

FILE

BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

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In The Matter of the Application of)
Duke Energy Ohio for an)
Increase in Gas Rates)

Case No. 07-589-GA-AIR

In the Matter of the Application of)
Duke Energy Ohio for Approval)
of an Alternative Rate Plan for its)
Gas Distribution Service)

Case No. 07-590-GA-ALT

In the Matter of the Application of)
Duke Energy Ohio for Approval)
to Change Accounting Methods)

Case No. 07-591-GA-AAM

THIRD SUPPLEMENTAL TESTIMONY OF

WILLIAM DON WATHEN, JR.

ON BEHALF OF

DUKE ENERGY OHIO

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ATTACHMENTS

THIRD SUPPLEMENTAL ATTACHMENT WDW-1 - The revenue requirement calculation and projects rates for the Rider AU for 2009 and 2014.

I. INTRODUCTION

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

2 A. My name is William Don Wathen, Jr. My business address is 139 East Fourth
3 Street, Cincinnati, Ohio 45202

4 **Q. ARE YOU THE SAME WILLIAM DON WATHEN, JR. WHO**
5 **PREVIOUSLY SUBMITTED TESTIMONY IN THIS PROCEEDING?**

6 A. Yes. I am.

7 **Q. WHAT IS THE PURPOSE OF YOUR SUPPLEMENTAL TESTIMONY?**

8 A. I will explain the revenue requirement calculation and projected rates for the
9 Company's proposed Rider Advanced Utility ("Rider AU"). Toward that end, I
10 have included an attachment showing these calculations, Supplemental
11 Attachment WDW-1.

12 **II. ADVANCED UTILITY RIDER – RIDER AU**

13 **Q. WHY IS THE COMPANY MAKING THIS FILING AT THIS TIME?**

14 A. On May 28, 2008, the Commission issued its order in this case approving a
15 Stipulation that was reached between all of the parties on February 28, 2008.
16 Included in the Stipulation was a commitment from the Company to file a
17 deployment plan for its proposed Utility of the Future program within 60 days of
18 the final order in the case. This filing constitutes the Company's compliance with
19 that commitment.

20 **Q. WILL YOU PROVIDE A BRIEF OVERVIEW OF THIS FILING?**

21 A. In addition to my third supplemental testimony herein, DE-Ohio witnesses Todd
22 Arnold, Christopher D. Kiergan, and Dr. Richard G. Stevie are providing
23 testimony in the case. Mr. Arnold describes the current status of the program in

1 more detail and sponsors the deployment plan. Mr. Kiergan sponsors the
2 deployment plan being filed in compliance with the commitments agreed to in the
3 approved Stipulation.

4 **Q. DESCRIBE THE UTILITY OF THE FUTURE PROJECT.**

5 A. First, the Company has renamed the project and it is called the "SmartGrid"
6 project. The project is essentially unchanged but the name change was made to
7 reflect the fact that the "future" is here – the project is underway.

8 Mr. Arnold discusses the specific details of the project in more detail in
9 his testimony; however, the SmartGrid project is intended to improve the
10 reliability, safety, and efficiency of both the gas and electric systems operated by
11 DE-Ohio. For the gas system, the principal activity required to implement the
12 SmartGrid project is to fit the existing meters with equipment to remotely acquire
13 data on consumption. This will require the equipment to refit some
14 communication equipment and some ancillary equipment as describe by DE-Ohio
15 witness Todd W. Arnold. In addition, communication equipment will be required
16 to acquire and transmit the data collected by the metering device. Much of this
17 communication equipment will be shared with the electric system. Also to be
18 shared with the electric system is the investment in computer hardware and
19 software to handle and make optimal use of the metering data.

20 **III. RIDER AU REVENUE REQUIREMENT**

21 **Q. DESCRIBE THE COMPANY'S PROPOSED RIDER AU?**

22 A. The Company proposed this rider in its initial application in this case last year.
23 The rider is intended to recover the cost of implementing the Company's
24 proposed SmartGrid project, which will substantially improve the safety,

1 reliability, and efficiency of the Company's gas and electric systems. The rider
2 will also pass through to customers benefits derived from the new metering
3 system, such as reduced meter reading expense. Rider AU, which is the subject
4 of this filing, is exclusively for the gas distribution business.

5 The Company proposes to establish Rider AU rates on a "per bill" basis
6 with the net revenue requirement allocated to customer classes based on the
7 number of meters. The calculation of the net revenue requirement is the subject
8 of most of my testimony herein.

9 The Direct Testimony of Matthew W. Smith filed previously in this case
10 provided an extensive description of this program and the Direct Testimonies of
11 Christopher D. Kiergan and Richard Stevie discuss the benefits and costs of the
12 program. The Direct Testimony of Todd W. Arnold describes the status of the
13 deployment of the infrastructure and some of the customer benefits of SmartGrid.

14 **Q. WHAT COSTS AND BENEFITS WILL BE INCLUDED IN THE RIDER?**

15 A. The costs to be included in the revenue requirement calculation for Rider AU will
16 include:

- 17 a. The net direct investment in the equipment (*e.g.*, metering equipment, gas
18 modules, *etc.*);
- 19 b. The gas business' share of any common facilities that are required to
20 achieve the desired result of the program (*e.g.*, communication
21 equipment);
- 22 c. The gas business' share of information technology ("IT") costs necessary
23 to optimize the benefits of the new technology;
- 24 d. A return on the net rate base added through the program; and

- 1 e. Incremental annualized depreciation expenses and property taxes for the
2 new equipment.

3 The benefits to be passed through include

- 4 a. The savings in meter reading expenses (measured by comparing a base
5 amount to the then current amount of meter reading expenses), net of any
6 severance costs related to headcount reductions in meter reading labor;
7 and
8 b. Rate base reductions attributable to any accumulated deferred income
9 taxes associated with the new plant will be deducted from rate base.

10 **Q. EXPLAIN WHAT YOU MEAN BY 'NET DIRECT INVESTMENT.'**

11 A. This would be the cost of the equipment directly associated with the activity of
12 metering gas usage. The best example of such equipment is the actual gas module
13 that would be integrated with an existing meter to remotely transmit usage data
14 back to the Company.

15 As suggested in the Staff Report, the costs includable in the Rider AU
16 revenue requirement would exclude routine meter replacements, routine
17 maintenance, and inspections.

18 **Q. WHAT COMMON FACILITIES WOULD BE INCLUDED?**

19 A. As explained in the testimony of DE-Ohio witness Todd W. Arnold, the
20 information transmitted from a customer's gas meter will be collected using
21 equipment that will be shared by both the electric and gas systems. As shared
22 equipment, it will be reflected in the Company's common plant balances. We
23 will use methods approved in recent rate cases, and consistent with our internal

1 accounting practice, to develop allocation factors to reasonably allocate such costs
2 between electric and gas customers.

3 **Q. HOW WILL 'IT' COSTS BE ADDRESSED IN THE RIDER AU REVENUE**
4 **REQUIREMENT CALCULATION?**

5 A. To take full advantage of the information that will be available with the
6 implementation of the new metering technology, the Company will be develop
7 and implement new hardware and software systems. To the extent these costs are
8 capitalized, they will be reflected in the common plant for DE-Ohio. Like the
9 other common plant mentioned above, the allocation of these costs between gas
10 and electric will be based on reasonable methods and subject to the review of the
11 Commission.

12 **Q. HOW WILL THE RETURN BE COMPUTED?**

13 A. The Rider AU revenue requirement will include a component for return on
14 incremental rate base for the gas share of the SmartGrid investment. The return to
15 be used in this proceeding will be the return approved by the Commission for use
16 in the Company's annual Rider AMRP calculation, which was a pre-tax return on
17 rate base of 11.67%.

18 **Q. DESCRIBE THE CALCULATION FOR DEPRECIATION EXPENSES**
19 **AND PROPERTY TAXES TO BE INCLUDED IN THE RIDER AU**
20 **CALCULATION.**

21 A. Although the Commission approved the Company's proposed depreciation rates
22 in this rate case, equipment included in the SmartGrid project may fall into
23 categories for which rates have not been approved. To the extent this is the case,
24 the Company will propose depreciation rates to be used for the capitalized costs

1 included in the SmartGrid project. For property taxes, we will use estimates of
2 the property taxes on date certain plant balances based on recently available
3 history. Like the Rider AMRP calculation, the depreciation expenses and the
4 property taxes included in the Rider AU revenue requirement calculation will be
5 annualized based on balances at the end of the period under review.

6 **Q. WHAT SAVINGS WILL BE INCLUDED IN THE RIDER AU REVENUE**
7 **REQUIREMENT CALCULATION?**

8 A. The Rider AU revenue requirement will be offset by savings in meter expenses.
9 Our proposal is to first total all of the annual meter and metering-related expenses,
10 which would include Accounts 878 – Meter and House Regulator Expenses,
11 Account 893 – Maintenance of Meters and House Regulators, and Account 902 –
12 Meter Reading Expense. These are the expense accounts we expect will realize
13 the greatest benefits from the program in terms of reducing costs. The sum of
14 these expenses will be compared to the sum of the expenses in the same accounts
15 as approved in the test year used in this case. The difference is the savings to be
16 included in the Rider AU revenue requirement calculation.

17 **Q. IS LOWER METERING EXPENSE THE ONLY BENEFIT DE-OHIO'S**
18 **GAS CUSTOMERS WILL SEE FROM THE SMARTGRID PROJECT?**

19 A. No. There are a number of other benefits - some economic and some service
20 related - that will be derived from the project. DE-Ohio witnesses Arnold, Stevie,
21 and Kiergan provide a broader discussion of the benefits that the SmartGrid
22 project will produce.

23 The objective of the Rider AU being proposed here is to make calculation
24 and development of the Rider AU rates simple, auditable, and effective for

1 reasonably sharing the benefits and costs of the SmartGrid project between
2 shareholders and customers.

3 **Q. EARLIER, YOU LISTED ACCUMULATED DEFERRED INCOME**
4 **TAXES AS A BENEFIT FROM THE PROGRAM. WHAT DO YOU**
5 **MEAN BY THAT STATEMENT?**

6 A. Admittedly, the accumulated deferred income taxes ("ADITs") generated by the
7 project are not a benefit in the same context as meter reading savings, for
8 example. However, this item should be included because the Company does
9 derive a cash flow benefit due to the treatment of the new facilities under existing
10 tax laws that should be passed on to customers. This is a common adjustment in a
11 traditional rate case, which recognizes the fact that "net plant" alone is not
12 necessarily a reflection of the true amount of capital deployed by a utility for its
13 actual investment in rate base being used to serve its customers.

14 **Q. ARE ALL OF THE BENEFITS OF THE PROJECT INCLUDED IN THE**
15 **RIDER AU?**

16 A. No. Some of the real benefits that the Company expects from the project are
17 either not easily quantified or are simply not appropriate to be included in the
18 Rider. Meter access is a good example of a benefit that is not easily quantified.
19 As described in earlier testimony in this case, the Company has thousands of
20 meters located inside customers' premises. SmartGrid will allow the Company to
21 obtain a meter reading without having to enter a customer's house. This
22 capability is something that many customers would consider a substantial benefit
23 of the program but it is not something that can be quantified.

1 Q. DO YOU HAVE AN EXAMPLE OF HOW ALL OF THESE COSTS AND
2 BENEFITS COME TOGETHER FOR THE RIDER AU REVENUE
3 REQUIREMENT CALCULATION?

4 A. Yes, I do. In Third Supplemental Attachment WDW-1, I have developed a
5 proposed set of schedules that would be filed with the Commission to support the
6 Company's Rider AU rates. The data in the attachment is based on the financial
7 information from the current deployment plan; however, because the exact
8 accounting of all the costs is not yet determined, I have only shown the costs
9 generally. As I indicated earlier, the rider will ultimately be calculated using
10 specific plant and O&M account information. Notwithstanding this qualification,
11 the projected Rider AU rates should provide a general indication of the overall
12 rate impacts of Rider AU on DE-Ohio's gas customers.

13 IV. ALLOCATION AND RATE DESIGN

14 Q. YOU MENTIONED EARLIER THAT THE RIDER AU REVENUE
15 REQUIREMENT WOULD BE ALLOCATED TO CUSTOMERS BASED
16 ON METER COUNT. PLEASE EXPLAIN.

17 A. As is customary in utility rate matters, the objective in cost allocation is to
18 allocate costs of any service to customers in a manner consistent with the degree
19 to which those customers generate the cost. In the vernacular of ratemaking, this
20 is often referred to as 'cost causation' principles. The Company submits that a
21 fair method of allocating the costs incurred for and benefits derived from the
22 SmartGrid project is to allocate the Rider AU revenue requirement based on the
23 number of meters. This methodology is intuitive to customers and is based on
24 readily available data.

V. RIDER AU FILING PROCEDURE

1 **Q. DOES THE COMPANY HAVE A PROPOSED SCHEDULE FOR FILING**
2 **THE RIDER AU?**

3 **A.** DE-Ohio witness Todd W. Arnold discusses the timing of the Rider AU filing. It
4 worth noting, however, that the Rider AU revenue requirement calculation is
5 generally modeled after the Rider AMRP.

VI. CONCLUSION

7 **Q. DO YOU HAVE ANY COMMENTS ABOUT THE OVERALL**
8 **STRUCTURE AND OBJECTIVE OF RIDER AU?**

9 **A.** Yes. Using cost/benefit tracking mechanisms such as the Rider AU is a common
10 application of ratemaking principles. It accomplishes a number of objectives and
11 is a particularly useful regulatory tool when utilities encounter significant capital
12 improvement projects such as the SmartGrid project described in this filing.

13 The Company's proposed Rider AU is designed with the intention of
14 balancing the burden of administering and reviewing the associated filings with
15 the objective of ensuring that the largest share of costs and benefits are
16 appropriately included. It is not practicable to design a tracker that captures every
17 benefit and every cost primarily because many of the benefits and costs cross over
18 a number of different plant and expense accounts. Attempting to capture every
19 possible cost and benefit would effectively require tracking all plant and expense
20 accounts, which is not the Company's intention.

21 **Q. DOES THIS CONCLUDE YOUR THIRD SUPPLEMENTAL**
22 **TESTIMONY?**

23 **A.** Yes.

Duke Energy Ohio
Ohio Rider AU Calculation
Annualized Revenue Requirement

	2009	2010	2011	2012	2013
Gross Plant	\$19,702,190	\$53,841,497	\$88,973,375	\$101,277,225	\$106,931,276
Accumulated Depreciation	941,237	4,462,458	11,311,229	20,445,324	30,508,140
Net Plant	\$18,760,953	\$49,379,039	\$77,662,147	\$80,831,901	\$76,423,136
Accum Def Inc Tax	169,649	263,356	(874,390)	(4,820,057)	(12,505,413)
Rate Base	\$18,930,601	\$49,642,395	\$76,787,756	\$76,011,844	\$63,917,723
Return on Rate Base (allowed)	11.67%	11.67%	11.67%	11.67%	11.67%
Return on Rate Base	\$2,209,201	\$5,793,268	\$8,961,131	\$8,870,582	\$7,459,198
Operating Expenses					
Depreciation	\$941,237	\$3,521,220	\$6,848,771	\$9,134,095	\$10,062,815
Property Taxes	394,044	1,076,830	1,779,468	2,025,545	2,138,626
Meter Reading (net of Severance)	-	(61,657)	(586,570)	(1,677,080)	(2,829,149)
IT & Communication Costs	490,602	1,310,219	2,222,077	2,654,091	2,936,812
Customer Service (net)	345,530	728,682	737,312	184,894	46,914
Other O&M Reductions (net)	-	(116,401)	(282,456)	(485,230)	(558,981)
Total Operating Expenses	\$2,171,413	\$6,458,894	\$10,718,601	\$11,836,316	\$11,797,037
Annualized Revenue Requirement	\$4,380,615	\$12,252,162	\$19,679,732	\$20,706,898	\$19,256,235

Duke Energy Ohio
Allocation of Rider AU Revenue Requirement
Calculation of Rates by Class

	Number of Meters	Charge Per Bill
For 2010 Bills	483,386	\$0.76
For 2011 Bills	483,386	\$2.11
For 2012 Bills	483,386	\$3.39
For 2013 Bills	483,386	\$3.57
For 2014 Bills	483,386	\$3.32

Note: Rates are calculated by taking annual revenue requirement for prior year, from page 1, and dividing by total number of meters. Charge is assumed to be the same for all rate classes.

Number of meters is taken from Schedule E-4 in the Company's recent gas distribution case, Case No. 07-589-GA-AIR.