide to the grid.”⁵⁵

18
19 Duke has not demonstrated that the battery storage project is an infrastructure
20 modernization program as required pursuant to O.R.C. 4928.143(B)(2)(h).

21 Furthermore, there has been no Staff examination of the Duke distribution system

⁵⁵ Duke response to OCC STP INT-02-007 (attached herein as JDW-17).

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1 to determine that any battery storage projects will align customer and Duke
2 expectations regarding reliability.

3

4 The PUCO authorized the current DCI Rider based upon the 19 programs that

5 Duke represented to the PUCO were vital in maintaining customer reliability.

6 Duke's failing reliability proves that the DCI rider was ineffective in helping

7 maintain or improve reliability. Now Duke wants to expand the magnitude of its

8 spending to replace meters and to install battery storage projects. Ending the DCI

9 Rider now helps ensure that customers are not being unfairly or otherwise

10 inappropriately charged for investments that provide them with no quantifiable

11 reliability benefit.

12

13 The costs associated with replacing meters should be addressed as part of a

14 comprehensive resolution of all of the issues associated with Duke's smart grid

15 program and not the DCI. The proposed battery storage project(s) under the

16 Settlement lacks sufficient information to enable an evaluation of the proposal to

17 determine if funding is qualified under the DCI rider. The PUCO should maintain

18 approval authority over all battery storage project(s) and not Duke.⁵⁶ Prior to

19 approval of any battery storage project(s), the PUCO should require the Utility to

20 file an application that contains sufficient details to determine if the project

21 qualifies as an infrastructure modernization program under R.C. 4928.143(B)(9)(d)

⁵⁶ Settlement, Attachment G, page 5-6.

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1 and ensure that any revenues associated with the project are used to reduce the
2 overall revenue cap.

3

4 ***Q39. DO YOU HAVE AN OPINION REGARDING THE SETTLEMENT***
5 ***RECOMMENDATION FOR A DISTRIBUTION BASE RATE CASE IN 2024?***

6 ***A39.*** Yes. I consider the recommendation for the rate case to be illusory at best. To
7 be absolutely clear, there is no Settlement agreement supporting a firm
8 commitment for a rate case in 2024. The Settlement merely intimates that Duke
9 may not be able to continue the DCI past 2024 if a rate case is not filed⁵⁷. My
10 concerns are that Duke has not demonstrated that the money it is collecting from
11 customers now under its current DCI rider is cost effective, providing any benefits
12 for customers or if the additional consumer monies are necessary. Revenue caps
13 that support spending another \$623 million over another six years is not beneficial
14 for consumers. Duke should be required to make the necessary investment to
15 provide safe and reliability service for its customers and then seek recovery of
16 these expenses in future base rates when and if it demonstrates that the costs were
17 prudently incurred.

⁵⁷ Settlement at page 12.

1 ***Q40. PLEASE EXPLAIN DUKE'S PROPOSAL TO COLLECT ADDITIONAL***
2 ***MONEY FROM CUSTOMERS FOR TREE-TRIMMING EXPENSES?***

3 ***A40.*** In agreeing to the new and less stringent reliability standards shown above, Staff,
4 Duke, and the signatory parties agreed to provide Duke with an ESRR rider that
5 enables Duke to collect an additional \$10 million annually beginning in 2018.⁵⁸
6 The rider can collect additional affiliated contractor vegetation management
7 services above the \$10,720, 877 included in base rates.

8

9 ***Q41. DO YOU HAVE AN OPINION ON DUKE'S PROPOSAL TO ESTABLISH A***
10 ***NEW ESRR RIDER?***

11 ***A41.*** Yes. The PUCO should reject the ESRR rider. First, there has been no
12 determination that Duke has actually incurred additional tree-trimming expenses
13 that it is not already collecting from customers in base rates. Second, the
14 Settlement supports Duke transitioning from a four-year cycle-based vegetation
15 management program as opposed to the current four-year cycle-based program.
16 Also, I oppose the Settlement provision that supports Duke being able to collect
17 alleged tree-trimming costs for 2018 for any period of time before the PUCO
18 renders an order in this case.

⁵⁸ Settlement at page 14.

1 ***Q42. DID THE PUCO STAFF REPORT PROVIDE ANY RECOMMENDATIONS***
2 ***CONCERNING THE DUKE PURCHASE OF RECEIVABLES PROGRAM,***
3 ***UNCOLLECTIBLE RIDER, AND DEBT COLLECTION PROCESS?***

4 ***A42.*** Yes. Staff recommended that the Utility needs to incorporate credit and business
5 risk into the purchase of receivables program.⁵⁹ By way of background, Duke
6 provides consolidated billing where competitive retail electric service supplier
7 (“Marketer”) charges are included along with Duke distribution charges in a
8 single monthly bill to customers. Marketer providers can choose to have Duke
9 purchase their receivables or they can manage their own debt collection. When
10 Duke purchases the Marketer receivables, it does so without a discount.
11 Therefore, the Marketers are reimbursed 100 percent of their charges from Duke
12 regardless if the customer pays the entire Marketer charges. Duke then seeks
13 collection of the Marketer charges from customers. And if customers do not pay
14 these charges, Duke would seek collection from customers through an
15 uncollectible rider.

16
17 Staff examined the purchase of receivables, bad debt rider, and debt collection
18 processes and concluded that Duke does not rely on common audits and other
19 tools to verify the accuracy of the Marketer receivables that ultimately are
20 included in the uncollectible rider. Staff further noted a lack of internal controls
21 and reports that Duke should be relying upon to protect customers from paying

⁵⁹ Staff Report at 51.

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1 business costs that rightfully should be the responsibility of the Marketers. Staff
2 recommended that a discount rate be established for the purchase of receivables
3 program. Staff also recommended that as part of the next annual review of the
4 uncollectible rider, Duke perform a comprehensive audit of the purchase of
5 receivables program.

6

7 ***Q43. HOW DID THE SETTLEMENT ADDRESS THE PURCHASE OF***
8 ***ACCOUNTS RECEIVABLES (“PAR”) ISSUE?***

9 ***A43.*** The PUCO Staff, Duke, and the other parties to the settlement agreed that an audit
10 would be performed of the PAR program.⁶⁰ The audit is supposed to examine the
11 sufficiency of Dukes processes and controls for monitoring Marketer compliance
12 with the PAR agreement. Costs for the audit will be paid for by customers
13 through the UE-GEN rider.⁶¹

14

15 ***Q44. DO YOU HAVE AN OPINION REGARDING THE PAR AS IT CONCERNS***
16 ***THE SETTLEMENT?***

17 ***A44.*** Yes. The Staff Report was on the right track in establishing a discount rate for the
18 PAR program. However, as a precursor to establishing a discount rate, Staff
19 should have examined if there is currently a need for continuing the PAR and the
20 uncollectible rider. The PAR was initiated to help spur additional marketer

⁶⁰ Settlement at 22.

⁶¹ *Id.*

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1 participation in the Duke electric choice program. According to the offers
2 available for residential customers on the PUCO energy choice website, there are
3 currently 61 marketers providing competitive offers in Duke's service territory.⁶²
4 There were 56 marketers providing service during the last ESP. Therefore, even
5 with a zero discount PAR, the program does not appear to provide incentives for
6 larger numbers of suppliers to offer Marketers in the Duke service territory. Yet
7 the PAR in concert with the uncollectible rider tend to shift the financial risk
8 associated with Marketer bad debt from suppliers onto customers. Because the
9 collection of the bad debt is essentially guaranteed through the uncollectible rider,
10 there is little if any incentive for Duke or the Marketers to actually manage the
11 debt. Eliminating the PAR and the uncollectible rider would place the
12 responsibility for collecting Marketer uncollectable debt back onto the suppliers
13 where it belongs.

14
15 In comments filed by the OCC in Case 17-2089-GE-COI on April 27, 2018, the
16 agency commented that when Duke purchases the supplier accounts receivable,
17 customers can be disconnected for non-payment even though the debt originated
18 with the competitive supplier. This was confirmed in the Duke response to STIP
19 OCC INT-05-139 (attached herein as JDW-18). Furthermore, according to the
20 Duke response to STIP OCC INT-05-140 (attached herein as JDW-19), Duke

⁶²<http://energychoice.ohio.gov/ApplesToApplesComparision.aspx?Category=Electric&TerritoryId=4&RateCode=1>

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1 does not separately track the number of residential customers who are
2 disconnected for non-payment of charges that originated with a Marketer. OCC
3 commented that this practice violates R.C. 4928.10(D) and multiple PUCO rules.
4 While the PUCO has not rendered an opinion in Case 17-2089-GE-ORD at this
5 time, Duke's practice of disconnecting customers for debt that originates with a
6 Marketer should be examined. My recommendation is that if the PUCO approve
7 the Settlement, the auditor should be instructed to evaluate the extent in which
8 Duke's disconnection policies regarding Marketer debt are in compliance with
9 Ohio law and PUCO rules.

10
11 ***Q45. DOES THE SETTLEMENT PACKAGE VIOLATE ANY IMPORTANT***
12 ***REGULATORY PRINCIPLE OR PRACTICE?***

13 ***A45.*** Yes. The Settlement violates R.C. 4928.02(A), which requires customers to be
14 provided with adequate, reliable, safe, efficient, nondiscriminatory, and
15 reasonably priced retail electric service. Duke has failed to meet its minimum
16 reliability performance standards for two years, which constitutes a violation of
17 Ohio Adm. Code 4901:1-10-10(E). This further demonstrates that Duke is failing
18 to provide adequate, safe, and reliable service to customers. In addition, to the
19 extent that the DCI rider has failed in providing customers with safe and reliable
20 service, the continuation of the DCI rider and the spending of over \$623 million
21 in investments that must be paid for by consumers under the settlement constitutes
22 unreasonably priced retail electric service.

1 Ohio Adm. Code 4901:1-10-10(B) prescribes the methodology to be used for
2 establishing minimum reliability performance standards. According to STIP INT
3 03-052 (attached herein as JDW-20), the reliability performance standards were
4 established in confidential settlement discussions. Therefore, there is no way for
5 the PUCO to evaluate the just and reasonableness of the standards.

6

7 **VI. CONCLUSION**

8

9 ***Q46. PLEASE SUMMARIZE YOUR RECOMMENDATION.***

10 ***A46.*** I recommend that the PUCO not adopt the Settlement as filed. As discussed
11 above, the Settlement fails to meet any prong of the PUCO's three-prong test.
12 There cannot be serious bargaining among knowledgeable parties where some
13 parties are excluded from discussions and other parties may not appreciate the
14 magnitude of Duke's failure to meet reliability standards. Additionally, the
15 Settlement, as a package, harms customers and does not benefit the public interest
16 because customers are required to pay for distribution programs, but are not
17 receiving reliable service and in fact reliability has previously declined despite
18 customers have been charged for the same or similar programs. Furthermore, the
19 Settlement violates Ohio regulatory principles and practices where customers pay
20 for programs but are not receiving reliable service. Thus, the PUCO should not
21 adopt the Settlement as filed.

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1 If the PUCO does adopt the Settlement, then the PUCO should modify the
2 settlement and incorporate the recommended changes discussed in my testimony
3 along with the recommended changes of OCC's other witnesses in this
4 proceeding.

5

6 ***Q47. DOES THIS CONCLUDE YOUR TESTIMONY?***

7 ***A47.*** Yes. However, I reiterate that, as demonstrated above, the proposed Settlement
8 fails to meet the three-prong test for PUCO approval of a settlement. I also
9 reserve the right to supplement my testimony if additional testimony is filed, or if
10 new information or data in connection with this proceeding becomes available.

CERTIFICATE OF SERVICE

I hereby certify that a true copy of the foregoing *Direct Testimony of James D. Williams on Behalf of the Office of the Ohio Consumers' Counsel* was served via electronic transmission to the persons listed below on this 25th day of June 2018.

/s/ William J. Michael

William J. Michael
Assistant Consumers' Counsel

SERVICE LIST

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Case No. 16-1602-EL-ESS

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Testimony of James D. Williams
Filed at the Public Utilities Commission of Ohio

1. *In the Matter of the Application of the Cincinnati Gas and Electric Company for an Increase in Its Rates for Gas Service to All Jurisdictional Customers, Case No. 95-0656-GA-AIR (August 12, 1996).*
2. *In the Matter of the Application of the Cincinnati Gas and Electric Company for an Increase in Its Rates for Gas Service to All Jurisdictional Customers, Case No. 01-1228-GA-AIR (February 15, 2002).*
3. *In the Matter of the Commission's Investigation into the Policies and Procedures of Ohio Power Company, Columbus Southern Power Company, The Cleveland Electric Illuminating Company, Ohio Edison Company, The Toledo Edison Company and Monongahela Power Company regarding installation of new line extensions, Case No. 01-2708-EL-COI (May 30, 2002).*
4. *In the Matter of the Application of The East Ohio Gas Company d/b/a Dominion East Ohio for an Increase in Its Rates for Gas Service to All Jurisdictional Customers, Case No. 07-0829-GA-AIR (June 23, 2008).*
5. *In the Matter of the Application of the Columbia Gas of Ohio, Inc. for Authority to Amend Filed Tariffs to Increase the Rates and Charges for Gas Distribution, Case No. 08-072-GA-AIR (September 25, 2008).*
6. *In the Matter of a Settlement Agreement Between the Staff of the Public Utilities Commission of Ohio, The Office of the Consumers' Counsel and Aqua Ohio, Inc. Relating to Compliance with Customer Service Terms and Conditions Outlined in the Stipulation and Recommendation in Case No. 07-564-WW-AIR and the Standards for Waterworks Companies and Disposal System Companies, Case No. 08-1125-WW-UNC (February 17, 2009).*
7. *In the Matter of the Application of the Ohio American Water Company to Increase its Rates for water and Sewer Services Provided to its Entire Service Area, Case No. 09-391-WS-AIR (January 4, 2010).*
8. *In the Matter of the Application of Aqua Ohio, Inc. for Authority to Increase its Rates and Charges in its Masury Division, Case No. 09-560-WW-AIR (February 22, 2010).*
9. *In the Matter of the Application of Aqua Ohio, Inc. for Authority to Increase its Rates and Charges in Its Lake Erie Division, Case No. 09-1044-WW-AIR (June 21, 2010).*

10. *In the Matter of the Application of The Ohio American Water Company to Increase its Rates for Water Service and Sewer Service*, Case No. 11-4161-WS-AIR (March 1, 2012).
11. *In the Matter of Columbus Southern Power Company and Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to Section 4928.143, Ohio Rev. Code, in the Form of an Electric Security Plan*, Case No. 11-346-EL-SSO, et al (May 4, 2012).
12. *In the Matter of the Application of The Dayton Power and Light Company for Approval of its Market Rate Offer*, Case No. 12-426-EL-SSO (June 13, 2012).
13. *In the Matter of the Application of Ohio Power Company to Establish Initial Storm Damage Recovery Rider Rates*, Case No. 12-3255-EL-RDR (December 27, 2013).
14. *In the Matter of the Application of Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to Section 4928.143, Ohio Rev. Code, in the Form of an Electric Security Plan*, Case No. 13-2385-EL-SSO (May 6, 2014).
15. *In the Matter of the Application of Duke 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 14-841-EL-SSO (May 29, 2014).
16. *In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company and The Toledo Edison Company for Authority to Provide for a Standard Service Offer Pursuant to R.C. 4928.143 in the Form of an Electric Security Plan*, Case No. 14-1297-EL-SSO (December 22, 2014).
17. *In the Matter of the Application of Duke Energy Ohio, Inc., to Adjust Rider DR-IM and Rider AU for 2013 Grid Modernization Costs*, Case No. 14-1051-EL-RDR (December 31, 2014) and (February 6, 2015).
18. *In the Matter of the Application Not for an Increase in Rates Pursuant to Section 4901:18, Revised Code, of Ohio Power Company to Establish Meter Opt Out Tariff*, Case No. 14-1158-EL-ATA (April 24, 2015).
19. *In the Matter of the Application of Duke Energy of Ohio, Inc., for Approval of a Grid Modernization Opt-out Tariff and for a Change in Accounting Procedures Including a Cost Recovery Mechanism.*, Case 14-1160-EL-UNC and 14-1161-EL-AAM (September 18, 2015).

20. *In the Matter of the Application of Duke Energy Ohio, Inc., for Approval of an Alternative Rate Plan Pursuant to Section 4929.05, Revised Code, for an Accelerated Service Line Replacement Programs*, Case No. 14-1622-GA-ALT (November 6, 2015).
21. *In the Matter of the Complaint of Jeffrey Pitzer, Complainant, v. Duke Energy Ohio, Inc. Respondent.*, Case No. 15-298-GE-CSS (December 30, 2015).
22. *In the Matter of the Application of Ohio Power Company to Initiate Phase 2 of Its gridSMART Project and to Establish the gridSMART Phase 2 Rider.*, Case No. 13-1939-EL-RDR (July 22, 2016).
23. *In the Matter of the Application of Columbia Gas of Ohio, Inc. for Approval of Demand Side Management Program for its Residential and Commercial Customers.*, Case No. 16-1309-GA-UNC (September 13, 2016).
24. *In the Matter of the Application of the Dayton Power and Light Company for Approval of Its Electric Security Plan*, Case No. 16-0395-EL-SSO (November 21, 2016). Supplemental Testimony, (March 29, 2017).
25. *In the Matter of the Application of Aqua Ohio, Inc. to Increase Its Rates and Charges for Its Waterworks Service.*, Case No. 16-0907-WW-AIR (December 19, 2016).
26. *In the Matter of the Application of Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to R.C. 4928.143, in the Form of an Electric Security Plan*, Case No. 16-1852-EL-SSO, (May 2, 2017).
27. *In the Matter of the Application of the Ohio Development Services Agency for an Order Approving Adjustments to the Universal Service Fund Riders of Jurisdictional Ohio Electric Distribution Utilities*, Case No. 17-1377-EL-USF, (August 11, 2017).
28. *In the Matter of the Application of Duke Energy Ohio, Inc. to Adjust Rider AU for 2016 Grid Modernization Costs*, Case No. 17-690-GA-RDR, (August 18, 2017).
29. *In the Matter of the Application of Duke Energy Ohio, Inc., for an Adjustment to Rider AMRP Rates*, Case No. 17-2318-GA-RDR, (April 5, 2018).
30. *In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in Electric Distribution Rates*, Case No. 17-032-EL-AIR, et al, (June 25, 2018).

Michael, William

From: Michael, William
Sent: Thursday, February 08, 2018 3:31 PM
To: Watts, Elizabeth H
Cc: Petricoff, M Howard; Beeler, Steven; Williams, James; Spiller, Amy B; D'Ascenzo, Rocco; Kingery, Jeanne W.
Subject: RE: Duke Case

Liz:

Thank you for the response. As you know, Mr. Williams' request for an explanation regarding the proposed reliability standards was made in connection with settlement discussions. It was not "discovery." Accordingly, your objection on that ground is misplaced. Also, as you are well aware, the first part of the settlement test (stated generally) asks if there was serious bargaining among knowledgeable parties. Mr. Williams (as part of OCC's team), in making his request, is simply trying to educate himself and become knowledgeable about the proposed reliability standards.

Further, OCC's comments regarding various proposals have been consistent throughout the discussions. Your representation that Duke would explain the proposed reliability standards was, therefore, made with knowledge of OCC's comments. Accordingly, your objection that you are "now unwilling" to explain the proposed reliability standards is misplaced.

While we may disagree on much of what else you say in the email, we can leave that for resolution at a later date if necessary and appropriate.

Sincerely,

Bill

William J. Michael
Assistant Consumers' Counsel
Office of the Ohio Consumers' Counsel
65 East State Street, 7th Floor
Columbus, Ohio 43215
614.466.1291

From: Watts, Elizabeth H [mailto:Elizabeth.Watts@duke-energy.com]
Sent: Thursday, February 08, 2018 2:15 PM
To: Michael, William
Cc: Petricoff, M Howard; Beeler, Steven; Williams, James; Spiller, Amy B; D'Ascenzo, Rocco; Kingery, Jeanne W.
Subject: RE: Duke Case

Privileged and Confidential – For Settlement Discussion Only

Bill:

OCC has expressed dissatisfaction with many of the issues contained in the current term sheet and it appears that OCC is unlikely to join the settlement of these cases. Consequently I am now unwilling to provide additional discovery related to these issues. At the time the stipulation is filed, I expect there will be a procedural entry providing for additional

discovery. At that time, you may seek information about the resulting reliability standards and any other matter relevant to the stipulation.

As was stated earlier in our meetings, the current term sheet provides for the continuation of Rider DCI to provide for capital investment in the distribution system. Staff and the Company thought it prudent to ensure that the Company would have rigorous standards with which to comply in exchange for being able to continue its program to harden the distribution system and provide better safety and reliability. We agree with OCC that reliability is an important issue to consumers. We hope that you will agree that the current term sheet is carefully constructed with that concept in mind.

Elizabeth

Elizabeth H. Watts

Associate General Counsel | Duke Energy Business Services
155 East Broad Street, Columbus, Ohio 43215
614-222-1331 Direct - 614-202-2509 Cell



From: William.Michael@occ.ohio.gov [mailto:William.Michael@occ.ohio.gov]

Sent: Thursday, February 08, 2018 1:42 PM

To: Watts, Elizabeth H

Cc: Howard.Petricoff@puco.ohio.gov; steven.beeler@ohioattorneygeneral.gov; James.Williams@occ.ohio.gov

Subject: Duke Case

Liz:

At the recent discussion between Staff, OCC, and Duke, and in response to a question from my colleague, Jim Williams, you represented that Duke would explain the proposed reliability standards. We have followed-up with you on two occasions, including actually proposing some dates on which the relevant personnel could talk. To date, we have not heard back from you.

Obviously, reliability is an important issue to consumers. We trust it is equally important to Duke. So we hope to hear back from you soon regarding scheduling a discussion.

Sincerely,

Bill

William J. Michael

Assistant Consumers' Counsel

Office of the Ohio Consumers' Counsel

65 East State Street, 7th Floor

Columbus, Ohio 43215

614.466.1291

**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the matter of the Annual Report of)
Electric Distribution System Reliability) Case No: 18 -0994 -EL-ESS
Pursuant to Rule 4901:1-10-10(C))

Pursuant to Rule 4901:1-10-10(C) of the Ohio Administrative Code,
Duke Energy Ohio
hereby submits the attached annual report for the year 2017 .

I certify that the following report accurately and completely reflects the annual report requirements pursuant to Rule 4901:1-10-10 of the Ohio Administrative Code.

Nick Melillo
Signature

Nick Melillo
Printed Name

Manager, PART I Engineering
Title

3/28/18
Date

**Duke Energy Ohio
Rule 10 Report for 2017**

1. 4901:1-10-10(C)(1): CAIDI (Customer Average Interruption Duration Index)

<u>Performance Standard</u>	<u>After Exclusions</u>	<u>Before Exclusions</u>
122.81	127.28	178.66

2. 4901:1-10-10(C)(1): SAIFI (System Average Interruption Frequency Index)

<u>Performance Standard</u>	<u>After Exclusions</u>	<u>Before Exclusions</u>
1.05	1.16	1.48

3. 4901:1-10-10(C)(1): Supporting Data

Customers <u>Served</u>	CI* <u>After Exclusions</u>	CI <u>Before Exclusions</u>	CMI* <u>After Exclusions</u>	CMI <u>Before Exclusions</u>
717,067	832,567	1,060,366	105,965,751	189,448,155

Notes:

*note: There is currently no agreed-upon CAIDI and SAIFI performance standard for Duke Energy Ohio. The numbers entered for CAIDI and SAIFI performance standards are the previously agreed-upon standards that ended in 2016.

*CI = Customer Interruptions
CMI = Customer Minutes Interrupted

**Duke Energy Ohio
Rule 10 Report for 2017**

4. 4901:1-10-10(C)(2): Major Event Outages

Date	Description	CI	CMI	CAIDI	SAIFI
3/1/2017	Rain and thunderstorms, with 45mph wind gusts noted. Continuous sustained winds of at least 25mph from 2pm to midnight. Up to 4" of rain within DEO service territory.	45,137	32,121,434	711.64	0.06
4/28/2017	Heavy thunderstorms, with 25mph wind gusts noted.	11,126	3,591,545	322.81	0.02
7/7/2017	Heavy thunderstorms, with 40mph wind gusts noted. Up to 1.7" of rain within DEO service territory.	42,831	27,564,782	643.57	0.06
11/18/2017	Heavy rain, with 48mph wind gusts noted. Sustained 20mph winds from 11am to 5pm. Up to 0.7" of rain noted within DEO service territory.	52,177	15,454,474	296.19	0.07
Totals:		151,271	78,732,235		

Notes: These numbers are including transmission outage data on the Major Event days, per the ESSS guidelines:
(C)(2): Performance on the same indices during major events and transmission outages, reported in separate categories with their respective supporting data

3/27/2018

**Duke Energy Ohio
Rule 10 Report for 2017**

5a. 4901:1-10-10(C)(2): Transmission Outages

Outage Start Date	Transmission Circuit Impacted	Outage Start Time	Circuit kV	Outage Cause	Outage Length (minutes)
1/10/2017	4366	7:39 PM	69	Vegetation	103
1/20/2017	9062	2:24 AM	69	Public Accident	31
1/31/2017	5665	8:46 AM	69	Equipment Failure	54
2/12/2017	9062	7:52 AM	69	Equipment Failure	21
3/1/2017	6365	7:07 AM	69	Vegetation	407
3/1/2017	1862	7:26 AM	69	Weather	763
3/1/2017	5863	7:26 AM	69	Weather	202
3/21/2017	6962	5:56 PM	69	Public Accident	192
3/28/2017	1862	1:04 PM	69	Public Accident	155
7/11/2017	1862	1:05 AM	69	Vegetation	10
7/13/2017	6961	3:08 PM	69	Other	82
8/21/2017	4366	7:08 PM	69	Vegetation	63
8/27/2017	3261	9:10 AM	69	Wildlife	56
10/15/2017	1862	3:57 PM	69	Vegetation	193
11/7/2017	3864	5:52 AM	69	Public Accident	61
11/18/2017	4366	12:17 PM	69	Vegetation	146
11/30/2017	1265	9:58 AM	69	Equipment Failure	131
12/18/2017	7481	4:36 PM	138	Equipment Failure	26

Notes: Data includes outages which occurred on Major Event Days. Momentary outages have been excluded.

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**Duke Energy Ohio
Rule 10 Report for 2017**

5b. 4901:1-10-10(C)(2): Distribution Circuits Impacted by Transmission Outages

Outage Start Date	CI per Outage	CMI per Outage	# of Impacted Circuits	IDs for Impacted Circuits	CI per Circuit	CMI per Circuit
1/10/2017	4,738	485,831	2	H4921410041	2,183	222,666
1/10/2017	4,738	485,831	2	H4921410042	2,555	263,165
1/20/2017	6,754	81,062	6	H4622960041	762	23,622
1/20/2017	6,754	81,062	6	H462232000E	158	1,422
1/20/2017	6,754	81,062	6	H462232000G	786	7,074
1/20/2017	6,754	81,062	6	H4622320041	2,459	22,131
1/20/2017	6,754	81,062	6	H4622320042	2,137	19,233
1/20/2017	6,754	81,062	6	H4611150041	452	7,580
1/31/2017	4,368	119,648	7	H4612370041	1,586	31,720
1/31/2017	4,368	119,648	7	H4612370042	10	200
1/31/2017	4,368	119,648	7	H4612370043	729	14,580
1/31/2017	4,368	119,648	7	H461065000A	329	5,626
1/31/2017	4,368	119,648	7	H461065000B	269	4,769
1/31/2017	4,368	119,648	7	H461065000C	317	5,224
1/31/2017	4,368	119,648	7	H4611620049	1,128	57,528
2/12/2017	6,878	134,550	5	H4622960041	766	16,086
2/12/2017	6,878	134,550	5	H462232000E	157	2,512
2/12/2017	6,878	134,550	5	H462232000G	787	12,592
2/12/2017	6,878	134,550	5	H4622320041	2,458	49,160
2/12/2017	6,878	134,550	5	H4622320042	2,710	54,200

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**Duke Energy Ohio
Rule 10 Report for 2017**

5b. 4901:1-10-10(C)(2): Distribution Circuits Impacted by Transmission Outages

Outage Start Date	CI per Outage	CMI per Outage	# of Impacted Circuits	IDs for Impacted Circuits	CI per Circuit	CMI per Circuit
3/1/2017	3,926	209,516	3	H4920510041	2,168	43,360
3/1/2017	3,926	209,516	3	H4920510044	1,419	28,380
3/1/2017	3,926	209,516	3	H4922060041	339	137,776
3/1/2017	1,482	971,286	2	H492359000A	307	74,761
3/1/2017	1,482	971,286	2	H4923590041	1,175	896,525
3/1/2017	936	189,072	1	H4920810041	936	189,072
3/21/2017	9,020	1,153,326	6	H4923620041	1,255	80,320
3/21/2017	9,020	1,153,326	6	H4923620042	2,909	546,892
3/21/2017	9,020	1,153,326	6	H4920710041	2,761	298,188
3/21/2017	9,020	1,153,326	6	H4922090041	631	66,886
3/21/2017	9,020	1,153,326	6	H4922120041	511	56,210
3/21/2017	9,020	1,153,326	6	H4922120042	953	104,830
3/28/2017	3,387	524,009	5	H492354000A	183	27,999
3/28/2017	3,387	524,009	5	H492359000A	305	46,665
3/28/2017	3,387	524,009	5	H4923590041	1,993	308,915
3/28/2017	3,387	524,009	5	H4923010041	496	76,880
3/28/2017	3,387	524,009	5	H4923010042	410	63,550
7/11/2017	1,749	17,490	1	H4921430041	1,749	17,490
7/13/2017	3,956	184,490	3	H4923180041	1,734	10,404
7/13/2017	3,956	184,490	3	H4923180042	1,474	113,498

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**Duke Energy Ohio
Rule 10 Report for 2017**

5b. 4901:1-10-10(C)(2): Distribution Circuits Impacted by Transmission Outages

Outage Start Date	CI per Outage	CMI per Outage	# of Impacted Circuits	IDs for Impacted Circuits	CI per Circuit	CMI per Circuit
7/13/2017	3,956	184,490	3	H4920510046	748	60,588
8/21/2017	2,168	83,256	3	H4923410041	552	34,776
8/21/2017	2,168	83,256	3	H4923410042	586	17,580
8/21/2017	2,168	83,256	3	H4923410043	1,030	30,900
8/27/2017	6,726	376,656	4	H4623550041	1,873	104,888
8/27/2017	6,726	376,656	4	H4623550042	1,380	77,280
8/27/2017	6,726	376,656	4	H4623550043	2,072	116,032
8/27/2017	6,726	376,656	4	H4623550044	1,401	78,456
10/15/2017	3,005	516,719	5	H492354000A	182	34,944
10/15/2017	3,005	516,719	5	H492359000A	307	58,944
10/15/2017	3,005	516,719	5	H4923590041	1,588	306,484
10/15/2017	3,005	516,719	5	H4923010041	495	61,776
10/15/2017	3,005	516,719	5	H4923010042	433	54,571
11/7/2017	3,724	224,272	3	H4623530042	1,593	97,173
11/7/2017	3,724	224,272	3	H38H1650041	761	44,899
11/7/2017	3,724	224,272	3	H38H1650042	1,370	82,200
11/18/2017	2,214	323,244	3	H4923410041	579	84,534
11/18/2017	2,214	323,244	3	H4923410042	592	86,432
11/18/2017	2,214	323,244	3	H4923410043	1,043	152,278
11/30/2017	6,191	551,673	6	H38H0480043	306	37,815

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**Duke Energy Ohio
Rule 10 Report for 2017**

5b. 4901:1-10-10(C)(2): Distribution Circuits Impacted by Transmission Outages

Outage Start Date	CI per Outage	CMI per Outage	# of Impacted Circuits	IDs for Impacted Circuits	CI per Circuit	CMI per Circuit
11/30/2017	6,191	551,673	6	H38H012000A	246	32,226
11/30/2017	6,191	551,673	6	H38H012000B	359	46,878
11/30/2017	6,191	551,673	6	H38H0120041	810	67,230
11/30/2017	6,191	551,673	6	H38H0120043	2,731	181,301
11/30/2017	6,191	551,673	6	H38H0120044	1,739	186,223
12/18/2017	13,835	293,782	7	H5020440041	880	8,800
12/18/2017	13,835	293,782	7	H5020440042	1,337	24,066
12/18/2017	13,835	293,782	7	H5020260041	2,109	42,180
12/18/2017	13,835	293,782	7	H5020260042	2,260	45,200
12/18/2017	13,835	293,782	7	H5020260043	2,798	72,748
12/18/2017	13,835	293,782	7	H5020260044	2,317	60,242
12/18/2017	13,835	293,782	7	H5020260046	2,134	40,546

Notes: Data includes outages which occurred on Major Event Days. Momentary outages have been excluded.

**Duke Energy Ohio
Rule 10 Report for 2017**

5c. 4901:1-10-10(C)(2): Index values during transmisslon outages

Outage start date	CAIDI during outage	SAIFI during outage
1/10/2017	102.5393	0.0066
1/20/2017	12.0021	0.0094
1/31/2017	27.3919	0.0061
2/12/2017	19.5624	0.0096
3/1/2017	53.3663	0.0055
3/1/2017	655.3887	0.0021
3/1/2017	202.0000	0.0013
3/21/2017	127.8632	0.0126
3/28/2017	154.7118	0.0047
7/11/2017	10.0000	0.0024
7/13/2017	46.6355	0.0055
8/21/2017	38.4022	0.0030
8/27/2017	56.0000	0.0094
10/15/2017	171.9531	0.0042
11/7/2017	60.2234	0.0052
11/18/2017	146.0000	0.0031
11/30/2017	89.1089	0.0086
12/18/2017	21.2347	0.0193

Notes:

**Duke Energy Ohio
Rule 10 Report for 2017**

6a. 4901:1-10-10(C)(3)(a): Data excluding major events and transmission outages

Outage Cause	Events	Customers Interrupted	Customers Minutes Interrupted
Equipment failure	2,871	231,803	25,655,956
Lightning	546	12,278	2,855,476
Other	1,194	66,241	4,685,916
Planned	9,335	91,140	12,593,996
Public Accident	781	121,765	14,809,043
Unknown	899	53,755	4,884,572
Vegetation	2,083	165,253	28,617,601
Weather, Storm	436	30,003	6,353,959
Wildlife	1,373	60,329	5,509,232
Totals:	19,518	832,567	105,965,751

Notes: Data excluding major events and transmission outages

**Duke Energy Ohio
Rule 10 Report for 2017**

6b. 4901:1-10-10(C)(3)(b): Data for major events only

Outage Cause	Events	Customers Interrupted	Customers Minutes Interrupted
Equipment failure	91	17,096	8,077,593
Lightning	51	1,170	680,110
Other	32	1,291	1,372,244
Planned	89	883	61,276
Public Accident	9	4,711	180,026
Unknown	43	3,002	2,310,642
Vegetation	547	68,405	33,758,858
Weather, Storm	373	39,058	28,213,358
Wildlife	12	7,097	2,385,010
Totals:	1,247	142,713	77,039,117

Notes: Data for major events only, transmission is EXCLUDED

**Duke Energy Ohio
Rule 10 Report for 2017**

6c. 4901:1-10-10(C)(3)(c): Data for transmission outages only

Outage Cause	Events	Customers Interrupted	Customers Minutes Interrupted
Equipment failure	27	31,272	1,099,653
Other	3	3,956	184,490
Public Accident	20	22,885	1,982,669
Vegetation	18	18,975	2,532,581
Weather, Storm	2	1,243	263,833
Wildlife	4	6,726	376,656
Totals:	74	85,057	6,439,882

Notes: This data is all Transmission outages, including those that occurred on Major Event Days. Momentary Outages have been excluded.

**Duke Energy Ohio
Rule 10 Report for 2017**

7. 4901:1-10-10(C)(4): Momentary Interruptions

Total Number = 2,100

Notes: All Momentary interruptions. MED's Included, Transmission Included

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

3/29/2018 2:21:27 PM

in

Case No(s). 18-0994-EL-ESS

Summary: Annual Report Duke Energy Ohio, Inc. Annual Report of Electric Distribution Reliability Pursuant to Rule 4901:1-10-10-(C) electronically filed by Dianne Kuhnell on behalf of Duke Energy Ohio, Inc. and Rocco D'Ascenzo and Watts, Elizabeth H.

CASE NUMBER:	16-1602-EL-ESS
CASE DESCRIPTION:	Duke Energy Ohio Inc
DOCUMENT SIGNED ON:	6/25/2018
DATE OF SERVICE:	

06/22/2018	Motion for Permission to Appear Pro Hac Vice for Camal O. Robinson on behalf of Duke Energy Ohio, Inc. electronically filed by Ms. E Minna Rolfes on behalf of Duke Energy Ohio, Inc. and Camal O. Robinson.
06/22/2018	Motion for Permission to Appear Pro Hac Vice for Kay Pashos on behalf of Duke Energy Ohio, Inc. electronically filed by Ms. E Minna Rolfes on behalf of Duke Energy Ohio, Inc. and Kay Pashos.
06/22/2018	Motion for Permission to Appear Pro Hac Vice for Michael S. Mizell on behalf of Duke Energy Ohio, Inc. electronically filed by Ms. E Minna Rolfes on behalf of Duke Energy Ohio, Inc. and Michael S. Mizell
06/22/2018	Notice of Appearance of Additional Counsel by Duke Energy Ohio, Inc. electronically filed by Ms. E Minna Rolfes on behalf of Duke Energy Ohio, Inc. and Mr. Rocco D'Ascenzo and Elizabeth H. Watts and Jeanne W. Kingery and Christopher L. Miller.
06/18/2018	Amended Notice of Deposition for DEO to Take Deposition Duces Tecum of Direct Energy Services, LLC Direct Energy Business, LLC and Direct Energy Business Marketing, LLC electronically filed by Mrs. Debbie L Gates on behalf of Duke Energy Ohio Inc. and D'Ascenzo, Rocco O. Mr. and Watts, Elizabeth H.
06/18/2018	Amended Notice of Deposition for DEO to Take Deposition Duces Tecum of Retail Energy Supply Association electronically filed by Mrs. Debbie L Gates on behalf of Duke Energy Ohio Inc. and D'Ascenzo, Rocco O. Mr. and Watts, Elizabeth H.
06/18/2018	Amended Notice of Deposition for DEO, Inc. to Take Deposition Duces Tecum of IGS Energy electronically filed by Mrs. Debbie L Gates on behalf of Duke Energy Ohio Inc. and D'Ascenzo, Rocco O. Mr. and Watts, Elizabeth H.
06/18/2018	Amended Notice of Deposition for DEO, Inc., to Take Deposition Duces Tecum of the Natural Resources Defense Council electronically filed by Mrs. Debbie L Gates on behalf of Duke Energy Ohio Inc. and D'Ascenzo, Rocco O. Mr. and Watts, Elizabeth H.
06/18/2018	Amended Notice of Deposition for DEO to Take Deposition Duces Tecum of Constellation NewEnergy, Inc. and Exelon Generation Company, LLC electronically filed by Mrs. Debbie L Gates on behalf of Duke Energy Ohio Inc. and D'Ascenzo, Rocco O. Mr. and Watts, Elizabeth H.
06/18/2018	Amended Notice of Deposition for DEO to Take Deposition Duces Tecum of The Office of Ohio Consumers' Counsel electronically filed by Mrs. Debbie L Gates on behalf of Duke Energy Ohio Inc. and D'Ascenzo, Rocco O. Mr. and Watts, Elizabeth H.
06/18/2018	Notice of Deposition for DEO, Inc. to Take Deposition Duces Tecum of Sierra Club electronically filed by Mrs. Debbie L Gates on behalf of Duke Energy Ohio Inc. and D'Ascenzo, Rocco O. Mr. and Watts, Elizabeth H.
06/18/2018	Notice of Deposition for DEO, Inc. to Take Deposition Duces Tecum of Ohio Environmental Council and Environmental Defense Fund electronically filed by Mrs. Debbie L Gates on behalf of Duke Energy Ohio Inc. and D'Ascenzo, Rocco O. Mr. and Watts, Elizabeth H.
06/18/2018	

	Amended Notice of Deposition for DEO, Inc. to take Deposition Duces Tecum of the Environmental Law & Policy Center electronically filed by Mrs. Debbie L. Gates on behalf of Duke Energy Ohio Inc. and D'Ascenzo, Rocco O. Mr. and Watts, Elizabeth H.
06/06/2018	Confidential treatment of documents Supplemental Direct Testimony of Williams Don Wathen Jr. supporting Objections to Staff's Report on behalf of Duke Energy Ohio, Inc. filed by Duke Energy Ohio, Inc. (pg ct 78)
06/06/2018	Confidential treatment of documents Direct Testimony of Renee Metzler supporting Objections to Staff's Report on behalf of Duke Energy Ohio, Inc. filed by Duke Energy Ohio, Inc. (pg ct 80)
06/06/2018	Duke Energy Ohio's Motion for Protective Order and Memorandum in Support filed by Rocco D'Ascenzo on behalf of Duke Energy Ohio, Inc.
06/06/2018	Duke Energy Ohio's Motion for Protective Order and memorandum in support - Judah Rose and Memorandum in Support electronically filed by Mrs. Adele M. Frisch on behalf of Duke Energy Ohio, Inc. and D'Ascenzo, Rocco O and Kingery, Jeanne W and Watts, Elizabeth H.
06/06/2018	Direct Testimony of Steven M. Fetter in Support of Stipulation on Behalf of Duke Energy Ohio, Inc. electronically filed by Mrs. Adele M. Frisch on behalf of Duke Energy Ohio, Inc. and D'Ascenzo, Rocco O and Kingery, Jeanne W and Watts, Elizabeth H.
06/06/2018	Direct Testimony of Richard Brown in Support of Stipulation on Behalf of Duke Energy Ohio, Inc. electronically filed by Mrs. Adele M. Frisch on behalf of Duke Energy Ohio, Inc. and D'Ascenzo, Rocco O and Kingery, Jeanne W and Watts, Elizabeth H.
06/06/2018	Supplemental Testimony of John L. Sullivan, III in Support of Stipulation on Behalf of Duke Energy Ohio, Inc. electronically filed by Mrs. Adele M. Frisch on behalf of Duke Energy Ohio, Inc. and D'Ascenzo, Rocco O and Kingery, Jeanne W and Watts, Elizabeth H.
06/06/2018	Second Supplemental Testimony of William Don Wathen Jr in Support of Stipulation on Behalf of Duke Energy Ohio, Inc. electronically filed by Mrs. Adele M. Frisch on behalf of Duke Energy Ohio, Inc. and D'Ascenzo, Rocco O and Kingery, Jeanne W and Watts, Elizabeth H.
06/06/2018	Direct Testimony of Amy B. Spiller in Support of Stipulation on Behalf of Duke Energy Ohio, Inc. electronically filed by Mrs. Adele M. Frisch on behalf of Duke Energy Ohio, Inc. and D'Ascenzo, Rocco O and Kingery, Jeanne W and Watts, Elizabeth H.
06/06/2018	PUBLIC - Direct Testimony of Renee Metzler Supporting Objections to Staff's Report on Behalf of Duke Energy Ohio, Inc. electronically filed by Mrs. Adele M. Frisch on behalf of Duke Energy Ohio, Inc. and D'Ascenzo, Rocco O and Kingery, Jeanne W and Watts, Elizabeth H.
06/06/2018	Duke Energy Ohio's Motion for Protective Order and memorandum in support - Renee Metzler and Memorandum in Support electronically filed by Mrs. Adele M. Frisch on behalf of Duke Energy Ohio, Inc. and D'Ascenzo, Rocco O and Kingery, Jeanne W and Watts, Elizabeth H.
06/06/2018	Duke Energy Ohio's Motion for Protective Order and memorandum in support - William Don Wathen Jr. and Memorandum in Support electronically filed by Mrs. Adele M. Frisch on behalf of Duke Energy Ohio, Inc. and D'Ascenzo, Rocco O and Kingery, Jeanne W and Watts, Elizabeth H.
06/06/2018	PUBLIC - Supplemental Direct Testimony of William Don Wathen Jr. Supporting Objections to Staff's Report on Behalf of Duke Energy Ohio, Inc. electronically filed by Mrs. Adele M. Frisch on behalf of Duke Energy Ohio, Inc. and D'Ascenzo, Rocco O and Kingery, Jeanne W and Watts, Elizabeth H.
06/06/2018	Supplemental Direct Testimony of James E. Ziolkowski Supporting Objections to Staff's Report on Behalf of Duke Energy Ohio, Inc. electronically filed by Mrs. Adele M. Frisch on behalf of Duke Energy Ohio, Inc. and D'Ascenzo, Rocco O and Kingery, Jeanne W and Watts, Elizabeth H.
06/06/2018	Supplemental Direct Testimony of James A. Riddle Supporting Objections to Staff's Report on Behalf of Duke Energy Ohio, Inc. electronically filed by Mrs. Adele M. Frisch on behalf of Duke Energy Ohio, Inc. and D'Ascenzo, Rocco O and Kingery, Jeanne W and Watts, Elizabeth H.
06/06/2018	Supplemental Direct Testimony of Cynthia S. Lee Supporting Objections to Staff's Report on behalf of Duke Energy Ohio, Inc. electronically filed by Mrs. Adele M. Frisch on behalf of Duke Energy Ohio, Inc. and D'Ascenzo, Rocco O and Kingery, Jeanne W and Watts, Elizabeth H.
06/06/2018	Public Version Supplemental Testimony of Judah L. Rose on Behalf of Duke Energy Ohio.
06/06/2018	Motion for protective order and memorandum in support filed by R. D'Ascenzo on behalf of Duke Energy Ohio, Inc.
06/06/2018	

	Confidential document target: Supplemental Testimony of Judah L. Rose on behalf of Duke Energy Ohio, Inc. (82 pages)
06/06/2018	Motion for a protective order and memorandum in support filed by R. D'Ascenzo on behalf of Duke Energy Ohio, Inc.
06/04/2018	Service Notice
05/23/2018	Attorney Examiner Entry setting a procedural schedule in accordance with Paragraph 6 electronically filed by Sandra Coffey on behalf of Public Utilities Commission of Ohio Attorney Examiner Stacie Cathcart.
05/22/2018	Memorandum Contra Motion for the Extension of the Procedural Schedule by the Environmental Law & Policy Center, Environmental Defense Fund, Natural Resources Defense Council, Ohio Environmental Council, Sierra Club, The Office of the Ohio Consumers' Counsel, and Interstate Gas Supply, Inc. electronically filed by Mr. Joseph E. Olikier.
05/15/2018	Motion for Extension of the Procedural Schedule and Request for Expedited Treatment and memorandum in support electronically filed by Ms. Tonneta Scott on behalf The Public Utilities Commission of Ohio.
05/15/2018	Notice of Withdrawal of Amy B. Spiller as counsel for Duke Energy Ohio electronically filed by Mrs. Adele M. Frisch on behalf of Duke Energy Ohio, Inc. and Rocco D'Ascenzo, Jeanne W. Kingery and Amy B. Spiller.
05/10/2018	Service Notice
05/09/2018	Attorney Examiner Entry consolidating cases, granting motions to intervene, and setting the procedural schedule electronically filed by Ms. Mary E Fischer on behalf of Nicholas J. Walstra, Attorney Examiner, Public Utilities Commission of Ohio.
05/04/2018	Memorandum Contra Duke Energy Ohio's Motion for a Procedural Schedule electronically filed by Mr. Tony G. Mendoza on behalf of Environmental Law & Policy Center and Ohio Environmental Council and Environmental Defense Fund and Sierra Club and Office of Ohio .Consumers' Counsel and Interstate Gas Supply, Inc. and Natural Resources Defense Council
05/03/2018	Motion and memorandum in support for a Procedural Schedule and Request for Expedited Ruling electronically filed by Carys Cochern on behalf of Watts, Elizabeth H. Ms.
05/03/2018	Reply by Duke Energy Ohio, Inc., to Memorandum Contra Motion to Consolidate Cases electronically filed by Carys Cochern on behalf of Kingery, Jeanne W Ms.
04/30/2018	Memorandum Contra Motion to Consolidate electronically filed by Mr. Joseph E. Olikier on behalf of IGS Energy.
04/13/2018	Motion to Consolidate Cases and Memorandum in Support electronically filed by Ms. Elizabeth H. Watts on behalf of Duke Energy Ohio, Inc.
04/13/2018	Stipulation and Recommendation electronically filed by Ms. Elizabeth H. Watts on behalf of Duke Energy Ohio, Inc.
03/09/2018	Status Report of Duke Energy Ohio, Inc. electronically filed by Mrs. Adele M. Frisch on behalf of Duke Energy Ohio, Inc. and Watts, Elizabeth H and D'Ascenzo, Rocco O and Spiller, Amy B and Kingery, Jeanne W.
03/05/2018	Service Notice
03/05/2018	Attorney Examiner Entry granting Staff's motion for suspension of the procedural schedule; electronically filed by Vesta R Miller on behalf of Stacie Cathcart, Attorney Examiner, Public Utilities Commission of Ohio.
02/28/2018	Unopposed Motion for Suspension and memorandum in support of the Procedural Schedule and Request for Expedited Treatment electronically filed by Mrs. Tonneta Y Scott on behalf of PUCO.
01/05/2018	Attorney Examiner Entry granting Staff's motion for continuance and scheduling the evidentiary hearing for 03/13/2018 as set forth in Paragraph 7 - electronically filed by Sandra Coffey on behalf of Stacie Cathcart, Attorney Examiner, Public Utilities Commission of Ohio.
01/05/2018	Service Notice
01/03/2018	Motion and Memorandum in Support for Continuance electronically filed by Mrs. Tonneta Y Scott on behalf of PUCO.
12/13/2017	

	Notice of Change of Address by The Office of the Ohio Consumers' Counsel electronically filed by Ms. Jamie Williams on behalf of Sauer, Larry Mr.
<u>11/30/2017</u>	Service Notice
<u>11/29/2017</u>	Attorney Examiner Entry granting Staff's motion for continuance; that the evidentiary hearing be held on 01/16/2018 electronically filed by Sandra Coffey on behalf of Public Utilities Commission of Ohio Attorney Examiner Stacie Cathcart.
<u>11/28/2017</u>	Motion for Continuance and Memorandum in Support electronically filed by Mrs. Tonnetta Y. Scott on behalf of PUCO Staff.
<u>11/16/2017</u>	Notice of withdrawal of Bricker & Eckler LLP as Counsel for the Office of the Ohio Consumers' Counsel electronically filed by Teresa Orahoad on behalf of Devin D. Parram.
<u>10/06/2017</u>	Notice of Appearance of Additional Counsel by the Office of the Ohio Consumers' Counsel electronically filed by Ms. Deb J. Bingham on behalf of Etter, Terry L.
<u>09/18/2017</u>	Service Notice
<u>09/18/2017</u>	Attorney Examiner Entry granting Duke's motion for a continuance and scheduling the evidentiary hearing for 12/07/2017 in accordance with Paragraph 6 - electronically filed by Sandra Coffey on behalf of Patricia Schabo, Attorney Examiner, Public Utilities Commission of Ohio.
<u>09/13/2017</u>	Memorandum Contra Motion for Duke Energy Ohio, Inc., to Continue the Hearing Set for September 26, 2017 submitted by Assistant Attorney General Thomas Lindgren on behalf of the Staff of the Public Utilities Commission of Ohio electronically filed by Kimberly L Keeton on behalf of Public Utilities Commission of Ohio.
<u>09/08/2017</u>	Motion of Duke Energy Ohio, Inc. to Continue the Hearing set for September 26, 2017 and Memorandum in Support filed by Elizabeth H. Watts on behalf of Duke Energy Ohio, Inc.
<u>08/31/2017</u>	Notice Of Withdrawal Of Counsel, Notice Of Appearance Of Additional Counsel And Notice Of Designation Of Counsel Of Record By The Office Of The Ohio Consumers' Counsel electronically filed by Ms. Deb J. Bingham on behalf of Etter, Terry L.
<u>08/03/2017</u>	Service Notice
<u>08/03/2017</u>	Attorney Examiner Entry setting forth procedural schedule; electronically filed by Vesta R Miller on behalf of Nicholas Walstra, Attorney Examiner, Public Utilities Commission of Ohio.
<u>03/24/2017</u>	Reply Comments by The Office of the Ohio Consumers' Counsel electronically filed by Ms. Jamie Williams on behalf of Etter, Terry Mr.
<u>03/24/2017</u>	Reply Comments of Duke Energy Ohio, Inc. electronically filed by Carys Cochern on behalf of Watts, Elizabeth H. Ms.
<u>03/06/2017</u>	Staff Review and Recommendation electronically filed by Mr. Jacob J Nicodemus on behalf of PUCO Staff.
<u>02/22/2017</u>	Comments by the Office of the Ohio Consumers' Counsel electronically filed by Ms. Deb J. Bingham on behalf of Etter, Terry L.
<u>01/04/2017</u>	Service Notice
<u>01/04/2017</u>	Attorney Examiner Entry setting forth the procedural schedule; electronically filed by Vesta R. Miller on behalf of Nicholas Walstra, Attorney Examiner, Public Utilities Commission of Ohio.
<u>10/05/2016</u>	Motion to Intervene and memorandum in support by the Office of the Ohio Consumers' Counsel electronically filed by Ms. Deb J. Bingham on behalf of Etter, Terry L.
<u>07/22/2016</u>	Application of Duke Energy Ohio, Inc. electronically filed by Dianne Kuhnell on behalf of Duke Energy Ohio, Inc. and Spiller, Amy B. and Watts, Elizabeth H. (Part 4 of 4)
<u>07/22/2016</u>	Application of Duke Energy Ohio, Inc. electronically filed by Dianne Kuhnell on behalf of Duke Energy Ohio, Inc. and Spiller, Amy B. and Watts, Elizabeth H. (Part 3 of 4)
<u>07/22/2016</u>	Application of Duke Energy Ohio, Inc. electronically filed by Dianne Kuhnell on behalf of Duke Energy Ohio, Inc. and Spiller, Amy B. and Watts, Elizabeth H. (Part 2 of 4)
<u>07/22/2016</u>	In the Matter of the Application of Duke Energy Ohio, Inc. to Establish Minimum Reliability Performance Standards electronically filed by Dianne Kuhnell on behalf of Duke Energy Ohio, Inc. and Spiller, Amy B. and Watts, Elizabeth H. (Part 1 of 4)

Duke Energy Ohio
Case No. 17-0032-EL-AIR, *et al.*
OCC Third Set of Production of Documents - Stipulation
Date Received: May 11, 2018

OCC-POD-03-039

REQUEST:

Please provide a copy of any action plans that were submitted to the PUCO director of the service monitoring and enforcement department regarding missed reliability performance standards in both 2016 and 2017.

RESPONSE:

See Attachment OCC-POD-03-039.

PERSON RESPONSIBLE: Legal



155 East Broad Street
20th Floor
Columbus, Ohio, 43215

o: 614-222-1331
f: 614-222-1337

May 8, 2018

John Williams, Director
Service Monitoring and Enforcement Department
Public Utilities Commission of Ohio
180 East Broad Street, 7th Floor
Columbus, Ohio 43215

Re: Duke Energy Ohio, O.A.C. 4901:1-10-10(D) Action Plan

Dear Mr. Williams:

This responds to an email of April 10, 2018 from Jacob Nicodemus wherein he cited O.A.C.4901:1-10-10(D), and noted Duke Energy Ohio, Inc.'s (Duke Energy Ohio) failure to meet performance standards. The email requests that Duke Energy Ohio provide an action plan. As Duke Energy Ohio's application to establish compliance standards is still pending, there remains an unresolved question as to what standards pertain. However, Duke Energy Ohio is providing an action plan as requested.

Much of the plan described below is dependent upon Commission approval of the pending Stipulation in Case Nos.17-032-EL-AIR and 17-1263-EL-SSO, *et al.* The Staff of the Public Utilities Commission of Ohio and Duke Energy Ohio have mapped out a plan that includes increased investment in reliability improvement and a provision that states that non-compliance for 2016 and 2017 will not be used to determine a penalty. Accordingly, the Company has set its goals for achievement of compliance in 2018 in order to comply with the terms of the Stipulation.

As we have discussed, the Company did meet the Customer Average Interruption Duration Index (CAIDI) standard for 2017, but narrowly missed on the System Average Interruption Frequency Index (SAIFI).

Although compliant, current CAIDI results are pressured due to increased ash tree failures and a continued focus on installation of sectionalizing devices that are being installed as part of the Company's plan to harden its system. Also, as is manifest due to the calculations, to the extent the Company is able to increase its SAIFI results, it becomes increasingly difficult to achieve flat or lower CAIDI results.

The plan to enhance CAIDI includes increased ash tree removal. Also, the Company has instituted weekly meetings with Operations employees to identify opportunities to improve response time for outage services.

With respect to SAIFI compliance, again the results are impacted at least in part by ash tree failures, increased outages due to sensitivities of isolation devices and planned outages.

The Company's current SAIFI action plan includes an increase in ash tree removal, adjustments of isolation device settings to minimize impacts to customers, additional sectionalizing devices, and planned outage reviews prior to construction to verify if an outage is really required. Also, the Company has created an investigation process to review devices that have had four or more outages in twelve months.

With increased investment made possible by ongoing work attributable to the Company's Rider DCI programs, it is anticipated that the Company's reliability reports for 2018 will be compliant with the Commission's rules.

Please let me know if you have any questions.

Respectfully submitted,

Duke Energy Ohio, Inc.

/s/ Elizabeth H. Watts

Rocco O. D'Ascenzo (0077651)
Deputy General Counsel
Elizabeth H. Watts (0031092)
(Counsel of Record)
Associate General Counsel
Duke Energy Business Services LLC
139 East Fourth Street, 1303-Main
P.O. Box 960
Cincinnati, Ohio 45201-0960
(614) 222-1331 (telephone)

**Duke Energy Ohio
Case No. 17-0032-EL-AIR, *et al.*
OCC Sixth Set of Production of Documents - Stipulation
Date Received: June 6, 2018**

OCC-POD-06-045

REQUEST:

Referring to the Company response to OCC-POD-03-039, please provide a copy of the April 10, 2018 email from Mr. Nicodemus where he noted Duke's failure to meet performance standards.

RESPONSE:

See OCC-POD-06-045 (Attachment).

PERSON RESPONSIBLE: Legal

Watts, Elizabeth H

From: jacob.nicodemus@puco.ohio.gov
Sent: Tuesday, April 10, 2018 1:57 PM
To: Watts, Elizabeth H
Cc: Stockton, Brett M; Barbara.Bossart@puco.ohio.gov; Craig.Smith@puco.ohio.gov
Subject: missed standards

Follow Up Flag: Follow up
Flag Status: Flagged

*** Exercise caution. This is an EXTERNAL email. DO NOT open attachments or click links from unknown senders or unexpected email. ***

Elizabeth,

As you are aware, each EDU annually files a report of distribution system reliability performance using indices CAIDI and SAIFI. For 2017, Duke reported a CAIDI performance of 127.28, which failed to meet the current CAIDI standard of 122.81 minutes, and a SAIFI performance of 1.16, which failed to meet the current SAIFI standard of 1.05 interruptions.

Per O.A.C. 4901:1-10-10(D), failure to meet a performance standard requires that the EDU submit an action plan by March 31st of the year following the miss:

(D) If the annual performance of an electric utility does not meet the electric utility's performance standard for any index, the electric utility shall submit an action plan to the director of the service monitoring and enforcement department, by March thirty-first of the year following the year when the standard was missed.

(1) The action plan shall include the following:

(a) Factors which contributed to the actual performance level for that index.

(b) A proposal for improving performance to a level that meets or exceeds the performance standards authorized for each missed reliability index, including each action taken or planned to be taken, and the anticipated completion date.

(2) The action plan shall be submitted in an electronic form prescribed by the commission or its staff.

(3) A status report on each action included in the action plan shall be submitted to the director of the service monitoring and enforcement department upon request of the staff.

Please respond with a written action plan as soon as possible. If you have any questions or concerns regarding this requirement, please don't hesitate to give me a call.

Thanks,
Jake

Jacob Nicodemus

Public Utilities Commission of Ohio
Service Monitoring and Enforcement Department
Reliability and Service Analysis Division
Utility Specialist II
(614) 644-8214

PUCO.ohio.gov



This message and any response to it may constitute a public record and thus may be publicly available to anyone who requests it.



155 E. Broad Street, 20th Floor
Columbus, Ohio 43215
Tel: 614-222-1331
Fax: 614-222-1337
Elizabeth.watts@duke-energy.com

Elizabeth H. Watts
Associate General Counsel

April 28, 2017

John Williams, Director
Service Monitoring and Enforcement Department
Public Utilities Commission of Ohio
180 East Broad Street
7th Floor
Columbus, Ohio 43215

Re: Duke Energy Ohio Rule 4901:1-10-10-27 (D) Action Plan

Dear Mr. Williams:

On March 31, 2017, pursuant to Rule 4901:1-10-10, O.A.C., Duke Energy Ohio, Inc., (Duke Energy Ohio) submitted its Annual Report regarding distribution reliability. Specifically, the Company reported that it was not in compliance with requirements for Customer Average Interruption Duration Index (CAIDI) for 2016. In order to remedy the problem, it is first necessary to understand the cause. The Company has determined that the below factors which contributed to the actual performance level.

It is Duke Energy Ohio's conclusion that CAIDI increased during 2016 as the result of continued focus on improvements to SAIDI and SAIFI. One such improvement focuses on minimizing the effect of a fault through the installation of sectionalizing devices such as reclosers and fuses. These sectionalizing devices limit the impact of a fault by isolating the resulting outage to a smaller number of customers. By isolating the fault in this manner, a larger number of customers avoided an outage. However, this benefit also results in less customers being restored in short duration during the restoration process, thus resulting in an impact to CAIDI. An example of how SAIDI, SAIFI, and CAIDI are affected was included in the technical review which occurred on February 2, 2017.

Additionally, when comparing the number of 2016 breaker level events against the five year average, Duke Energy Ohio has experienced a 43% reduction in the number of events and a 22% reduction in the number of Customer Interruptions (CI). Correspondingly, the Company has experienced a 45% increase in the number of recloser events and a 20% increase in the customer interruptions compared to the five year average. Since the overall number of events for Duke Energy Ohio has remained relatively constant, the net effect is a reduction in the number of customers that have experienced a shorter duration outage, which will cause CAIDI to increase. This demonstrates that the Company's sectionalizing strategy is being effective with mitigating outages to a larger number of customers.

John Williams, Director
April 28, 2017
Page 2 of 2

Duke Energy Ohio offers the following proposal for improving performance to the required level, including actions to be taken and anticipated completion date.

1. The Company plans to continue the sectionalizing strategy to isolate outages to impact a smaller number of customers thus mitigates impacts to a larger customer count.
2. The Company will leverage technology that enables two way communication and control to our distribution control center to pinpoint trouble and to restore power quicker to our customers.
3. The Company will continue to review and correct outage events data. Two additional efforts are being initiated:
 - a. Ensuring events are modeled to reflect the actual customers associated with an outage with less than 500 customers. While the Company has been focused on larger events greater than 500 customers, this initiative is focusing on events that affect less than 500 customers.
 - b. Ensure outage restoration time is entered to more accurately to reflect the actual time customer service is restored.
4. The Company will begin a program called "Switch Before Fix" as an initiative that will identify opportunities to restore power to as many customers as possible as quick as possible, through switching and fault isolation before beginning repairs that take a longer duration. While this effort is not new, additional reviews are taking place to identify additional opportunities.
5. Resource Response Time Performance - Duke Energy Ohio will develop metrics to track and measure the time to get a first responder to the outage location to drive operational improvement. Faster response equates to faster outage restoration.

It is anticipated that this information will respond to any concerns regarding this year's compliance submissions. Please let us know if you need additional information or clarification.

Respectfully submitted,



Amy B. Spiller
Deputy General Counsel
Elizabeth H. Watts
Associate General Counsel
Duke Energy Shared Services, Inc.
155 East Broad Street, 21st Floor
Columbus, Ohio 43215
Phone: 614-222-1330
Fax: 614-222-1337
Amy.Spiller@duke-energy.com
Elizabeth.Watts@duke-energy.com

Duke Energy Ohio
Case No. 17-0032-EL-AIR, *et al.*
OCC Third Set of Production of Documents - Stipulation
Date Received: May 11, 2018

OCC-POD-03-040

REQUEST:

Please provide a copy of any presentation(s), correspondence with the PUCO and any other written materials regarding the missed reliability performance standards in both 2016 and 2017.

RESPONSE:

See Response to OCC-POD-03-39

PERSON RESPONSIBLE: Legal

Duke Energy Ohio
Case No. 17-0032-EL-AIR, et al.
OCC Sixth Set of Interrogatories - Stipulation
Date Received: June 6, 2018

OCC-INT-06-141

REQUEST:

Regarding the statement in the May 8, 2018 action plan that was provided in response to OCC-POD-03-039 stating "As we discussed, the Company did meet the Customer Average Interruption Duration Index (CAIDI) standard for 2017, but narrowly missed on the System Average Interruption Frequency Index (SAIFI)," please explain the following:

- a. What was the CAIDI standard that was purportedly met by the Company in 2017?
- b. What was the SAIFI standard that was "narrowly missed" in 2017?
- c. Identify the person(s) from the PUCO Staff and Duke that were part of the purported discussion involving the Company meeting the CAIDI standard in 2017 and narrowly missing the SAIFI?
- d. Identify the date that the purported discussion occurred between the PUCO Staff and the Company that Duke met the CAIDI standard for 2017 but narrowly missed the SAIFI
- e. Was the purported discussion between the PUCO Staff and Duke regarding an understanding that the Utility met the CAIDI standard for 2017 but narrowly missed the SAIFI standard memorialized in a letter, e-mail, or any other form of communications?
- f. Did the PUCO Commission issue any entry or order approving reliability standards for 2016 and 2017? If so, what date(s) were the entries or orders issued in and what were the approved standards?

RESPONSE:

- a. The Company did not have standards pertaining to 2017 as the Company's application to establish new standards is still pending.
- b. This response to Commission Staff was in error since there were no standards established at this time.
- c. The correspondence was produced. There was no additional discussion.
- d. See c. above.
- e. See c. above.
- f. Objection. This Interrogatory seeks to elicit information that is of public record and thus is equally accessible to the Office of the Consumers' Counsel. See Case No.13-1539-EL-ESS, Opinion and Order, (September 17, 2014). Note that OCC was a signatory to the Stipulation that was filed in the case.

PERSON RESPONSIBLE: Legal

Duke Energy Ohio
Case No. 17-0032-EL-AIR
OCC Fourth Set of Interrogatories
Date Received: May 18, 2017

OCC-INT-04-090

REQUEST:

Under the Rider DCI referenced in Ms. Hart's testimony at page 6, please provide the total level of capital expenditures that were made in each of the following programs in 2015 and 2016. In addition, please provide the planned level of expenditures for each program for 2017 and 2018.

RESPONSE:

Rider DCI Program	2015	2016	2017	2018
Transformer Retrofit Program	6,121,404	3,158,887	4,365,662	4,562,857
Vegetation Clearing/ Right-of-Way Acquisition Modification Program	0	0	0	0
Underground Cable Injection	5,579,542	10,018,293	7,589,486	7,048,980
Underground Cable Replacement	1,442,113	24,107,081	21,853,953	14,764,973
DTUG-Online Dissolved Gas Analysis (DGA), Sump Pump, Oil Monitoring (Network)	2,322	131,143	116,296	498,410
Manhole Lid Retrofit Program	1,420,463	1,382,661	800,410	950,204
Manhole/ Vault Capital Rebuild (Network)	1,330,694	3,522,116	2,089,734	3,157,997
Vault Network Protector/ Transformer Change Out	1,232,352	1,333,149	5,428,964	8,951,479
Redesign of Worst Congested Underground Structures	109,594	308,129	59,168	208,030
URD Submersible Transformer Upgrades	274,356	4,108,956	1,983,779	2,339,736
Distribution Substation Protection (Physical Security)	0	0	0	0
Upgrade Live Front Transformers	462,608	783,269	722,854	137,879
Upgrade Distribution Transformer Substations (Unique Customer Locations)	53,220	530,959	507,687	802,539
PILC Replacement (Feeder Exits)	2,070,949	3,639,451	4,142,875	4,042,123
Distribution Operations Center and Mobile Logistics Modernization	8,214,819	16,152,500	23,550,044	18,746,454
Ownership of Underground	N/A	N/A	N/A	N/A

Residential Services				
Conversion of Old 4kV Feeders	4,176,922	8,949,441	8,611,487	6,016,308
Recloser Replacement	1,655,474	1,711,100	1,066,250	1,283,215
Circuits Sectionalization	902,656	1,501,286	2,501,935	1,423,387

PERSON RESPONSIBLE:**Cicely Hart**



**Duke Energy Ohio
SmartGrid
Non-Financial Metrics
2016 Annual Report**

This 2016 Annual Report of non-financial metrics associated with the Advanced Metering Infrastructure (AMI) meter and SmartGrid deployment in Ohio, is submitted in accordance with the Stipulation and Recommendation that was approved by the Public Utilities Commission of Ohio, in the Opinion and Order in Case No. 10-2326-GE-RDR. The report compares Baseline with 2011 through 2016 performance.

As agreed in the meeting with Staff and OCC on Feb. 6, 2013, Duke Energy Ohio will submit a report titled Distribution System Efficiency Metrics with the annual cost recovery filing and as a result, "Line Loss & Unaccounted for Electric (Kwh)" and "Average System Voltage" have been removed from the Smart Grid Non-financial Metrics report.

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DE Ohio - 2016 Non-Financial Metrics Report

Metric	Baseline	2011	2012	2013	2014	2015	2016	Projected Steady State at 2015
# of Certified Gas Modules	0	205,579	318,982	387,034	440,394	446,075	447,697	440,000
# of Certified Electric Meters	0	294,494	477,965	623,909	706,593	716,920	722,040	720,000
# of Duke Energy Ohio employees – Gas	210	135	129	134	142	145	140	135
# of Duke Energy Ohio employees – Power	643	409	278	276	235	310	271	585
Total delivered at Retail -- Kwh	21,010,867,000	20,240,732,940	19,932,319,484	20,010,062,750	20,286,736,611	20,162,115,125	20,489,647,501	20,854,335,000 [1]
# of Installed & Certified Communication Nodes	0	71,036	116,802	139,849	139,993	140,194	140,291	138,000
Remote Order Fulfillments as % of Total Meter Orders [2]	0%	50.0%	66.3%	84.2%	93.9%	96.2%	96.4%	98.5%
# of Manual On-cycle Electric Meter Reads	8,585,006	6,230,211	4,020,651	2,115,646	775,985	345,644	300,120	25,000
# of Manual On-cycle Gas Meter Reads	5,374,353	3,883,768	2,506,380	1,296,687	475,604	211,847	184,944	220,000
# of Manual Off-cycle Electric Meter Reads	138,881	83,046	50,172	28,571	14,013	9,961	9,019	500
# of Manual Off-cycle Gas Meter Reads	85,120	50,899	30,750	17,511	8,588	6,105	5,527	3,000
# of Manual Electric Meter Reads	8,723,887	6,313,257	4,070,823	2,144,217	789,998	355,605	309,139	25,500
# of Manual Gas Meter Reads	5,459,473	3,934,667	2,537,130	1,314,198	484,192	217,952	190,471	223,000
# of Non-pay Disconnects - Electric [3]	65,841	70,328	81,451	82,399	86,345	76,212	64,784	[4]
# of Meter Readers (expressed in FTE)	135	103	74	60	48	23	22	10
Certified Meters as % of Planned Total	0.0%	43.1%	68.7%	87.2%	98.9%	100.0%	100.0%	98.5%
# of Meter Reading Routes	2,460	2,046	1,284	998	427	294	237	63
# of Handhelds Repaired	122	32	14	0	0	0	4	0
# of Handhelds Purchased	41	0	121	0	0	0	0	0
# of Non-AMI Meters Purchased	3,608	7,104	5,753	1,221	262	442	411	0
# of Meters Repaired - Mechanical	11,649	22,860	22,494	15,918	9,571	3,846	75	100
# of Meters Failed - Electric Smart Meter	0	116	800	1,850	275	556	728	2,200
# of Gas Modules Failed	73	183	58	516	101	7	-	550
# of Meter Reading Vehicles	117	115	106	82	78	39	24	12
Average Miles per Meter Reading Vehicle	10,619	10,153	3,684	9,562	7,060	9,492	13,943	[5]
# of Truck Rolls Avoided (Outage)	0	217	610	566	655	1,613	5,615	[2]
# of Truck Rolls Related to an Outage	19,877	30,601	42,952	38,383	45,166	37,471	41,047	[2]
# of Node-notified Storm Event Outages [6]	0	0	148	102	163	210	113	[2]
# of Node-notified Outages [6]	0	18	1,163	2,183	2,761	1,537	693	[2]
# of Self-Healing Teams Installed	0	17	24	30	30	30	33	30
# of Annual Customer Minutes Saved from Self-Healing Events	0	558,905	2,782,697	4,605,817	5,535,113	8,965,998	18,999,741	3,000,000
# of Successful Self-Healing Team Operations	-	8	10	27	55	69	88	[2]
# of Self-Healing Team Failures	-	-	-	15	20	19	21	[2]
Total # of SHT Operations	-	8	10	42	75	82	109	[2]
# of successful self-healing team operations during MED's	-	-	-	-	-	14	19	[2]
# of unsuccessful self-healing team operations during MED's	-	-	-	-	-	3	9	[2]
# of AMI Power Theft Cases Billed	0	839	1,198	1,288	876	867	663	1,250
% Capacitor Off-line	15.0%	5.2%	4.3%	2.2%	2.2%	2.7%	3.1%	[7]
# of Capacitor Banks Installed [8]	2,127	2,031	1,891	1,956	1,956	1,956	1,956	[7]

Footnotes

[1] Steady state represents the 2015 forecast per Duke's IRP filing in June 2012.

[2] Steady state is not applicable as numbers are dependent on factors outside of Duke Energy's control, including weather/storm activity.

[3] Baseline, 2011, and 2012 figures contain a small number of gas disconnects, as a specific breakout could not be determined. Data for 2013, 2014, 2015, and 2016 is electric only.

[4] Duke Energy Ohio is unable to forecast a steady state as the number of Non-Pay Disconnects is heavily influenced by economic conditions.

[5] Steady state cannot be determined until manual meter reading routes are defined at the conclusion of the deployment.

[6] Totals for 2016 represent partial year data due to system issues.

[7] Sufficient data does not yet exist to provide information on steady state.

[8] Numbers provided represent 3-phase distribution switched capacitors in the field.

Duke Energy Ohio
Case No. 17-0032-EL-AIR, et al.
OCC Sixth Set of Production of Documents - Stipulation
Date Received: June 6, 2018

OCC-POD-06-050

REQUEST:

Please provide a copy of the DE Ohio – 2017 Non-Financial Metrics Report required as part of Duke’s grid modernization program.

RESPONSE:

See page 9 of the Stipulation in Case No. 10-2326-GE-RDR: “For at least one year beyond full deployment, the Company will separately track SmartGrid non-cost metrics for electric Rider DR-IM.” As the tracking was only required for 1 year beyond full deployment, the Company’s obligation has been fulfilled and no such information is currently available.

PERSON RESPONSIBLE: Legal

**Duke Energy Ohio
Case No. 17-0032-EL-AIR, *et al.*
OCC Second Set of Interrogatories - Stipulation
Date Received: April 26, 2018**

OCC-INT-02-008

REQUEST:

Page 14 of the Stipulation refers to a DCI Work Plan that “shall be submitted to Staff annually starting on December 1, 2019.”

- a. Will Duke prepare a similar work plan for any DCI investments made or to be made in calendar years 2018 and 2019?
- b. Will copies of the work plan be made available to parties other than the PUCO Staff?

RESPONSE:

- a. Unknown at this time as the Company has not yet met with Staff to discuss the creation of such workplan.
- b. No.

PERSON RESPONSIBLE: Legal

PUCO Case No. 16-1602-EL-ESS
OCC-POD-01-002(b) Attachment
Page 1 of 30



Q3-16 Ohio PUC Reliability Study Residential Results

October 2016

Prepared by: Cindy Linker, Duke Energy CSAT Team

Completed Survey Counts

- Online survey emailed to a random sample of residential customers
- Email invitations mailed in Waves

	Q3-15	Q4-15	Q1-16	Q2-16	Q3-16
Sample Size	1762	1500	2000	2000	2497
Completed Surveys	110	118	103	127	122
Response Rate	6%	8%	5%	6%	5%

PUCO Case No. 16-1602-EL-ESS
OCC-POD-01-002(b) Attachment
Page 3 of 30

Reliability

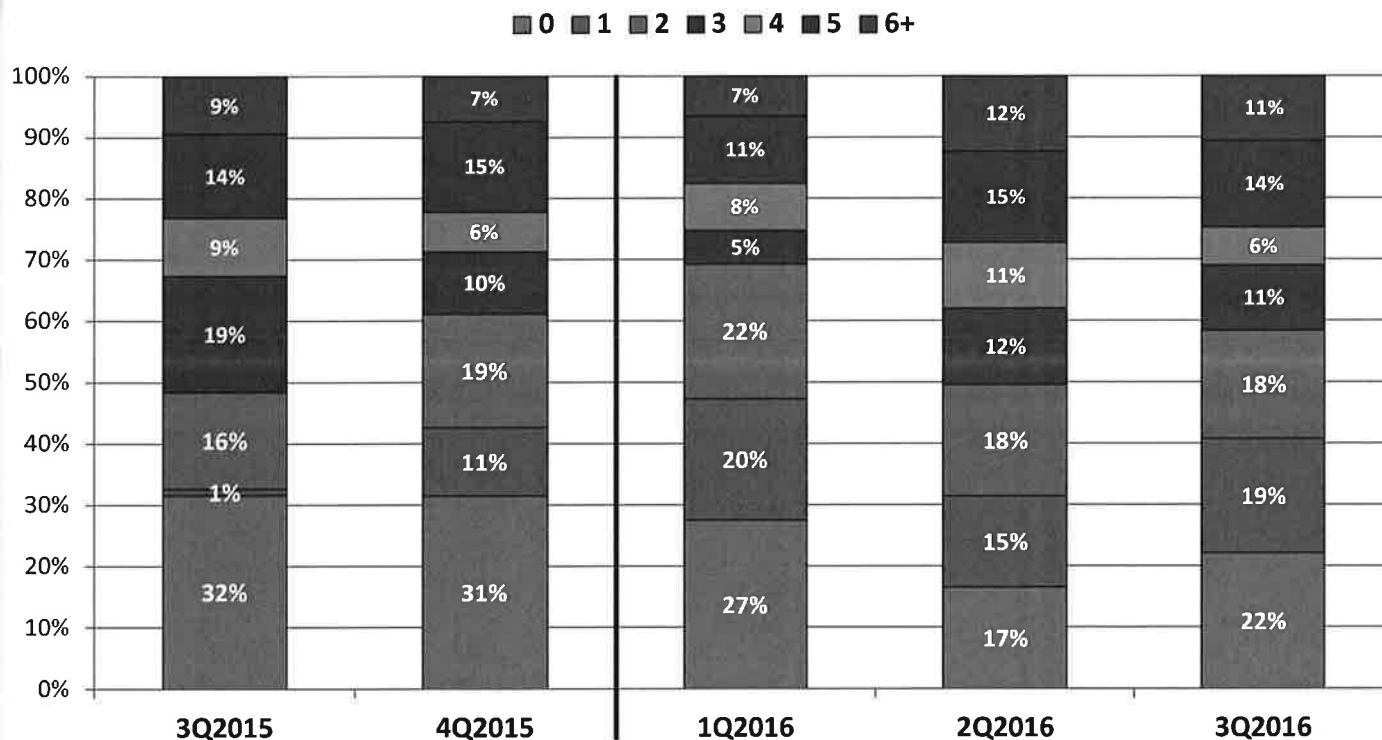
Quarterly Results

Q3-16 OH PUC Residential Reliability Study



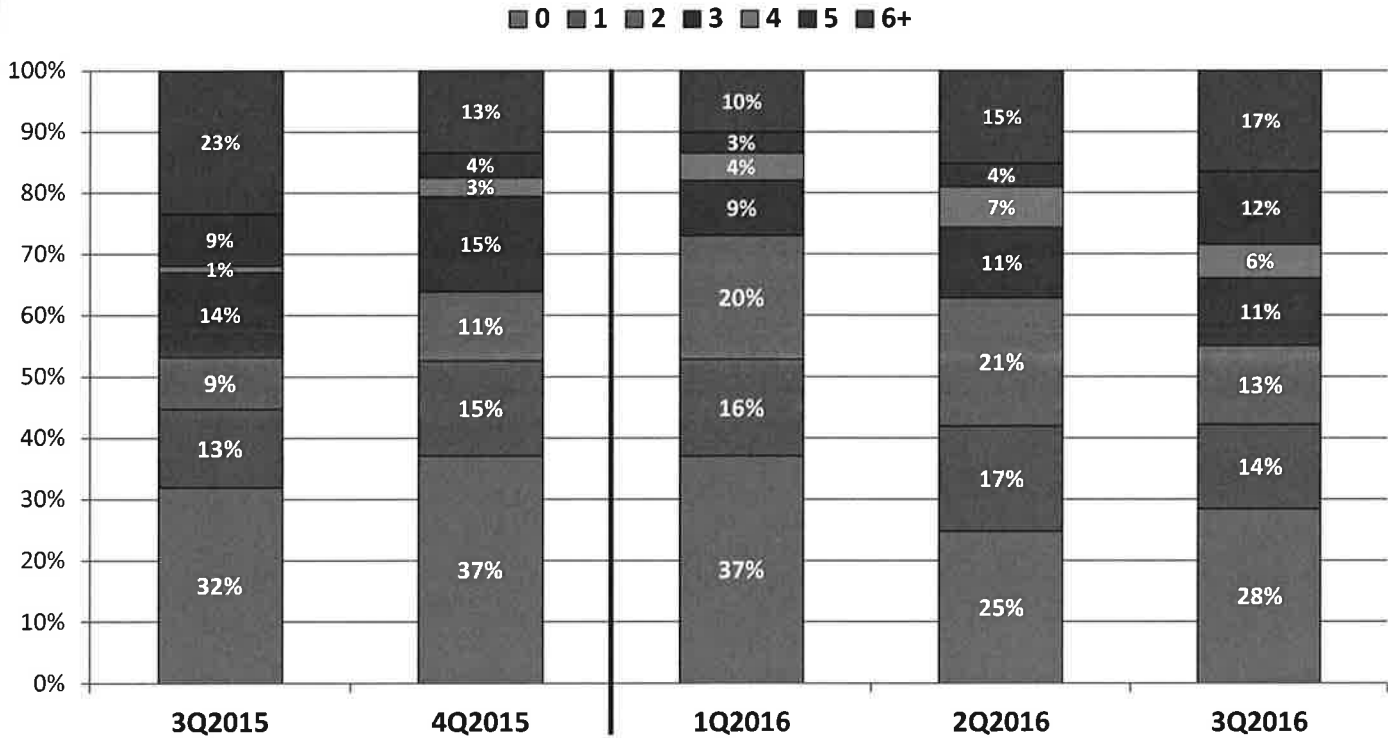
PUCO Case No. 16-1602-EL-ESS
OCC-POD-01-002(b) Attachment
P. 14

How many brief interruptions of 5 minutes or less would you consider *acceptable* during a 12 month period?



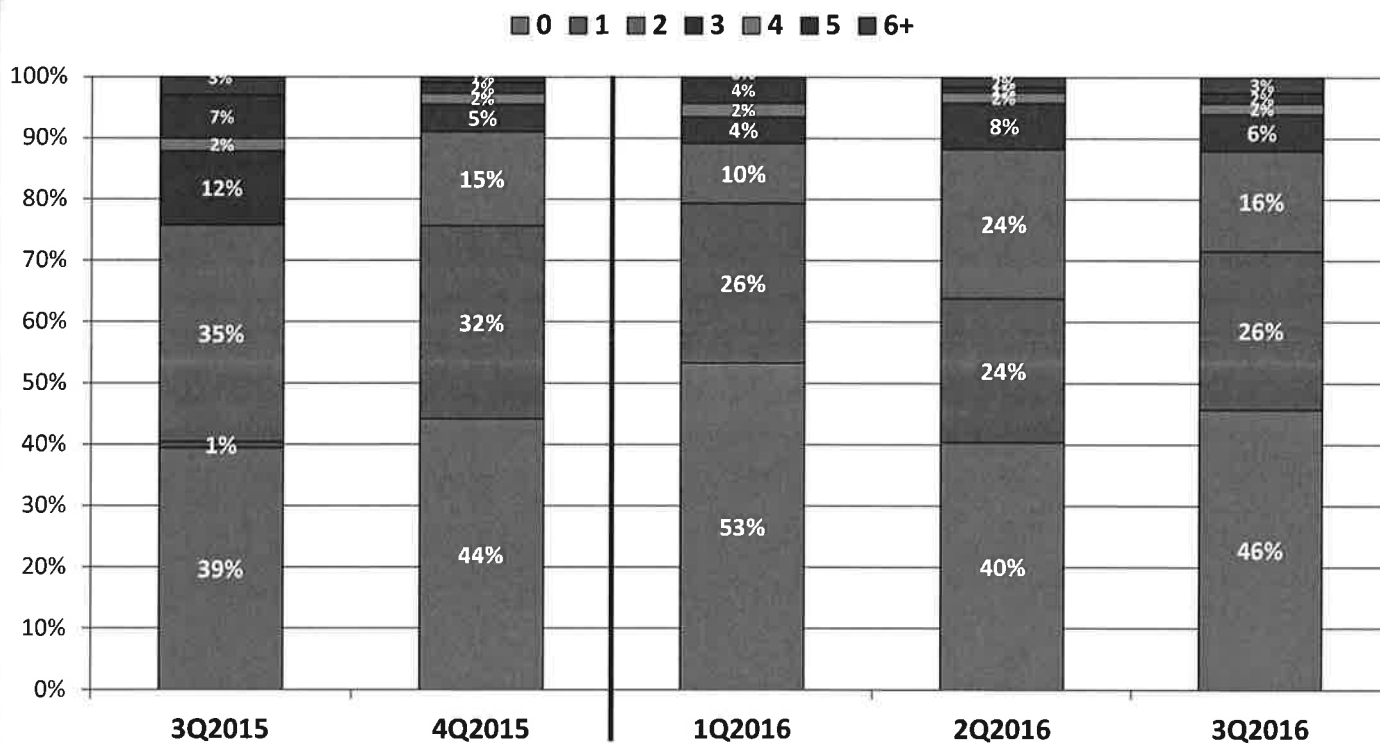
PUCO Case No. 16-1602-EL-ESS
OCC-POD-01-002(b) Attachment
Page 14 of 14

How many brief interruptions of 5 minutes or less have you experienced at your home in the past 12 months?



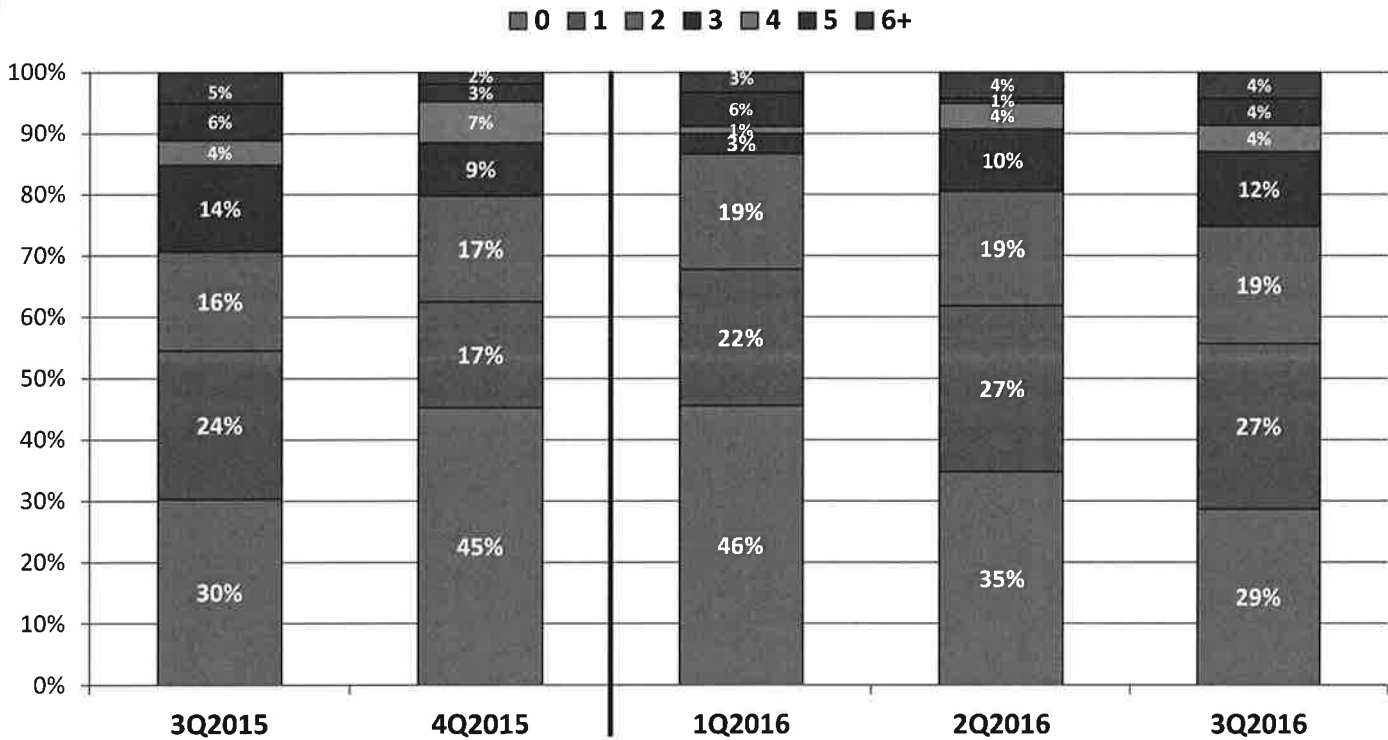
How many lengthy interruptions of more than 5 minutes would you consider *acceptable* during a 12 month period?

PUCO Case No. 16-1602-EL-ESS
OCC-POD-01-002(b) Attachment
PAW 11



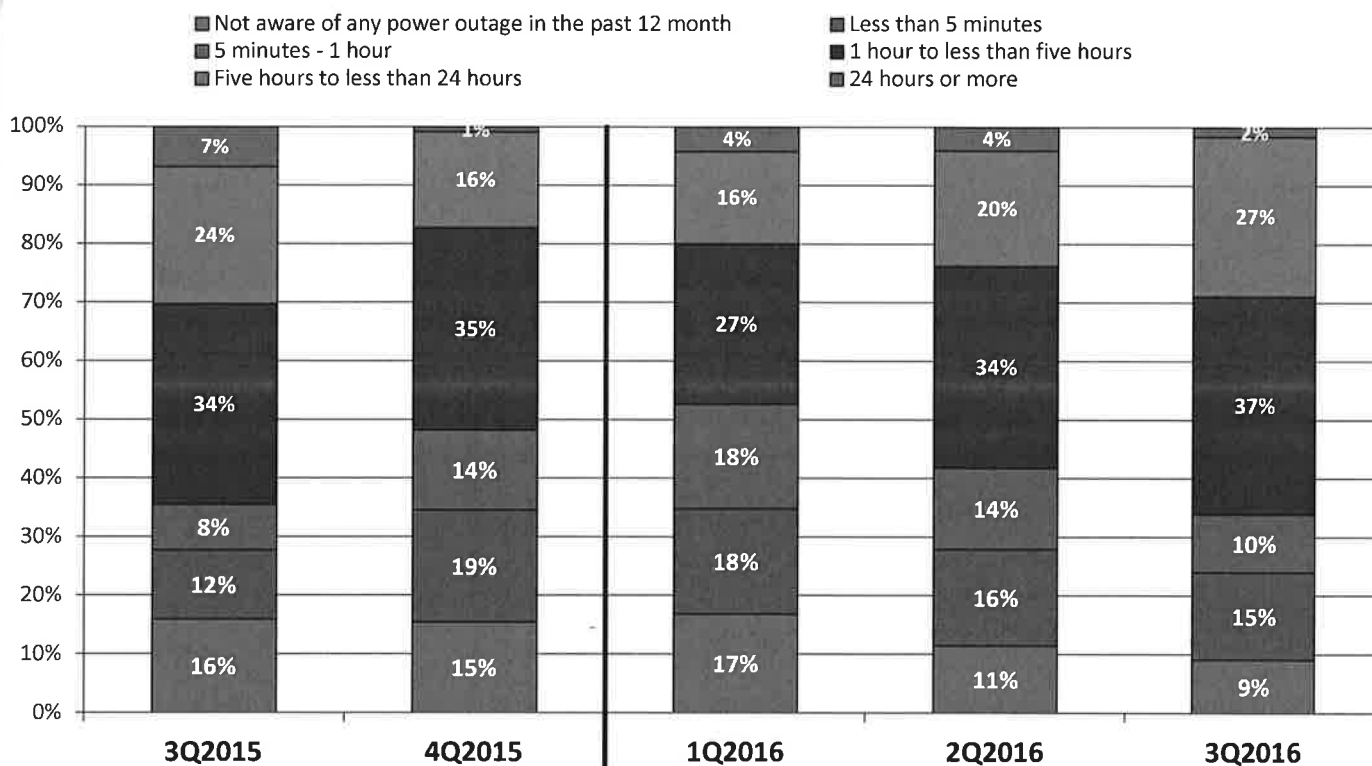
PUCO Case No. 16-1602-EL-ESS
QCC-POP-01-002(b) Attachment
Page 10 of 11

How many lengthy interruptions of more than 5 minutes have you experienced at your home in the past 12 months?



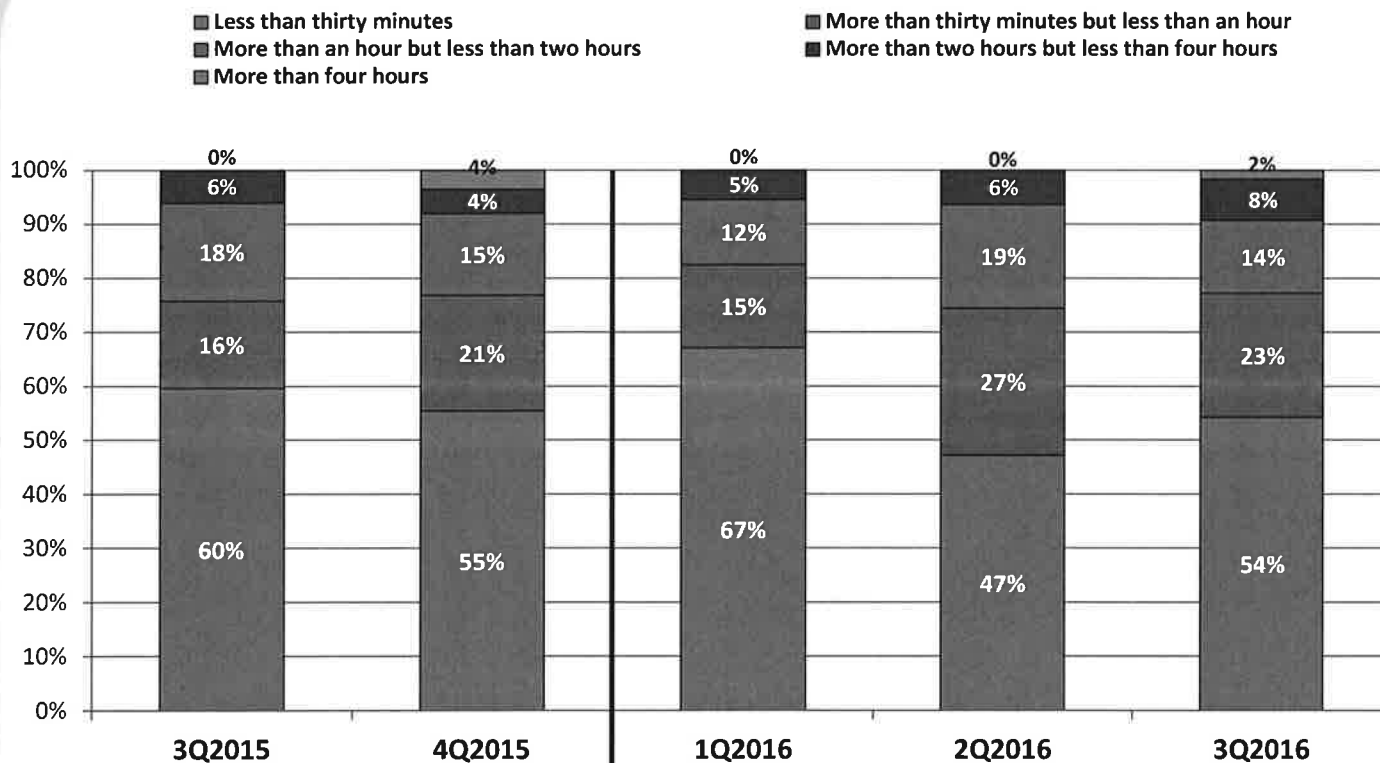
PUCO Case No. 16-1602-EL-ESS
OCC-POD-01-002(b) Attachment

Would you estimate your longest power outage in the past 12 months to be:



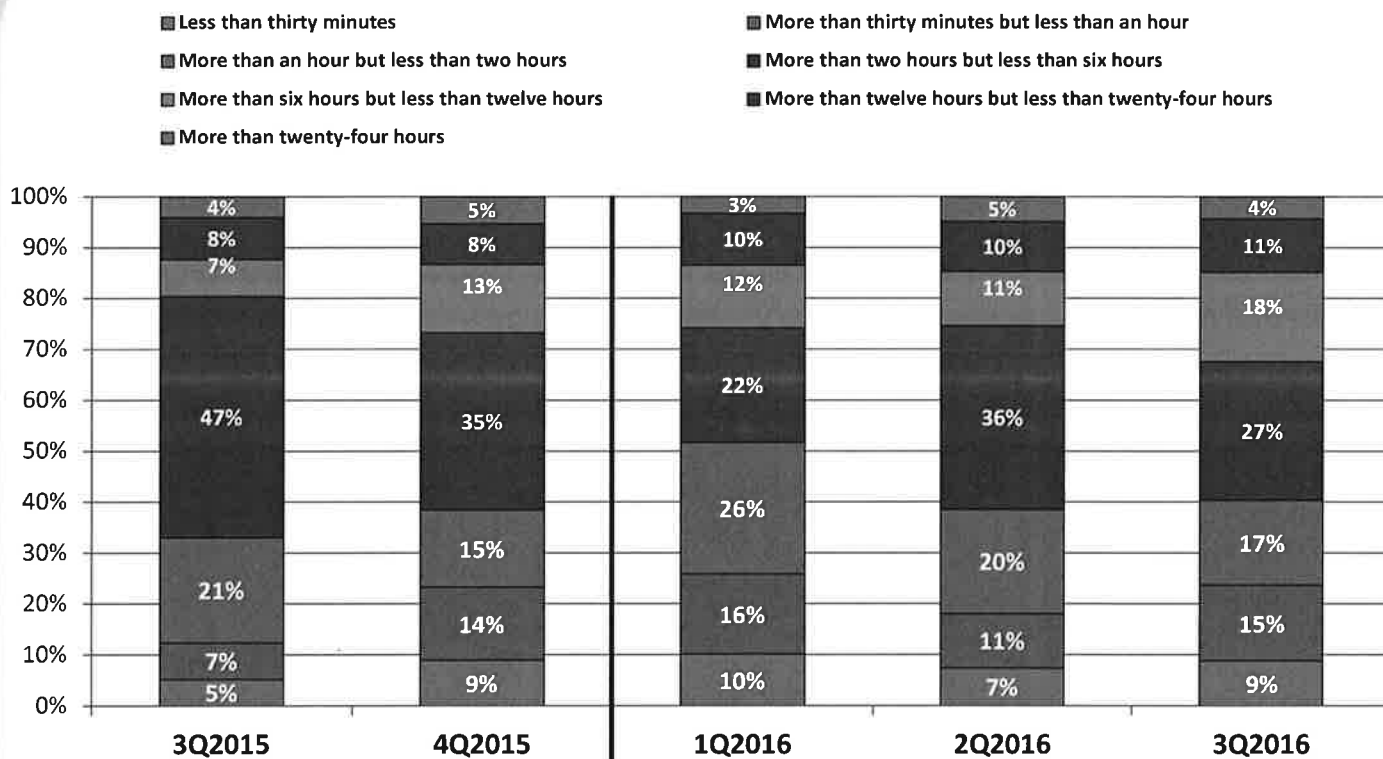
PUCO Case No. 16-1602-EL-ESS
OCC-POD-01-002(b) Attachment

What do you consider to be an acceptable length of a prolonged outage that was not storm related?



PUCO Case No. 16-1602-EL-ESS
OCC-POD-01-002(b) Attachment
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What do you consider to be an acceptable length of a prolonged outage that was storm related?



PUCO Case No. 16-1602-EL-ESS
OCC-POD-01-002(b) Attachment
Page 11 of 30

Demand Response

Quarterly Results

Q3-16 OH PUC Residential Reliability Study

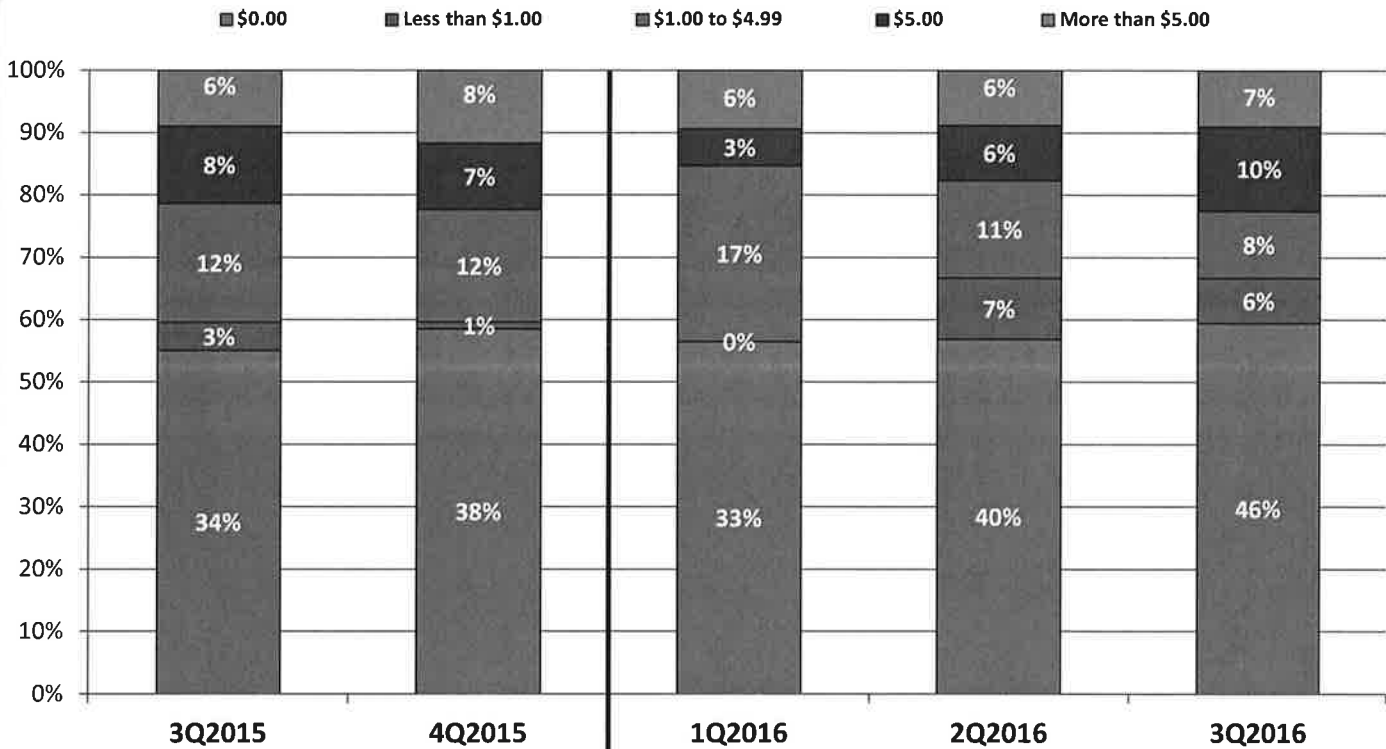


PUCO Case No. 16-1602-EL-ESS

Q3-16 OH PUC Residential Reliability Study

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During a specified period of system stress, such as a hot summer day, what is the maximum amount that you would be willing to pay and have included in your electric bill in order to avoid a 1 hour electric service outage to your residence?

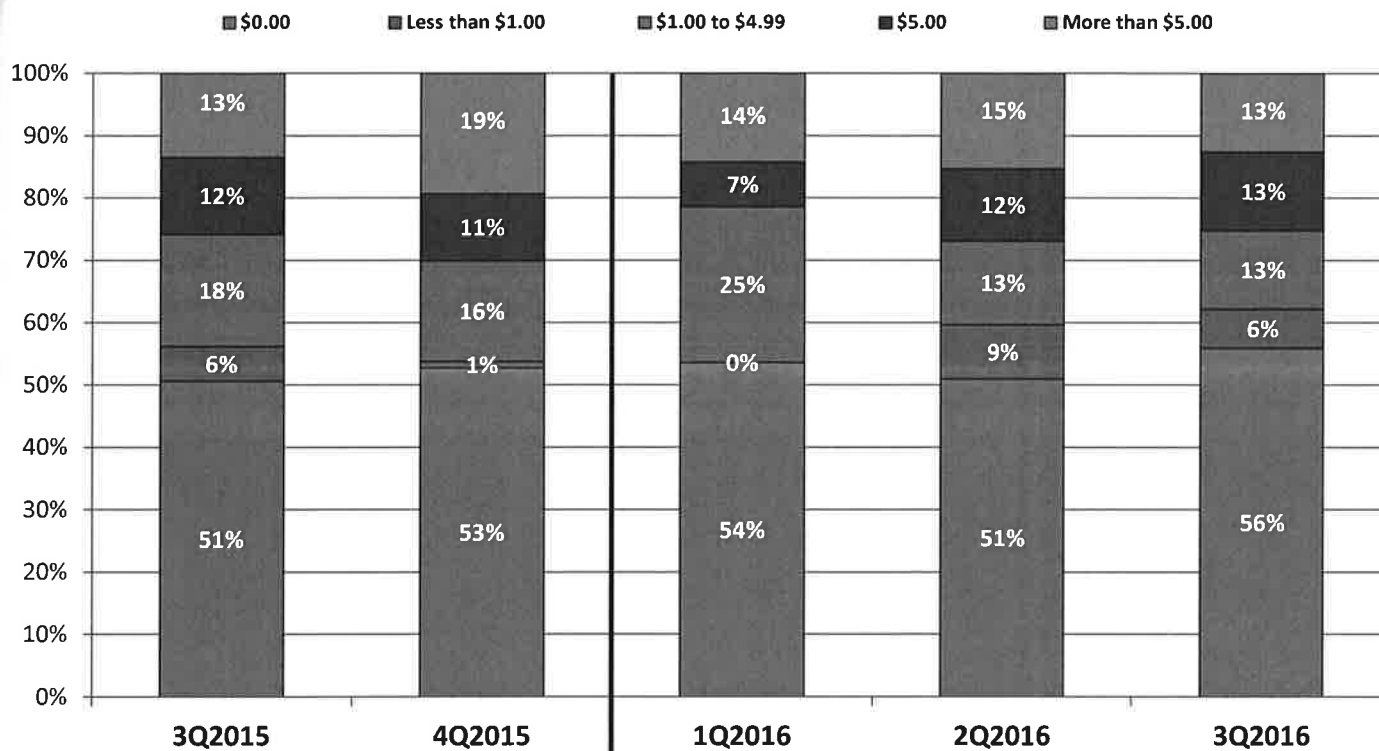


PUCO Case No. 16-1602-EL-ESS

Case No. 16-1602-EL-ESS

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During a specified period of system stress, such as a hot summer day, what is the maximum amount that you would be willing to pay and have included in your electric bill in order to avoid a 2 hour electric service outage to your residence?

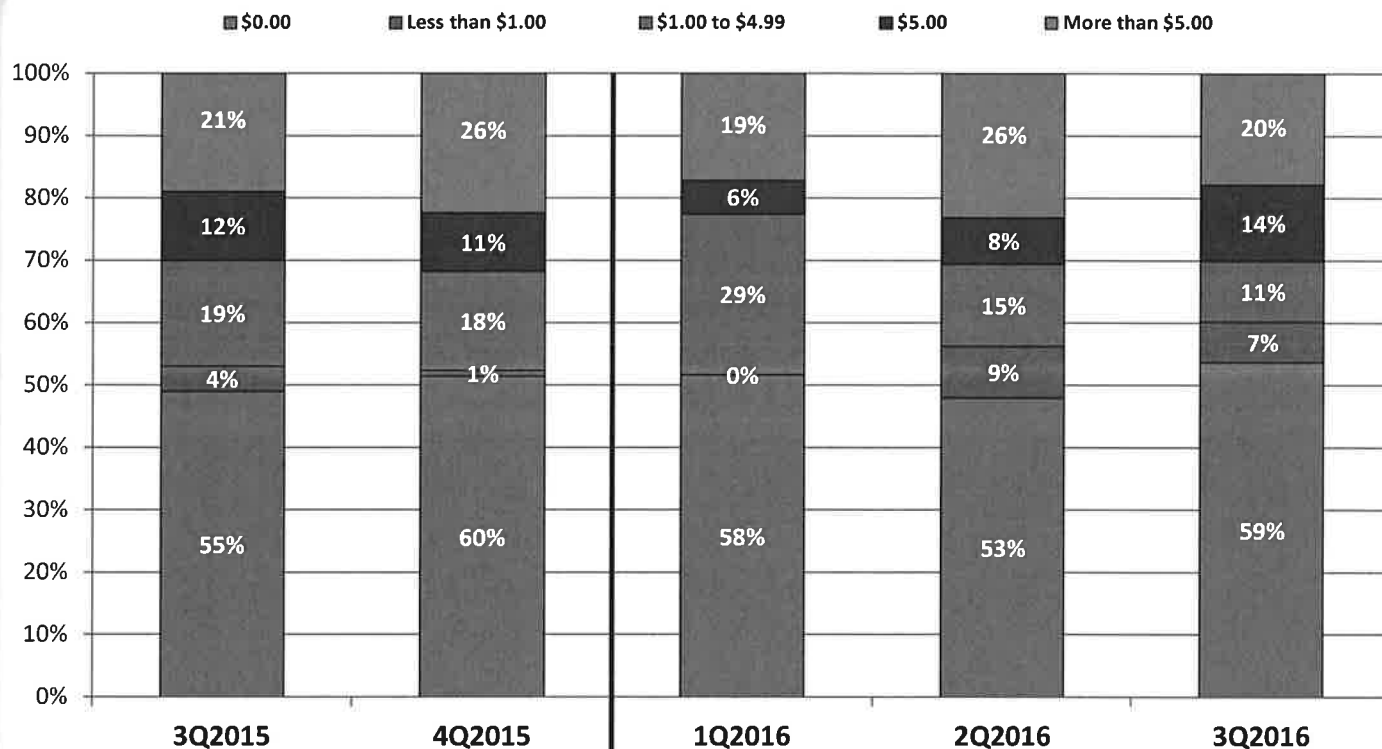


PUCO Case No. 16-1602-EL-ESS

OSG PDU 01-023 by Attorney

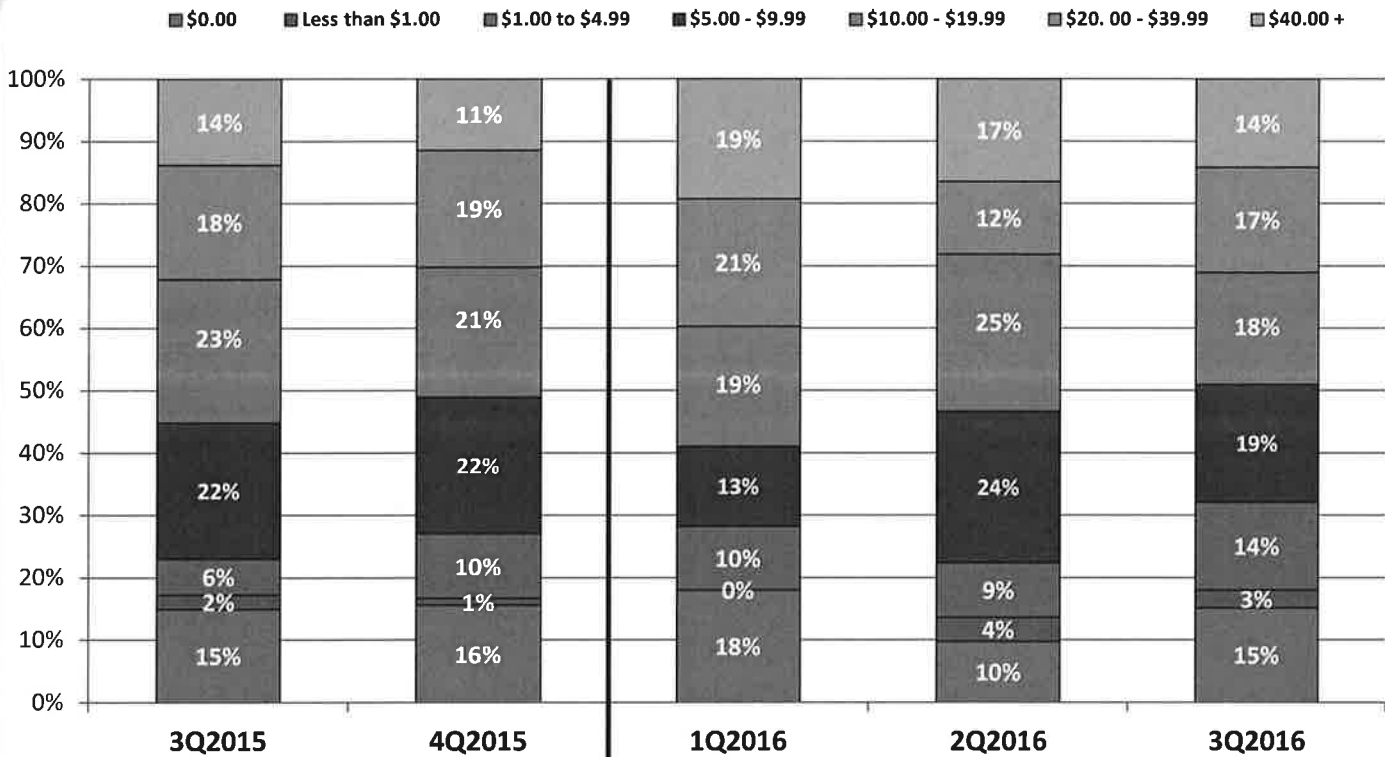
Page 14 of 30

During a specified period of system stress, such as a hot summer day, what is the maximum amount that you would be willing to pay and have included in your electric bill in order to avoid a 4 hour electric service outage to your residence?



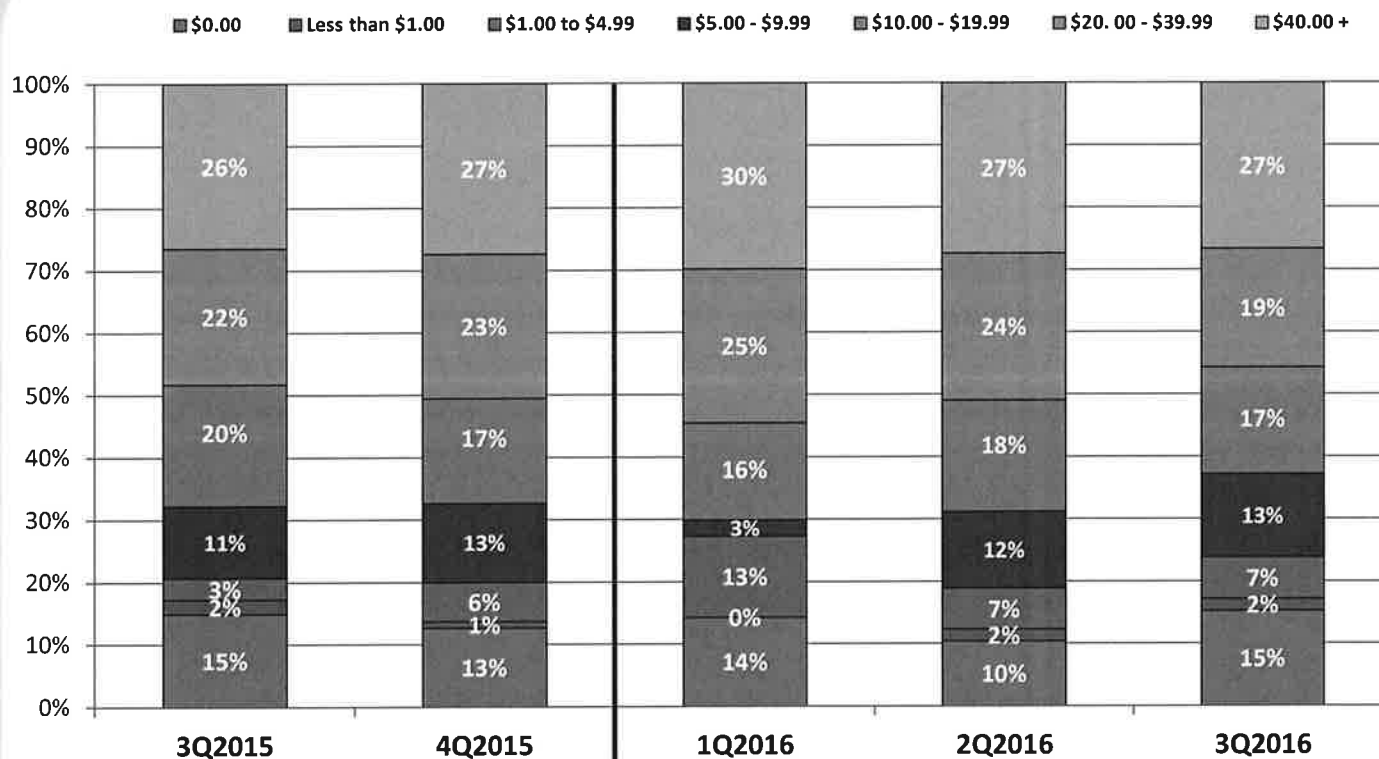
PUCO Case No. 16-1602-EL-ESS
OCC-POD-01-002(b) Attachment
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How much of a credit to your electric bill would you require from the utility to allow the electric company to interrupt service to your residence for 1 hour?



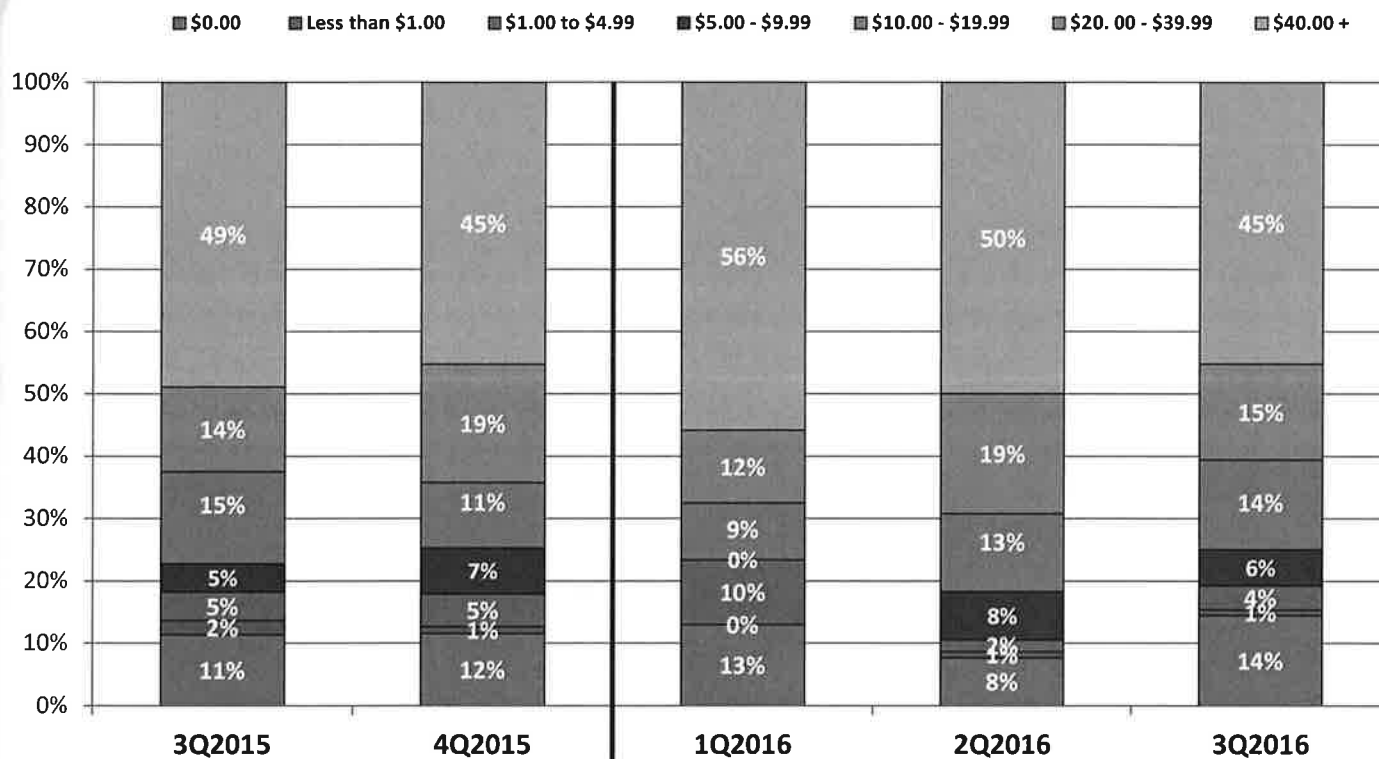
How much of a credit to your electric bill would you require from the utility to allow the electric company to interrupt service to your residence for 2 hours?

PUCO Case No. 16-1602-EL-ESS
OCC-POD-01-002(b) Attachment
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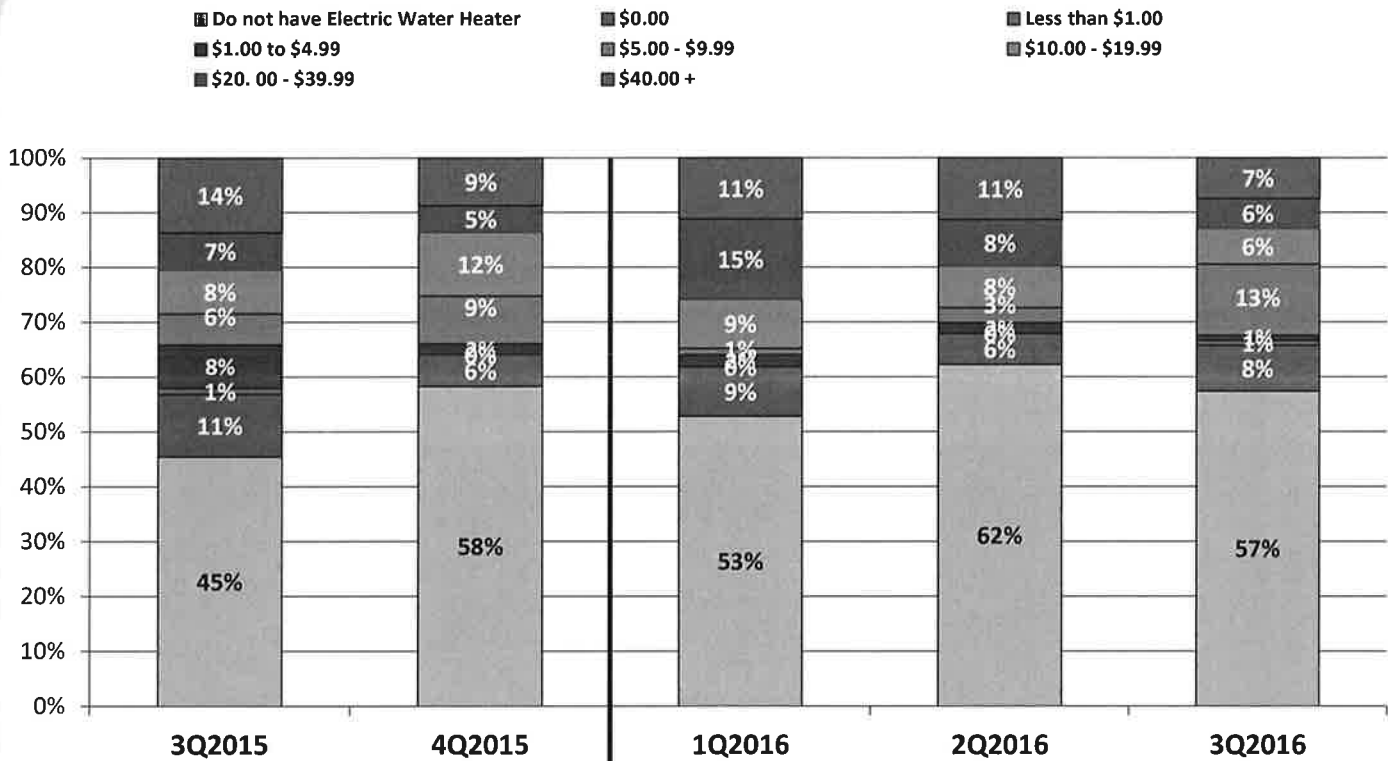
How much of a credit to your electric bill would you require from the utility to allow the electric company to interrupt service to your residence for 4 hours?

PUCO Case No. 16-1602-EL-ESS
OCC-POD-01-002(b) Attachment

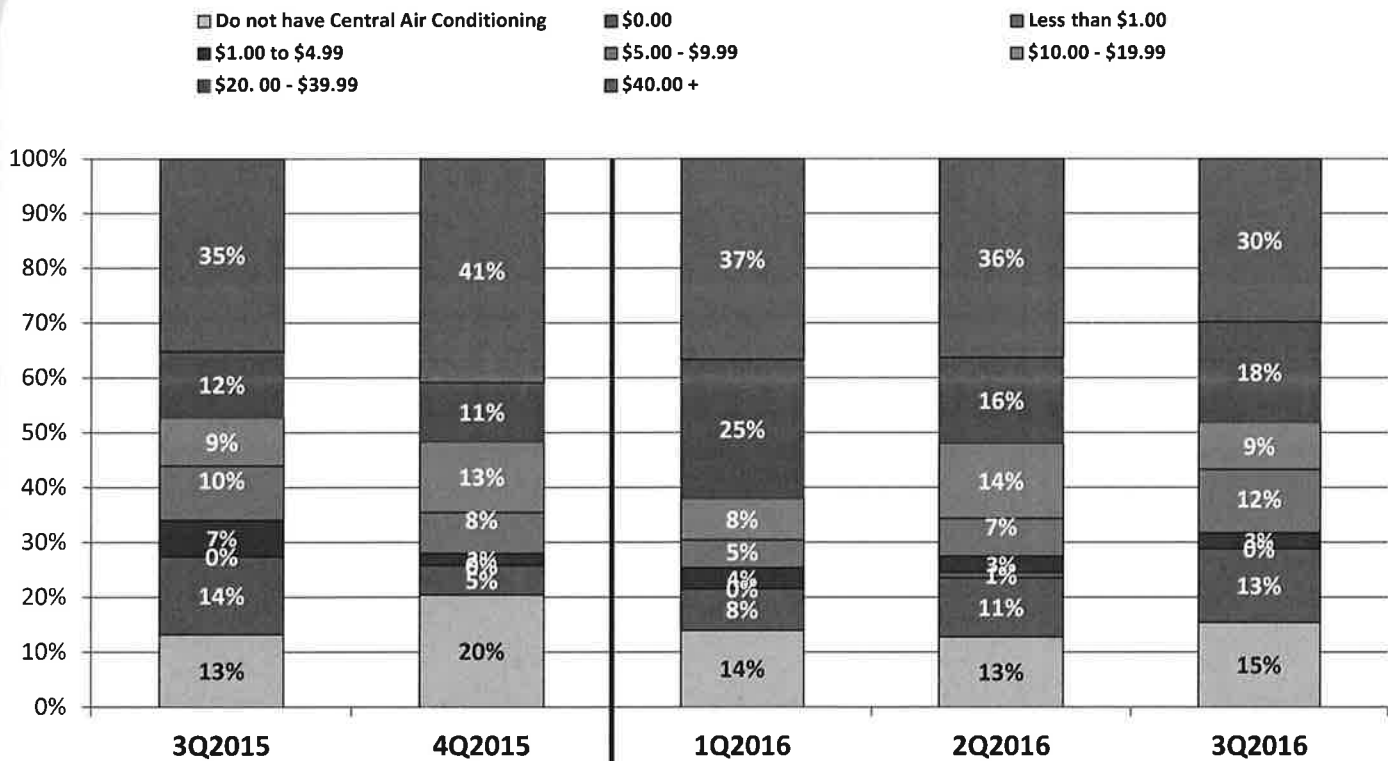


How much of a credit to your electric bill would you require from the utility to allow the electric company to control the operation of the hot water heater within your residence during a time when its system is under stress?

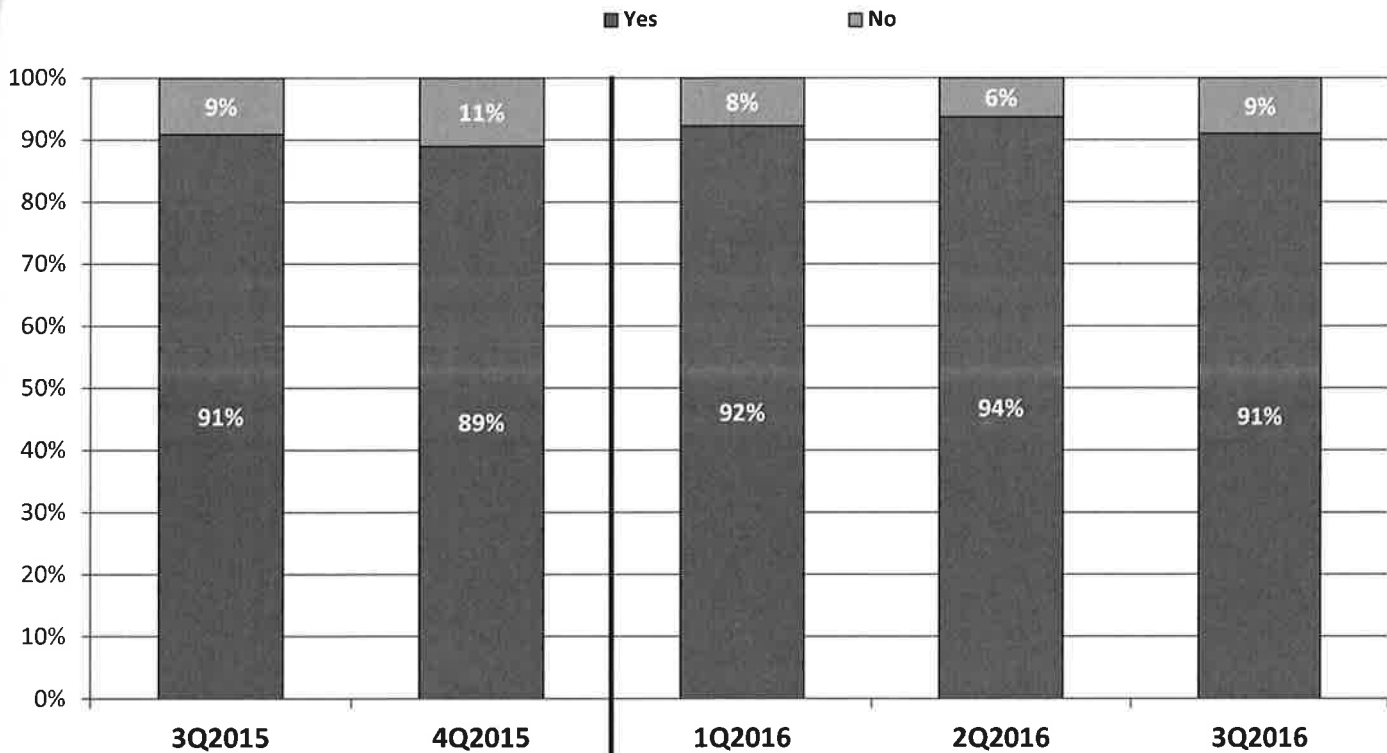
PUCO Case No. 16-1602-EL-ESS
Docket No. 16-0030-EL-ESS
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How much of a credit to your electric bill would you require from the utility to allow the electric company to control the operation of the air conditioning within your residence during a time when its system is under stress?

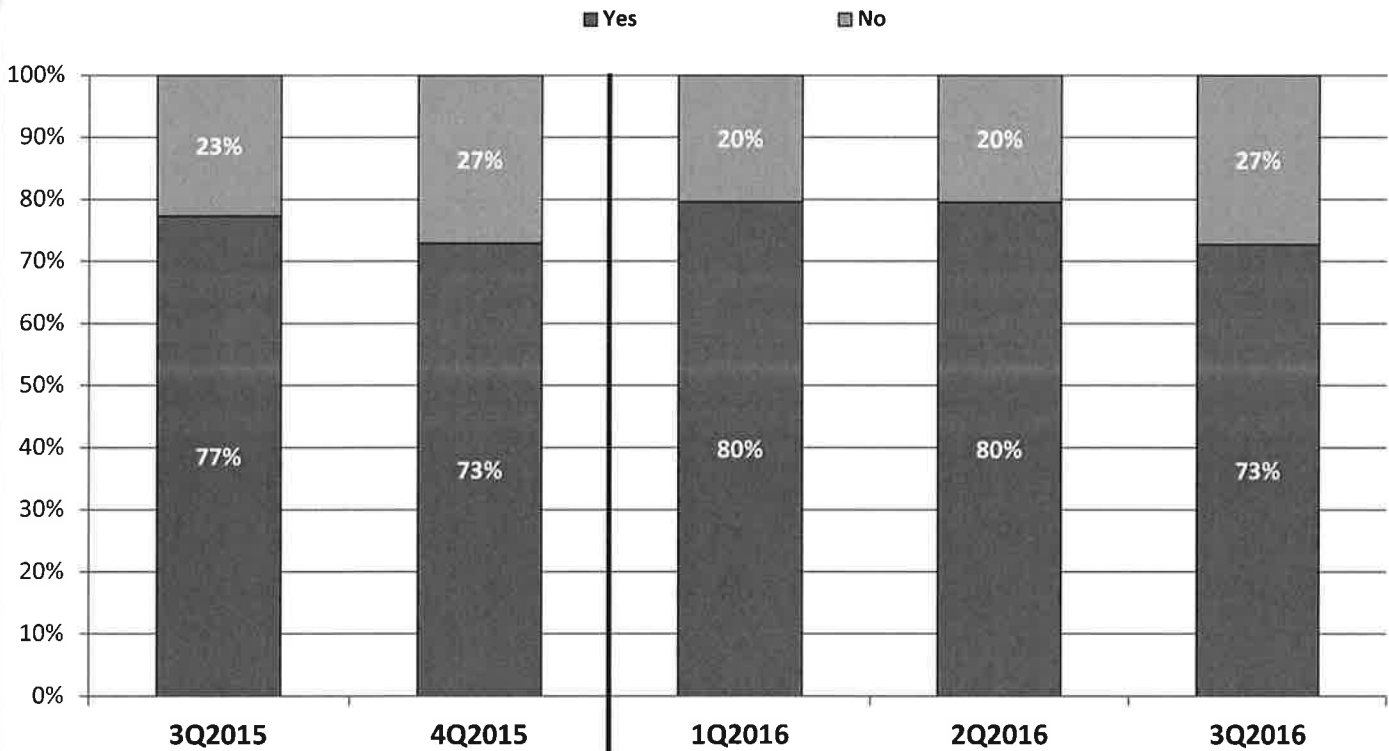


PUCO Case No. 16-1602-EL-ESS
OGG-2018-01-00200-Attachment
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Page 20 of 30



In helping with your energy conservation, would you be interested in new technology that lets you automate the settings for air conditioning or different appliances to reduce electricity use when the cost to produce and deliver electricity is high?

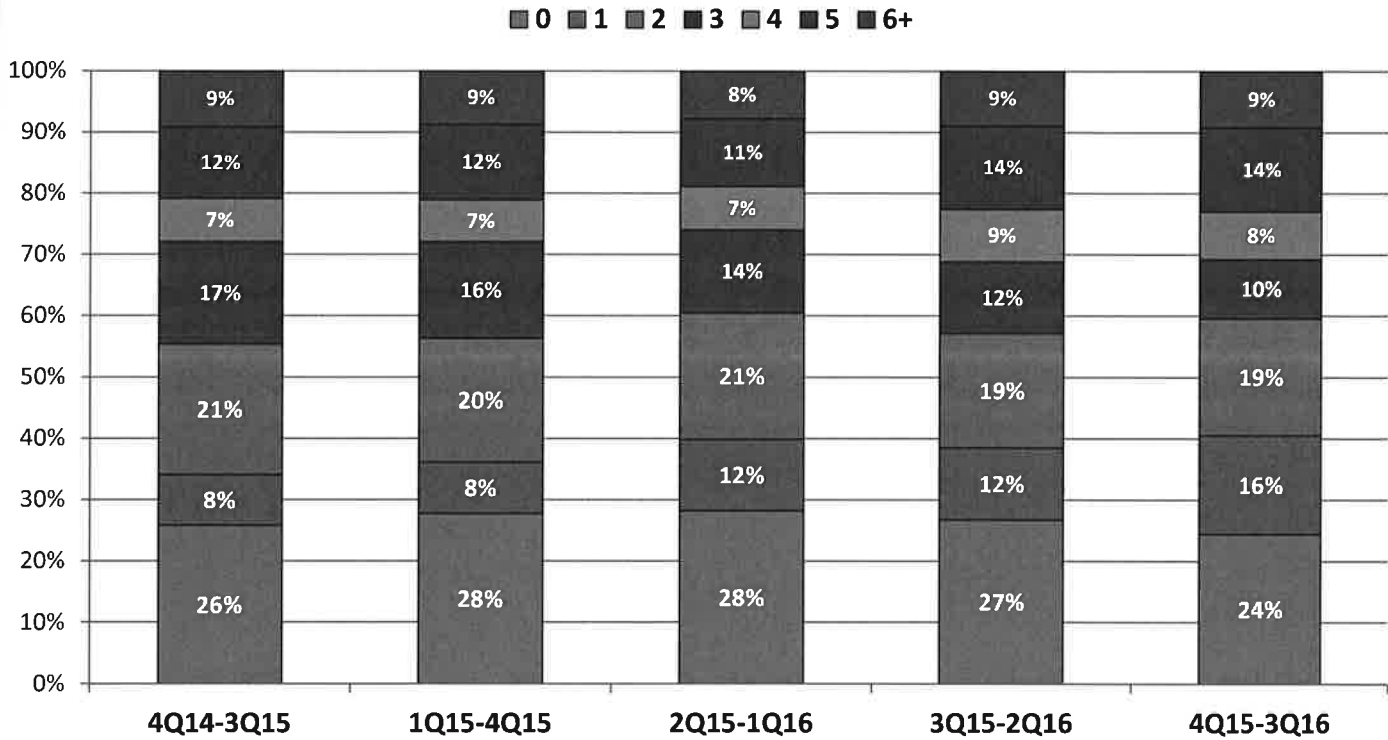
PUCO Case No. 16-1602-EL-ESS
Docket No. 16-0180-EL-ESS
Page 21 of 30



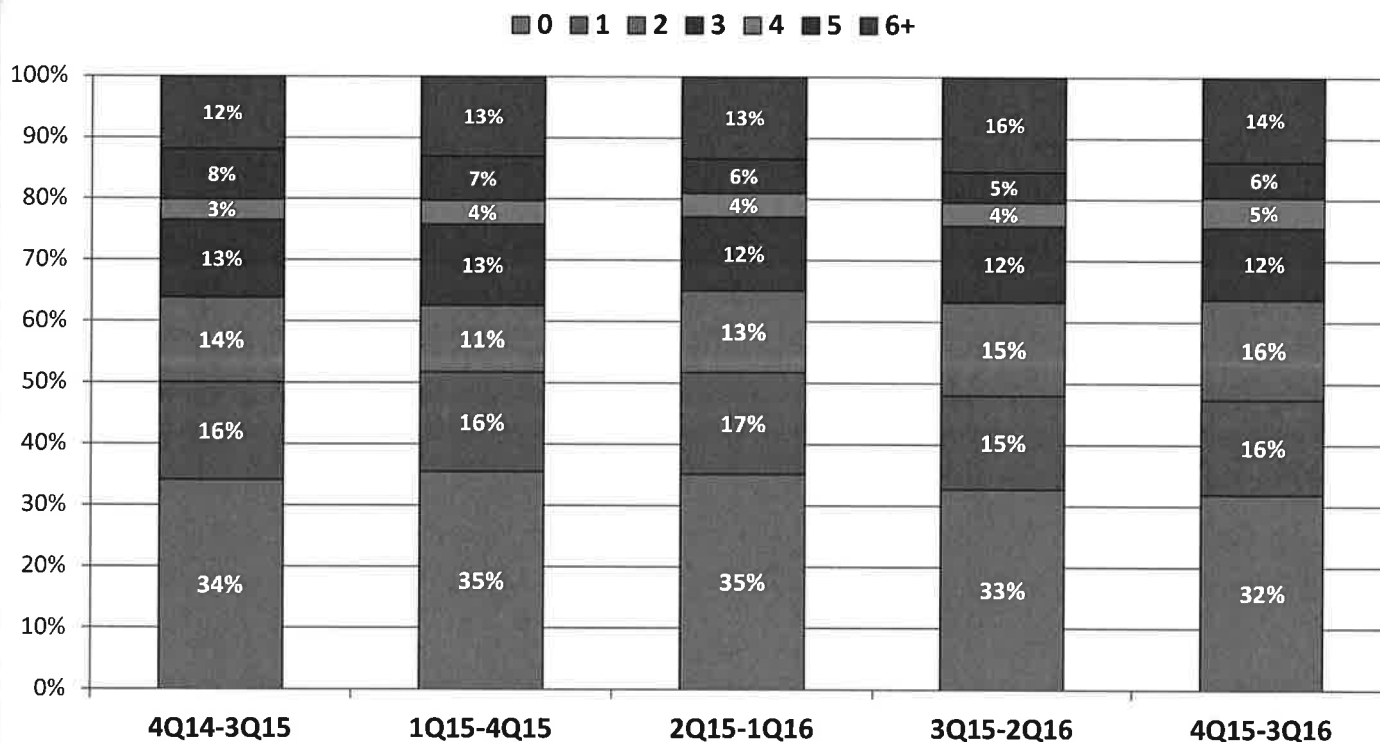
Reliability

Rolling 4-Quarter Average Results

PUCO Case No. 16-1602-EL-ESS
OCC-POD-01-002(b) Attachment
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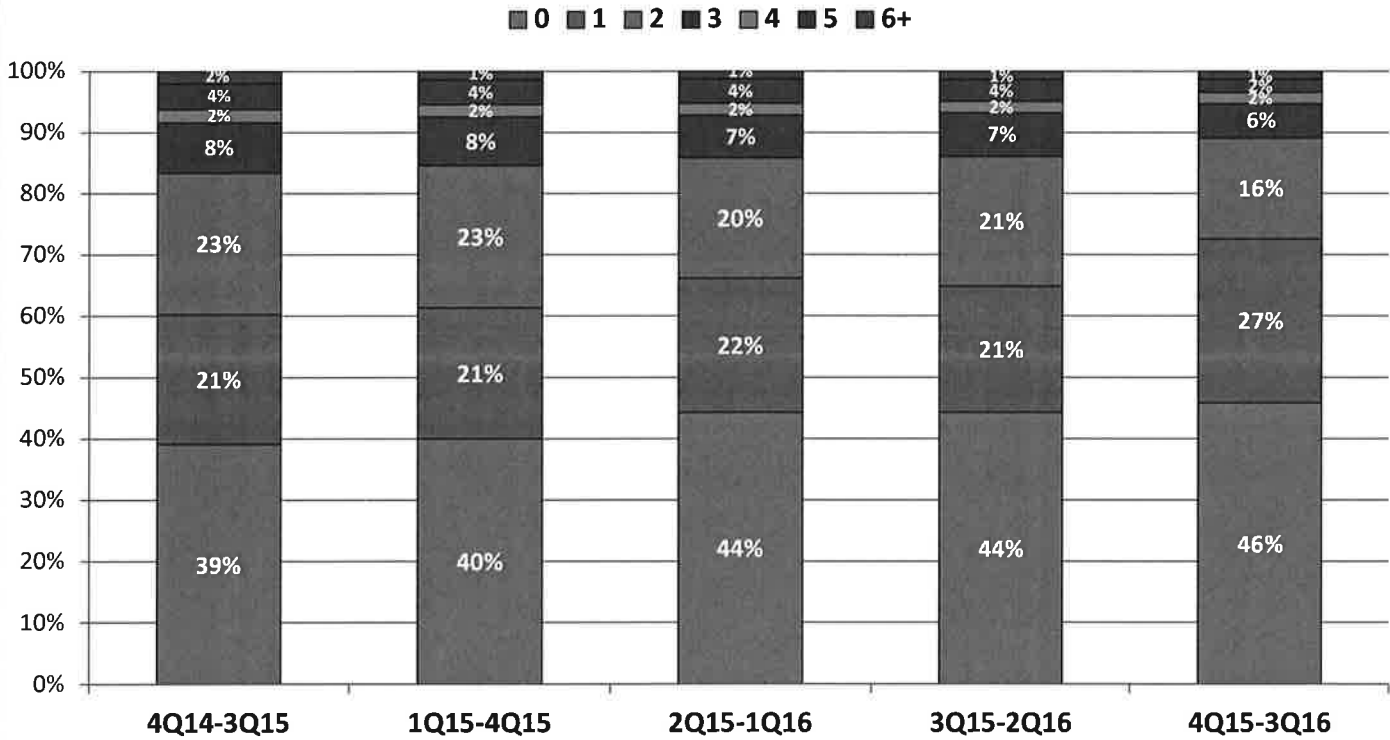


PUCO Case No. 16-1602-EL-ESS
OCC-POD-01-002(b) Attachment
How many brief interruptions of 5 minutes or less have you experienced at your home in the past 12 months?



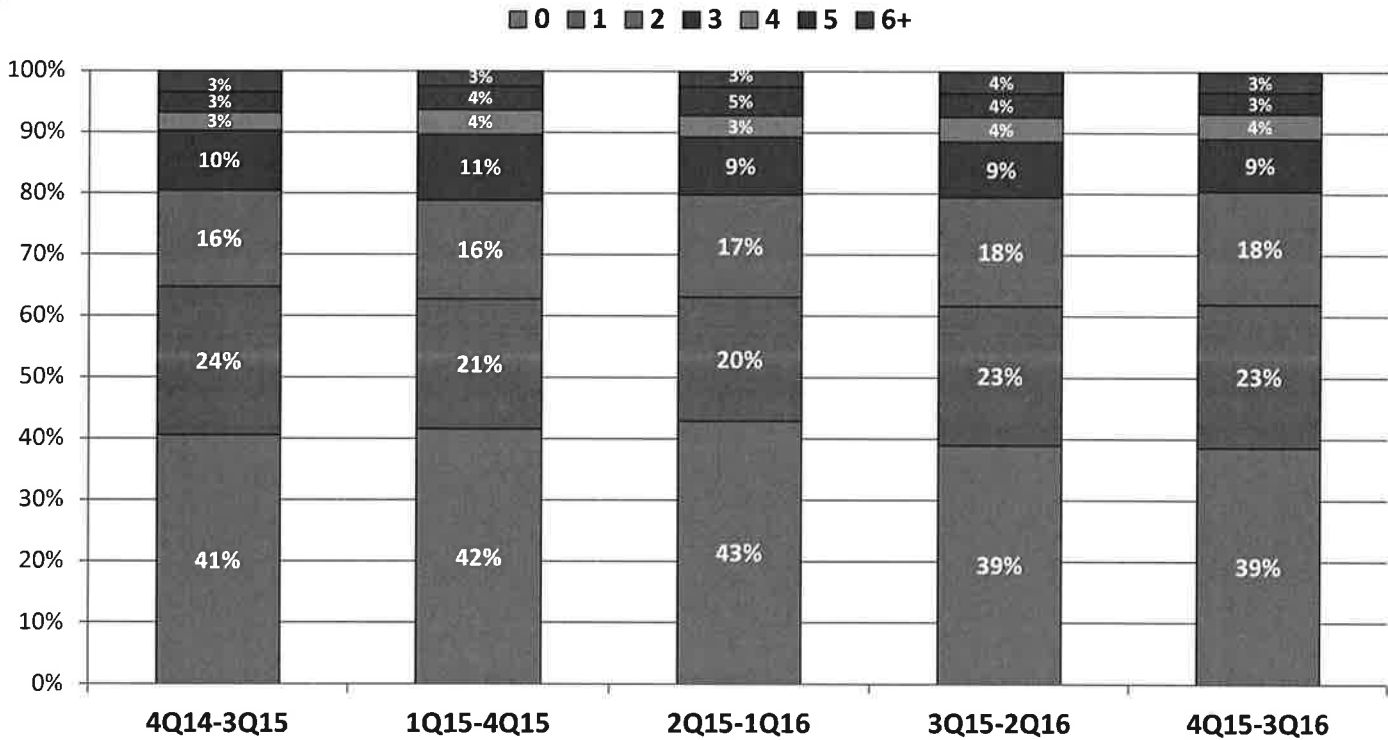
PUCO Case No. 16-1602-EL-ESS
OCC-POD-01-002(b) Attachment

How many lengthy interruptions of more than 5 minutes would you consider *acceptable* during a 12 month period?



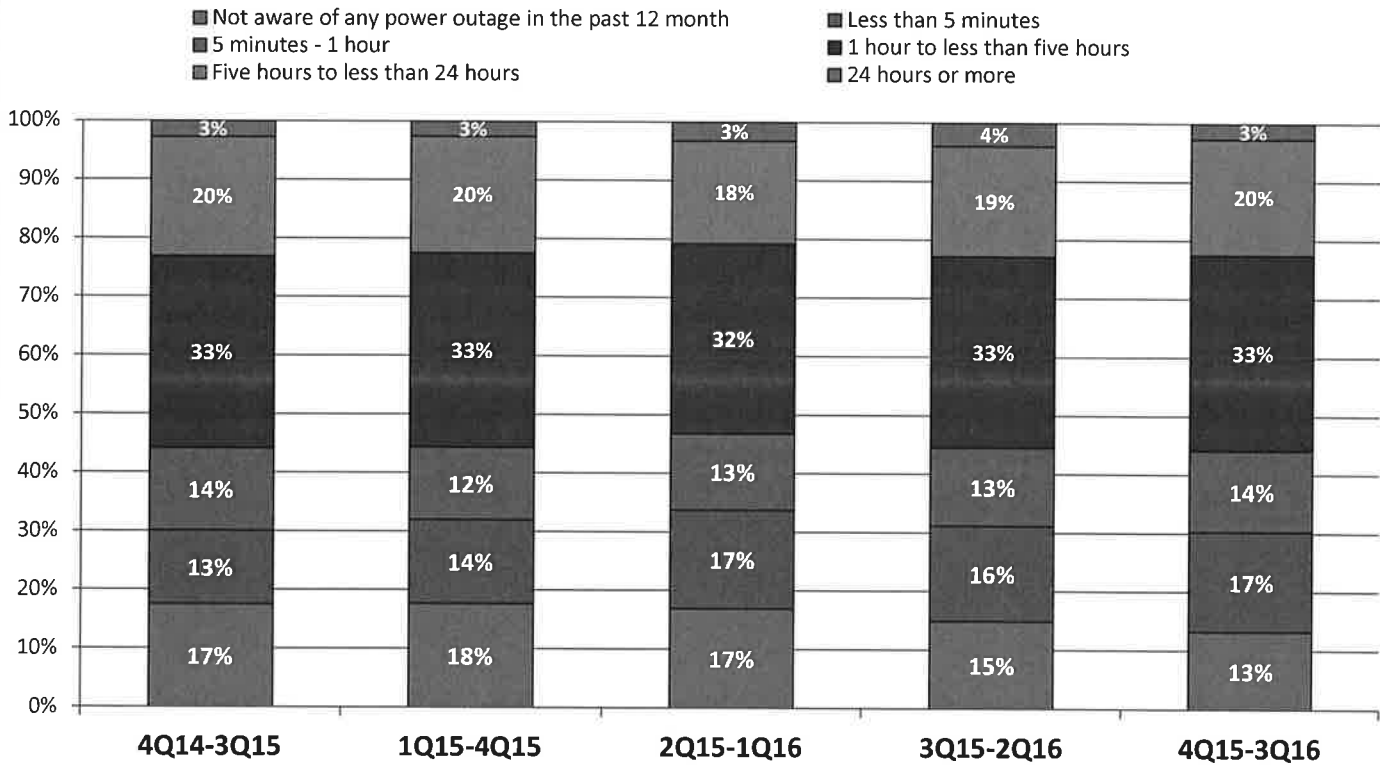
PUCO Case No. 16-1602-EL-ESS
QCC-POD-01-002(b) Attachment
- 14

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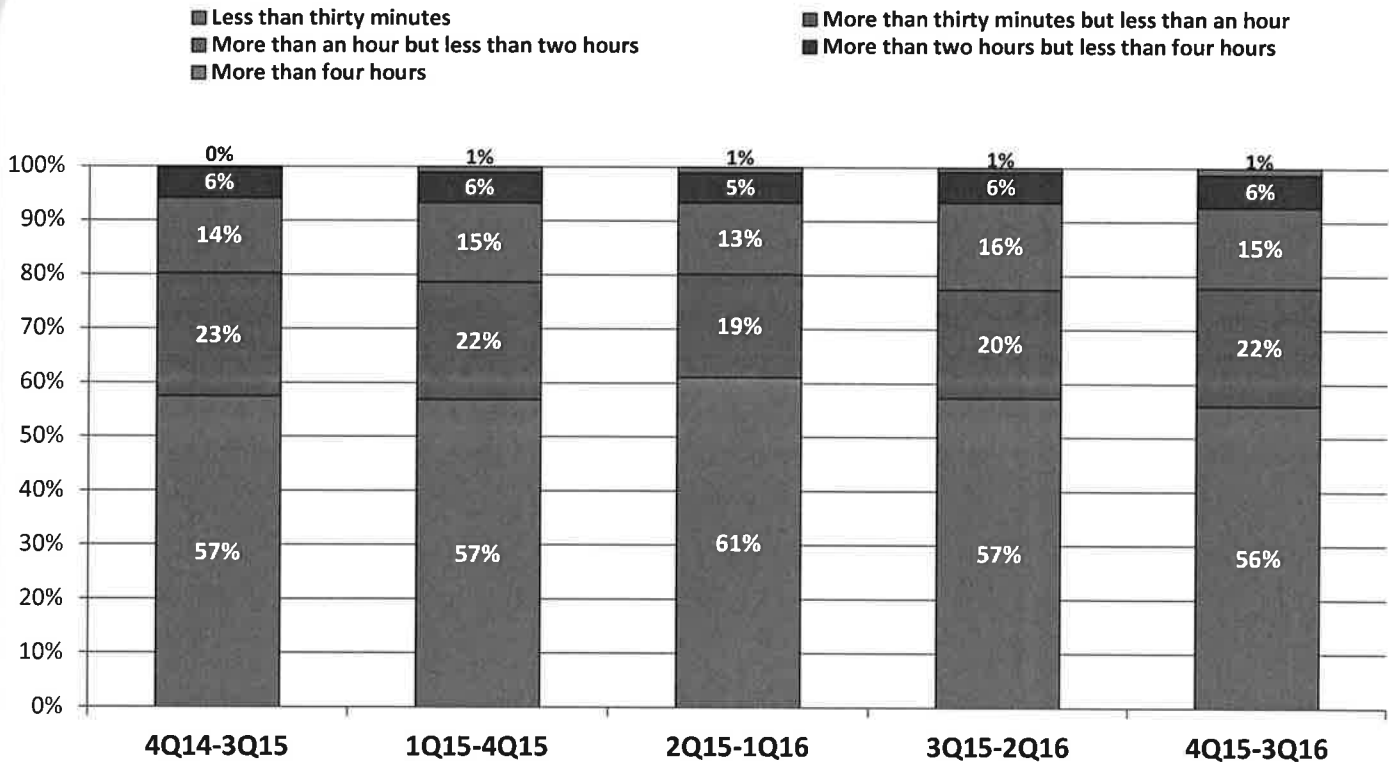
PUCO Case No. 16-1602-EL-ESS
OCC-POD-01-002(b) Attachment
Bf. 10

Would you estimate your longest power outage in the past 12 months to be:



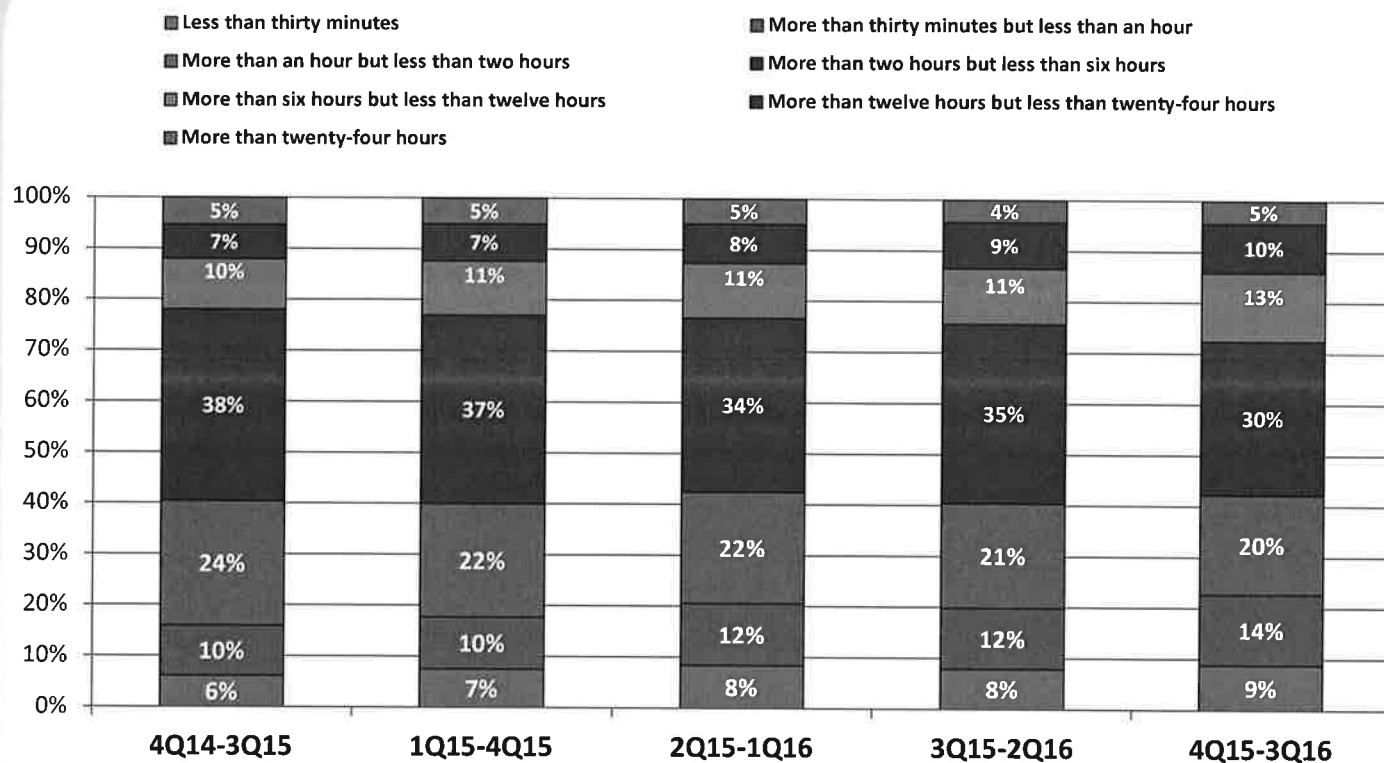
PUCO Case No. 16-1602-EL-ESS
OCC-POD-01-002(b) Attachment

What do you consider to be an acceptable length of a prolonged outage that was not storm related?



PUCO Case No. 16-1602-EL-ESS
OCC-POD-01-002(b) Attachment
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What do you consider to be an acceptable length of a prolonged outage that was storm related?



PUCO Case No. 16-1602-EL-ESS
OCC-POD-01-002(b) Attachment
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**Duke Energy Ohio
Case No. 17-0032-EL-AIR, *et al.*
OCC Second Set of Interrogatories - Stipulation
Date Received: April 26, 2018**

OCC-INT-02-006

REQUEST:

The last bullet point on page 11 of the Stipulation states that the DCI Revenue Cap will be increased by an additional \$18.7 million each year from 2021 through 2024. Is Duke required to meet any reliability standards for these increases to apply?

RESPONSE:

No. However, the Commission regulations provide for penalties under specified circumstances for failure to meet required standards.

PERSON RESPONSIBLE: Legal

Duke Energy Ohio
Case No. 17-0032-EL-AIR
OCC Ninth Set of Interrogatories
Date Received: August 15, 2017

OCC-INT-09-184

REQUEST:

Referring to the Direct Testimony of Donald L. Schneider, Jr. at page 10:

- a. What is the total projected cost for the business continuity effort for the years 2017 and 2018?
- b. What are the total projected costs associated with removal of the approximate 23,700 communication nodes?
- c. What are the total projected capital costs in 2017 and 2018 associated with purchasing the Itron electric meters that will replace approximately 80,000 Echelon electric meters?
- d. What are the total projected capital costs in 2017 and 2018 associated with purchasing the Itron gas communication modules that will replace 48,800 Badger gas communication modules?
- e. How does the Company intend to recover the capital costs associated with the business continuity effort 2017 and 2018?
- f. How does the Company intend to recover O&M costs associated with the business continuity effort in 2017 and 2018?

RESPONSE:

- a. See table below:

	Total	2017	2018
Capital	24,136,045	10,081,979	14,054,066
O&M	60,506	60,506	0
Total	24,196,551	10,142,485	14,054,066

- b. Objection: question is unclear. See response to OCC-INT-09-184(a) which includes the node removal costs.

- c. See table below:

	Total	2017	2018
Itron Meters	10,111,082	4,266,984	5,844,099

- d.

	Total	2017	2018
Itron Gas Modules	2,949,511	1,249,254	1,700,257

- e. If the capital costs are included in FERC distribution capital accounts they will be included in Rider DCI. Capital costs that are included in FERC general plant accounts will also be included in Rider DCI if the Company's request in this case to include general and intangible accounts in Rider DCI is

approved. If this request is not approved there will be no recovery on general and intangible plant until the Company's next base electric case.

- f. O&M costs not included in the Company's test period in this case will not be recovered by customers unless the Company has another base electric rate case in calendar year 2018.

PERSON RESPONSIBLE:

Parts a-d: Donald L. Schneider, Jr.; Parts e, f: Peggy Laub

Duke Energy Ohio
Case No. 17-0032-EL-AIR, et al.
OCC Second Set of Interrogatories - Stipulation
Date Received: April 26, 2018

OCC-INT-02-007

REQUEST:

Page 13 of the Stipulation states that Duke may invest up to \$20 million for a battery storage project, with those costs charged to customers through Rider DCI.

- a. Explain the basis for the \$20 million amount.
- b. Will Duke be required to show that any such battery storage project is cost-effective (i.e., that the benefits to customers are greater than the cost of the project)?

RESPONSE:

- a. Duke Energy Ohio is proposing a pilot of 10 MW to deploy in its service territory so it can show at scale the value that distributed battery storage can provide to the grid. It anticipates that this amount of storage fully installed will cost ~\$20 MM.
- b. Distributed battery storage can provide tremendous stacked benefit streams across the Transmission and distribution systems including T&D deferral, improvements in power quality and reliability, along with bulk system benefits such as frequency regulation. This pilot proposed by Duke Energy Ohio will be extremely important in proving these business cases so energy storage can be seamlessly integrated into the Company's electric system for the benefit of all retail customers as the Company continues to modernize its system.

PERSON RESPONSIBLE: Zach Kuznar

**Duke Energy Ohio
Case No. 17-0032-EL-AIR, *et al.*
OCC Fifth Set of Interrogatories - Stipulation
Date Received: May 23, 2018**

OCC-INT-05-139

REQUEST:

Referring to the Company response to OCC STIP-INT-03-104, are residential customers disconnected for non-payment of charges that originated with CRES providers that are participating in the Duke PAR program?

RESPONSE:

Yes.

PERSON RESPONSIBLE: Mitch Carmosino

**Duke Energy Ohio
Case No. 17-0032-EL-AIR, *et al.*
OCC Fifth Set of Interrogatories - Stipulation
Date Received: May 23, 2018**

OCC-INT-05-140

REQUEST:

For each of calendar year 2016 and 2017, how many residential customers were disconnected for non-payment of charges that originated with a CRES provider that was participating in the Duke PAR program?

RESPONSE:

Duke Energy Ohio does not track PAR customer disconnections separately.

PERSON RESPONSIBLE: Mitch Carmosino

**Duke Energy Ohio
Case No. 17-0032-EL-AIR, *et al.*
OCC Third Set of Interrogatories - Stipulation
Date Received: May 11, 2018**

OCC-INT-03-052

REQUEST:

Referring to the Reliability Standards section on page 13 of the Stipulation and Recommendation, please describe the methodology that was used to develop both of the proposed SAIFI and CAIDI standards for each year between 2018 through 2025.

RESPONSE:

The values included in the Stipulation resulted from settlement discussions and represent compromises on behalf of the Company. Such discussions are confidential.

PERSON RESPONSIBLE: Legal

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

6/25/2018 4:07:57 PM

in

Case No(s). 17-0032-EL-AIR, 17-0033-EL-ATA, 17-0034-EL-AAM, 17-0872-EL-RDR, 17-0873-EL-ATA, 1

Summary: Testimony Direct Testimony of James D. Williams in Opposition to the Joint Stipulation and Recommendation on behalf of The Office of The Ohio Consumers' Counsel electronically filed by Ms. Jamie Williams on behalf of Michael, William Mr.