

**BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO**

In the Matter of the Application of Vectren)
Energy Delivery of Ohio, Inc. for Approval) Case No. 18-0049-GA-ALT
of an Alternative Rate Plan.)

In the Matter of the Application of Vectren)
Energy Delivery of Ohio, Inc. for Approval) Case No. 18-0298-GA-AIR
of an Increase in Gas Rate)

In the Matter of the Application of Vectren)
Energy Delivery Ohio, Inc. for Approval of) Case No. 18-0299-GA-ALT
an Alternative Rate Plan.)

**SUPPLEMENTAL DIRECT TESTIMONY
OF
MOHAMMAD HARUNUZZAMAN, Ph.D.**

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 43215-3485*

January 28, 2019

TABLE OF CONTENTS

	PAGE
I. INTRODUCTION	1
II. PURPOSE OF MY TESTIMONY	3
III. OVERVIEW OF THE CAPITAL EXPENDITURE PROGRAM	4
IV. SUMMARY OF VEDO’S APPLICATION	5
V. SUMMARY OF THE SETTLEMENT PROVISIONS RELATING TO THE CEP	6
VI. EVALUATION OF THE SETTLEMENT PROVISIONS RELATING TO THE CEP	7

ATTACHMENTS

Attachment MH-1

1 **I. INTRODUCTION**

2

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

4 ***A1.*** My name is Mohammad Harunuzzaman. My business address is 65 East State
5 Street, 7th Floor, Columbus, Ohio 43215-4213. I am employed by the Office of
6 the Ohio Consumers' Counsel ("OCC") as a Principal Regulatory Analyst.

7

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

10 ***A2.*** I earned a Doctorate in Nuclear Engineering from the Ohio State University in
11 1994. In the doctoral program, my fields of specialization were reliability and
12 safety of nuclear power plants, and cost optimization. I also have a bachelor's
13 degree in Physics from the University of Dhaka, Bangladesh.

14

15 My professional experience includes nearly 15 years of regulatory policy research
16 at the National Regulatory Research Institute ("NRRI"), The Ohio State
17 University, more than seven years in electric market analysis at Pepco Energy
18 Services ("PES"), an unregulated affiliate of Potomac Electric Power Company
19 ("PEPCO"), and one year in electric fuel price forecasting at the Florida Power
20 and Light Company ("FPL").

21

22 At the NRRI, I performed regulatory policy analysis, supported by engineering
23 and quantitative analysis, of issues that included cost-of-service and rate design,
24 deregulation of the natural gas industry and retail gas choice programs, separation

*Supplemental Direct Testimony of Mohammad Harunuzzaman, Ph.D.
On Behalf of the Office of the Ohio Consumers' Counsel
PUCO Case No. 18-0298-GA-AIR et al.*

1 of costs and services of regulated and unregulated parts of a utility company (to
2 prevent cross subsidization of the unregulated affiliate by the regulated utility),
3 incentive regulation as applied to energy efficiency and gas acquisition practices
4 of a local gas distribution company, and renewables and advanced generation
5 technologies of an electric utility.

6
7 At FPL, I worked on the forecasting of energy fuel prices including coal, gas, and
8 oil. At PES, I performed computer modeling simulation and analysis of
9 wholesale regional electricity markets, including the PJM,¹ NYISO,² NEISO³ and
10 ERCOT,⁴ and forecasted electricity prices. At the same company, I also
11 performed analysis to support financial risk management operations of the
12 company.

13
14 Since March 2016, I have been employed as Principal Regulatory Analyst at the
15 OCC. At my current position, I am responsible for research, investigation, and
16 analysis of regulatory filings, participation in special projects, and assisting in
17 policy development and implementation.

18
19 A list of my professional publications is included in Attachment MH-1.

¹ Pennsylvania, Maryland and New Jersey Regional Transmission Operator.

² New York Independent System Operator.

³ New England Independent System Operator.

⁴ Electricity Reliability Council of Texas.

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

3 **A3.** Yes, I submitted testimony on behalf of OCC Case No. 16-2422-GA-ALT
4 concerning reauthorization of Columbia Gas of Ohio's accelerated Infrastructure
5 Replacement Program.⁵ And on November 7, 2018, I submitted written direct
6 testimony in these proceedings.⁶

7
8 **II. PURPOSE OF MY TESTIMONY**

9
10 **Q4. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
11 **PROCEEDING?**

12 **A4.** The purpose of my testimony is to support OCC's overall position that the
13 Stipulation and Recommendation ("Settlement")⁷ filed by Vectren Energy
14 Delivery Ohio ("VEDO" or "the Company"), the PUCO Staff, and other signatory
15 parties does not meet the PUCO's test for approving settlements. Specifically, in
16 my opinion, the Settlement provision calling for one- to two-year review of the
17 CEP by the PUCO Staff or its designee is inadequate to protect residential
18 consumers. Therefore, as it relates to the CEP, the Settlement does not benefit
19 customers and is not in the public interest.

⁵ Direct Testimony of Mohammad Harunuzzaman Opposing the Joint Stipulation and Recommendation, PUCO Case No 16-2422-GA-ALT (Sept. 17, 2017).

⁶ Direct Testimony of Mohammad Harunuzzaman, PUCO Case No 18-0298-GA-AIR (Nov. 7, 2018).

⁷ Stipulation and Recommendation, PUCO Case No 18-0298-GA-AIR et al (Jan. 4, 2019).

III. OVERVIEW OF THE CAPITAL EXPENDITURE PROGRAM

Q5. PLEASE PROVIDE AN OVERVIEW OF THE CAPITAL EXPENDITURE PROGRAM (“CEP”) THAT VEDO’S CUSTOMERS PAY FOR

A5. House Bill 95 (“HB95”) and Ohio Revised Code 4929.111 (“ORC 4929.111”)

allow a natural gas company to implement a CEP for any of the following:

(1) Any infrastructure expansion, infrastructure improvement, or infrastructure replacement program;

(2) Any program to install, upgrade, or replace information technology systems;

(3) Any program reasonably necessary to comply with any rules, regulations, or orders of the commission or other governmental entity having jurisdiction.

ORC 4929.111 also directs the PUCO to authorize a natural gas company to defer or recover both of the following.

(1) A regulatory asset for the post-in-service carrying costs on that portion of the assets of the capital expenditure program that are placed in service but not reflected in rates as plant in service;

(2) A regulatory asset for the incremental depreciation directly attributable to the capital expenditure program and the property tax expense directly attributable to the capital expenditure program.

1 Therefore, deferred expenses of a CEP can be treated as a regulatory asset
2 that can earn a return on and of these assets.

3 The CEP was established for VEDO by PUCO order in Case No. 12-530-GA-
4 UNC ("12-530 Order"). In the 12-530 Order, the PUCO approved accounting
5 authority, inclusive of the deferral of depreciation and property tax expense and
6 the accrual of post-in-service carrying cost ("PISCC"), on investments made
7 under the Utility's CEP for the period October 1, 2011 through December 31,
8 2012. In a subsequent case, Case No. 13-1890-GA-UNC ("13-1890 Order"), the
9 PUCO approved the continuation of the CEP investments and deferral beyond
10 December 31, 2012, up to the point when the deferral would reach the \$1.50 per
11 customer per month cap established in the 12-530 Order.

12
13 **IV. SUMMARY OF VEDO'S APPLICATION**

14
15 ***Q6. PLEASE SUMMARIZE VEDO'S APPLICATION FOR COLLECTING CEP***
16 ***COSTS FROM CONSUMERS***

17 **A6.** In its Application filed on March 30, 2018, VEDO seeks to collect from
18 customers in base rates the regulatory assets approved for deferral in Case Nos.
19 12-530-GA-UNC⁸ and 13-1890-GA-UNC.⁹ Between 2011 and 2017, the total
20 deferral was approximately \$66 million.¹⁰ The underlying CEP investments will
21 also be collected in the current rate case. VEDO proposes to collect its CEP

⁸ Finding and Order, PUCO Case No 12-0530-GA-UNC (Dec. 12, 2012).

⁹ Finding and Order, PUCO Case No 13-1890-GA-UNC (Dec. 12, 2013).

¹⁰ Direct testimony of J. Cas Swiz, PUCO Case No 18-0298-GA-AIR at 31 (Apr. 4, 2013).

1 deferrals beginning January 1, 2018 until the next rate case. The rider will collect
2 deferred depreciation, property tax, and PISCC. The underlying assets, however,
3 will not be included in the rider and will instead be addressed in the next base rate
4 case.¹¹

5
6 **V. SUMMARY OF THE SETTLEMENT PROVISIONS RELATING TO THE**
7 **CEP**

8
9 ***Q7. PLEASE SUMMARIZE THE SETTLEMENT AS IT RELATES TO THE CEP***

10 ***A7.*** Among other things, concerning the CEP, the Settlement: (1) sets a monthly rate
11 cap of \$1.50 for residential customers on the CEP deferrals beginning in 2018
12 through 2024¹²; and (2) proposes that the PUCO Staff or its designee will conduct
13 a review every one- to two-years of the prudence, necessity, lawfulness, and
14 reasonableness of VEDO's CEP expenditures.¹³

¹¹ Direct Testimony of J. Cas Swiz in PUCO Case No18-0049-GA-ALT at 4(Apr. 13, 2018).

¹² Settlement at 9-10.

¹³ *Id.* at 11.

**VI. EVALUATION OF THE SETTLEMENT PROVISIONS RELATING TO
THE CEP**

***Q8. WHAT IS YOUR UNDERSTANDING OF THE STANDARD OF REVIEW
THAT THE PUCO COMMONLY USES IN EVALUATING A
SETTLEMENT?***

A8. I understand that the PUCO typically evaluates a proposed settlement using a three-prong test for approval. Specifically, the PUCO will apply the following three criteria in deciding whether to adopt a proposed settlement: Is the proposed settlement a product of serious bargaining among capable, knowledgeable parties?

1. Does the proposed settlement, as a package, benefit customers and the public interest?

2. Does the proposed settlement package violate an important regulatory principle or practice?

The PUCO also routinely considers whether the parties represent a diversity of interests.

***Q9. DO THE SETTLEMENT PROVISIONS RELATING TO THE CEP
COMPORT WITH THE THREE-PRONG TEST?***

A9. No. The Settlement provision that requiring one- to two-year reviews by the PUCO Staff or its designee of the prudence, necessity, lawfulness, and reasonableness of the annual CEP investments is inadequate to protect residential

1 customers from potentially paying inflated CEP rider rates. The provision does
2 not benefit customers and is not in the public interest.

3
4 ***Q10. WHY DO YOU BELIEVE THAT THE SETTLEMENT PROVISION***
5 ***CALLING FOR ONE- TO TWO-YEAR REVIEWS OF CEP INVESTMENTS***
6 ***BY THE PUCO STAFF OR ITS DESIGNEE IS INADEQUATE TO***
7 ***PROTECT RESIDENTIAL CONSUMERS?***

8 ***A10.*** First, I would point out that it is unclear what actual or estimated annual capital
9 expenditure levels will be for the 2018 – 2024 period under the Settlement's
10 proposed \$1.50 cap. Joint Exhibit 3.0 to the Settlement provides an “illustrative
11 example” of how the annual CEP deferrals will be converted to rates through a
12 revenue requirement calculation.¹⁴ However, Joint Exhibit 3.0 does not provide
13 any information on what spending levels in 2018-2024 correspond to the \$1.50
14 CEP rider cap. In other words, Joint Exhibit 3.0 does not clearly specify the CEP
15 spending limit represented by the \$1.50 rate cap. Moreover, neither Joint Exhibit
16 3.0 nor any other place in the Settlement identifies what the actual or budgeted, or
17 projected, annual capital spending levels in 2018 – 2024 will be. The uncertainty
18 surrounding what the annual CEP investment levels makes reviews of the
19 necessity, prudence, lawfulness and reasonableness of VEDO annual CEP capital
20 investments critically important. The ability to defer and now annually recover
21 PISCC and depreciation and property tax expenses associated with CEP

¹⁴ Joint Exhibit 3.0, Stipulation and Recommendation, PUCO Case No 18-0298-GA-AIR at 48 (January 4, 2018).

*Supplemental Direct Testimony of Mohammad Harunuzzaman, Ph.D.
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PUCO Case No. 18-0298-GA-AIR et al.*

1 investments offers a significant temptation for VEDO to over-invest in its
2 distribution system, as the Company will earn a rate-of-return on the deferrals in
3 the annual CEP Rider *and* on the underlying capital investments in a future rate
4 case (assuming they are found to be used and useful in that future rate case).
5

6 To guard against such potential over-investment, the reviews of the necessity,
7 prudence, and lawfulness of VEDO's CEP investments should be conducted each
8 year, not in a more general one- to two-year period. And the annual reviews
9 should be conducted by an independent third-party with expertise in natural gas
10 pipeline operations, systems, engineering, construction, etc. in addition to the
11 ratemaking principles associated with utility capital investments. The PUCO Staff
12 may not have in-house expertise to determine if VEDO is making unnecessary
13 investments and/or over-building its distribution system in order to enlarge its rate
14 base and garner inflated returns. Therefore, VEDO's customers would benefit
15 from an independent, outside review.
16

17 ***Q11.* CAN YOU ELABORATE ON THE DIFFERENT CRITERIA (SUCH AS**
18 **NECESSITY, PRUDENCE, REASONABLENESS, ETC.) THAT WOULD**
19 **BE USED TO CONDUCT AN AUDIT?**

20 ***A11.*** A necessity audit should review whether VEDO made an appropriate
21 determination of necessity or need at the beginning of each year prior to making
22 investments with respect to purposes (e.g., infrastructure expansion/improvement,
23 information technology upgrades, government rules and regulations, etc.) set by

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PUCO Case No. 18-0298-GA-AIR et al.*

1 R.C. 4929.11 for CEP investments. Such a determination of necessity would
2 include, for example, whether and how much infrastructure expansion was
3 necessitated by, among other things, projected growth in the number of customers
4 and of gas demand. Likewise, VEDO would need to assess what programs would
5 be necessary to comply with existing and anticipated government rules,
6 regulations, and orders, and at what cost. The independent audit should
7 comprehensively and rigorously review each of the purposes set by R.C. 4929.11
8 for CEP investments and make an evaluation of VEDO's determination of need
9 and whether the VEDO's CEP investments comported with that determination.

10

11 ***Q12. CAN YOU PROVIDE AN EXAMPLE WHY ANNUAL REVIEWS OF THE***
12 ***NECESSITY ALONG WITH THE PRUDENCE, REASONABLENESS, AND***
13 ***LAWFULNESS OF VEDO'S CEP CAPITAL INVESTMENTS BY AN***
14 ***INDEPENDENT THIRD-PARTY REVIEWER ARE IMPORTANT?***

15 ***A12.*** Yes. VEDO's CEP as approved by the PUCO in Case Nos. 12-530-GA-UNC and
16 13-1890-GA-UNC included a \$1.50 per month residential rate cap on the CEP
17 deferrals approved in those cases. In other words, VEDO could make CEP capital
18 investments up to the point where the accrued deferrals associated with those
19 investments would have exceeded \$1.50 per month if the deferrals were included
20 in residential customers' rates.

21 The PUCO's Orders in the 12-530-GA-UNC and 13-1890-GA-UNC cases also
22 required VEDO to annually file a report that detailed the monthly CEP
23 investments and calculations used to determine the monthly deferrals each year

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PUCO Case No. 18-0298-GA-AIR et al.*

1 and progress towards meeting the 1.50 per month cap. By April 30 each year
2 VEDO filed such annual reports in Case No. 13-1890-GA-UNC. The reports
3 included schedules that identified the Company's total CEP investments in the
4 prior year (except that the 2013 report included CEP investments made from
5 10/1/11 through 12/31/13, a 15-month period) and a revenue calculation
6 identifying the cumulative impact of the CEP deferrals if they were included in
7 residential customers' rates. Table-1 below presents the total annual CEP
8 investments and residential rate impact calculations reported by VEDO in the
9 annual reports that it filed in Case No. 13-1890-GA-UNC in 2013 – 2018,
10 covering the CEP investment period 10/1/11 through 12/31/17.

Table-1:

VEDO Total CEP Investments and Residential Rate Impact
Reported in Case No. 13-1890-GA-UNC

<u>CEP Report Year</u>	<u>Investment Period</u>	<u>Investment Reported</u>	<u>Res. Rate Impact Reported</u>
2013	10/1/11 - 12/31/12	\$23,500,000	\$0.03/month
2014	1/1/13 - 12/31/13	\$21,121,194	\$0.12/month
2015	1/1/14 - 12/31/14	\$42,240,228	\$0.26/month
2016	1/1/15 - 12/31/15	\$41,795,666	\$0.51/month
2017	1/1/16 - 12/31/16	\$66,697,992	\$0.90/month
2018	1/1/17 - 12/31/17	\$69,743,771	\$1.43/month
<u>Total:</u>		<u>\$265,098,851</u>	

11 As Table-1 demonstrates, VEDO's capital investments for the CEP (which
12 effectively is all of the Company's capital expenditures not recovered in its
13 Distribution Replacement Program ("DRR")) increased dramatically from the
14 Program's early years to the latter years. The Company's CEP investments for
15 the twelve calendar months in 2013 was reported as \$21,121,194. Yet, only four
16 years later for the twelve months in 2017, VEDO's CEP capital spending had

1 increased to \$69,743,771, a whopping 230% increase. It is difficult to envision
2 that conditions concerning VEDO's natural gas distribution system changed so
3 much over a short four-year period to make such a dramatic increase in capital
4 investments necessary. This example clearly shows that annual reviews of the
5 necessity, prudence, reasonableness, and lawfulness of VEDO's CEP investments
6 by an independent third-party reviewer is vitally important.

7

8 ***Q13. WHAT ARE YOUR RECOMMENDATIONS ON THE SETTLEMENT***
9 ***WITH REGARD TO THE CEP?***

10 ***A13.*** Because the Settlement is inadequate to protect consumers, and does not benefit
11 them, I recommend that the PUCO reject the provision in the Settlement calling
12 for a one- to two-year review of CEP capital investments by PUCO Staff or its
13 designee in favor of a substantially more rigorous independent review. The
14 PUCO should direct that the review of VEDO's CEP capital investments should
15 be conducted annually and should be conducted by an independent third-party
16 consultant paid for by VEDO's shareholders (not ratepayers) with expertise in
17 natural gas pipeline operations, systems, engineering, construction, etc. in
18 addition to the ratemaking principles associated with utility capital investments.

19

20 ***Q14. DOES THIS CONCLUDE YOUR TESTIMONY?***

21 ***A14.*** Yes, it does. However, I reserve the right to incorporate new information that
22 may subsequently become available.

CERTIFICATE OF SERVICE

I hereby certify that a true copy of the foregoing *Supplemental Direct Testimony of Mohammad Harunuzzaman on Behalf of the Office of the Ohio Consumers' Counsel* was served via electronic transmission to the persons listed below on this 28th day of January 2019.

/s/ William Michael

William Michael
Assistant Consumers' Counsel

werner.margard@ohioattorneygeneral.gov
mjsettineri@vorys.com
glpetrucci@vorys.com
joliker@igsenergy.com
mnugent@igsenergy.com
slesser@calfee.com
mkeaney@calfee.com
talexander@calfee.com
tony_long@hna.honda.com
mfleisher@elpc.org
cmooney@ohiopartners.org

campbell@whitt-sturtevant.com
whitt@whitt-sturtevant.com
rust@whitt-sturtevant.com
kennedy@whitt-sturtevant.com
fdarr@mcneeslaw.com
mpritchard@mcneeslaw.com
jstephenson@vectren.com
Thomas.jernigan.3@us.af.mil
Andrew.unsicker@us.af.mil

Attorney Examiner:
Gregory.price@puc.state.oh.us
patricia.schabo@puc.state.oh.us

Mohammad Harunuzzaman, Ph.D.
List of Professional Publications

Papers on Nuclear Safety and Reliability

Nuclear Technology, "Optimization of Standby Safety System Maintenance Schedules in Nuclear Power Plants," 113, 354-367 (March 1996) (with T. Aldemir).

Transactions of the American Nuclear Society, "Optimal Preventive Maintenance of a Nuclear Power Plant Subsystem Using Dynamic Programming," 57, 99-100 (November 1988) (with T. Aldemir).

American Nuclear Society, "Sensitivity of Optimal Maintenance Cost to Reliability Constraints, PSA '96: Probabilistic Safety Assessment," II, 1632-1635 (September 1996) (with T. Aldemir).

Reports and Publications on Public Utility Regulation

The National Regulatory Research Institute, The State of Regulation, An Examination of the Four Utility Sectors, 2001 (with K. Costello, et al.).

The National Regulatory Research Institute, Consumer Benefits from Gas Choice: Empirical Findings from the First Programs, 2000 (with K. Costello).

The National Regulatory Research Institute, Cost Allocation and Rate Design for Unbundled Gas Services, 2000 (with S. Koundiniya).

The National Regulatory Research Institute Pipeline Capacity Turnback: Problems and Options, 1997 (with A. M. Rahman).

The National Regulatory Research Institute, Support for Social Goals in A More Competitive Electricity Industry, 1997 (with R.J. Graniere, M. Islam).

The National Regulatory Research Institute, State Commission Regulation of Self-Dealing Power Transactions, 1996 (with K. Costello).

The National Regulatory Research Institute, Integrated Resource Planning for Local Gas Distribution Companies: A Critical Review of Regulatory Policy Issues, 1994 (with M. Islam).

The National Regulatory Research Institute, Regulatory Practices and Innovative Generation Technologies: Problems and Rate-making Approaches, 1994 (with K. Costello, et al.)

The National Regulatory Research Institute, Regulatory Treatment of Electric Utility Clean Air Act Compliance Strategies, Costs and Emission Allowances, 1993 (with K. Rose, A. S. Taylor).

The National Regulatory Research Institute, Public Utility Commission Implementation of the Clean Air Act's Allowance Trading Program, 1992 (with K. Rose, et al.).

The National Regulatory Research Institute, Incentive Regulation for Local Gas Distribution Companies under changing Industry Structure, 1991, (with D. Duann, K. Costello, and S-B Cho.)

The National Regulatory Research Institute, Gas Storage: Strategy, Regulation, and Some Competitive Implications, 1990 (with D. J. Duann, P. A. Nagler and G. Iyyuni).

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