Ohio | Public Utilities Commission

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PUCO EXHIBIT FILING

Date of Hearing: 1-29-19

Case No. Application of Vectren Energy Delivery of Ohio, Inc. For Approval of an Increase in Gas Rates. : Case No. 18-298-GA-AIR

PUCO Ca In the Matter of the Application of Vectren Energy Delivery of Ohio, Inc. For Approval of an Alternative Rate Plan. : Case No. 18-299-GA-ALT

In the Matter of the Application of Vectren Energy Delivery of Ohio, Inc. For Approval of an Alternative Rate Plan. : Case No. 18-49-GA-ALT

List of exhibits being filed:

Vedo Exhibits 11.2, 12.0, 13.0, 13.2, 14.0 & 15.0

Joint Exhibits 1.0 - 5.0

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BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO

- - -

In the Matter of the Application of Vectren Energy Delivery of Ohio, Inc. For Approval of an Increase in Gas Rates.	Case No. 18-298-GA-AIR
In the Matter of the Application of Vectren Energy Delivery of Ohio, Inc. For Approval of an Alternative Rate Plan.	Case No. 18-299-GA-ALT
In the Matter of the Application of Vectren Energy Delivery of Ohio, Inc. For Approval of an Alternative Rate Plan.	Case No. 18-49-GA-ALT

- - -

PROCEEDINGS

Before Gregory Price and Patricia Schabo, Attorney Examiners, at the Public Utilities Commission of Ohio, 180 East Broad Street, Room 11-A, Columbus, Ohio, called at 10:00 a.m. on Tuesday, January 29, 2019.

- - -

VOLUME I

- - -

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- - -

VEDO EXHIBIT NO. 11.2

BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Vectren Energy Delivery of Ohio, Inc., for Approval of an Alternative Rate Plan	)))	Case No. 18-0049-GA-ALT
In the Matter of the Application of Vectren Energy Delivery of Ohio, Inc. for Approval of an Increase in Gas Rates	)))	Case No. 18-0298-GA-AIR
In the Matter of the Application of Vectren Energy Delivery of Ohio, Inc., for Approval of an Alternative Rate Plan	)))	Case No. 18-0299-GA-ALT

SECOND SUPPLEMENTAL DIRECT TESTIMONY OF
J. CAS SWIZ
IN SUPPORT OF THE STIPULATION AND RECOMMENDATION
ON BEHALF OF
VECTREN ENERGY DELIVERY OF OHIO, INC.

____ Management policies, practices, and organization
____ Operating income
____ Rate base
____ Allocations
____ Rate of return
____ Rates and tariffs
_X_ Other (Stipulation and Recommendation)

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Second Supplemental Direct Testimony of
J. Cas Swiz
in Support of the Stipulation and Recommendation

I. BACKGROUND AND QUALIFICATIONS

Q1. Please state your name and business address.

A. My name is J. Cas Swiz and my business address is One Vectren Square, Evansville, Indiana 47708.

Q2. Are you the same J. Cas Swiz who filed Direct Testimony on behalf of Vectren Energy Delivery of Ohio, Inc. (VEDO or the Company) in this proceeding on April 13, 2018, and Supplemental Testimony on November 7, 2018?

A. Yes.

Q3. Did you also file Direct Testimony in Case No. 18-0049-GA-ALT?

A. Yes, in support of VEDO's proposed Capital Expenditure Program (CEP) Rider.

Q4. What is the purpose of this testimony?

A. This testimony is intended to provide certain facts showing that the Commission should approve the Stipulation and Recommendation (Stipulation) filed in this matter on January 4, 2019, because it is the product of serious negotiations among knowledgeable parties, benefits customers and the public interest, and does not violate any important regulatory principles or practices.

II. THE STIPULATION AND RECOMMENDATION

Q5. Please provide an overview of the Stipulation.

A. The Stipulation recognizes that VEDO's current base rates for natural gas distribution service are no longer sufficient to yield reasonable compensation for the service rendered and are no longer just or reasonable. The Stipulation recommends that "[u]nless otherwise specifically provided for in this Stipulation, all rates, terms,

conditions, and any other items shall be treated in accordance with the Staff Report filed in these cases on October 1, 2018 (Staff Report)." (Stip. ¶ 2.) And "[a]ny rates, charges, terms, conditions, or other items included in VEDO's applications in the above-captioned cases (collectively, Application)" that "are not addressed in the Staff Report or this Stipulation," are to "be treated in accordance with the Application." (*Id.*)

Q6. Describe the attachments to the Stipulation.

A. There are four attachments to the Stipulation. Joint Exhibit 2.0 includes the Stipulation Schedules, which were prepared under my supervision. Joint Exhibit 3.0 is an Illustrative CEP Rider Calculation, which was also prepared under my supervision, and which uses hypothetical cost and investment inputs to demonstrate how VEDO will develop and build the CEP Rider rate and apply the applicable rate caps. Joint Exhibit 4.0 and Joint Exhibit 5.0 are tariff exhibits; of these exhibits, I am only supporting the rates included within the proposed tariff, Joint Exhibit 4.0. These exhibits are otherwise being supported by VEDO witness Scott Albertson.

Q7. What revenue requirement does the Stipulation recommend?

A. As set forth in Joint Exhibit 2.0, the Stipulation recommends that VEDO receive a net base rate increase of $22,730,487. Although this is significantly less than the approximately $34 million increase requested by VEDO, the Stipulation recommends that it provides reasonable compensation for the services rendered.

Q8. What is the Stipulation's recommended rate base?

A. As again set forth in Joint Exhibit 2.0, the value of all of VEDO's property used and useful for the rendition of service to its customers as of the approved date certain of December 31, 2017, is $622,297,988. Although this is less than VEDO's actual rate base on the date certain, VEDO is accepting it in compromise.

1 **Q9. What rate of return is reflected in the stipulated revenue requirement?**

2 A. The stipulated revenue requirement reflects a rate of return on rate base of 7.48 percent.
3 This is significantly less than the 7.97 percent rate of return supported by VEDO in its
4 Application, and it is within the range recommended by Staff in the Staff Report. This is
5 also significantly less than VEDO's current rate of return of 8.89 percent, as authorized in
6 VEDO's last rate case, Case No. 07-1080-GA-AIR. The stipulated rate of return is being
7 addressed by VEDO witness Dr. Michael Vilbert.

8 **Q10. Does the Stipulation also address the operating revenue and expense reflected in the**
9 **revenue requirement?**

10 A. Yes. The specific adjustments to operating revenue and expense are set forth in the C
11 Schedules to Joint Exhibit 2.0 and reflect several compromises between VEDO's and
12 Staff's positions.

13 **Q11. Describe the allocations used to develop the rates set forth in Joint Exhibit 4.0.**

14 A. The allocations used to develop these rates are the same as those reviewed and
15 recommended by Staff within the Staff Report (Staff Report at 29). This recommendation
16 was based upon the cost of service study sponsored by VEDO Witness Feingold. The
17 distribution of the stipulated revenue increase, and the manner of distribution, to each rate
18 schedule represents those percentages supported by the Company's response to Staff
19 discovery, as referenced within the Staff Report, and the recommendations made within
20 the Staff Report (Staff Report at 29). The data request referenced by Staff was provided
21 to requesting parties, and other than the continuation of SFV, I am not aware that any
22 non-Signatory Party objected to these recommendations of the Staff Report.

23 **Q12. Describe the late-filed exhibits contemplated under the Stipulation.**

24 A. Three potential adjustments to the revenue requirement are contemplated under the
25 Stipulation, which will be addressed through late-filed exhibits.

The first involves property taxes. The Stipulation recognizes that the amount of property tax expense included in the revenue requirement is $16,505,566. One disputed item in the case, as evident from the Staff Report and Objections (which VEDO has withdrawn), was the proper level of property tax to reflect in rates. VEDO's application proposed adjustments intended to recognize the level of expense occurring on the assets in service on the date certain (*i.e.*, property tax expense incurred in 2018 and payable in 2019). Staff projected a different level of expense than VEDO, to which VEDO objected. Rather than engage in a dispute over the projection of a level of expense that would be known for certain in 2019, VEDO and Staff agreed that in accordance with R.C. 4909.15(D) and R.C. 4909.191, VEDO would submit actual data regarding the actual property tax expense paid through September 30, 2019. If that data shows that VEDO's actual property tax expense was less than $16,505,566, VEDO will submit a rate adjustment for the recalculation of stipulated base rates, no later than ninety days after that data is received, in accordance with R.C. 4909.191 and otherwise comply with the conditions of that statute. If actual property tax expense is greater than $16,505,566, VEDO will not propose an adjustment.

The second adjustment involves rate case expense. The Stipulation specifies the amount of rate-case expense reflected in the stipulated revenue requirement and permits VEDO to submit a late-filed exhibit to update to the actual amount of expense incurred at a specified point in the case. This adjustment can go up or down, depending on the actual level of expense incurred and deferred. Even with this adjustment, VEDO expects to recover less rate-case expense than actually incurred, given that it will likely incur additional expenses after the time of the update. If this Stipulation is litigated through the rehearing phase, the additional, unrecovered expense could be substantial.

The last adjustment is to update the remaining deferral balance associated with the Distribution Accelerated Risk Reduction (DARR) Program. VEDO received authority to defer expenses associated with its DARR Program in Case No. 15-1741-GA-AAM. The Staff Report recommended that the termination of the DARR deferral should occur "contemporaneous with the date new rates adopted in this case go into effect." (Staff Report at 16.) The stipulated revenue requirement reflects deferred DARR expenses through the end of 2018. VEDO's deferral authority, however, continues until a recovery mechanism is established. In this case, the recovery mechanism will be the proposed base rates and charges agreed to in the Stipulation, which, based on the timeline in this proceeding, will become effective after the end of 2018. The Stipulation provides a means of recovering this final portion of the DARR deferral balance, permitting VEDO to submit a late-filed exhibit capturing and incorporating into base rates the remaining portion of the DARR deferral balance. This approach eliminates the need either to file a separate application to recover a small balance or to carry such balance for an extended period of time until a future rate case.

Q13. Does the Stipulation resolve every dispute potentially at issue in this case?

A. No. On a number of fronts, the Stipulation recognizes that certain issues are best resolved in other contexts or separate dockets. In these situations, the Stipulation provides clarity regarding the process by which such issues may be resolved, without requiring a choice between litigation or forfeiture of the issue.

Q14. Can you explain what issues have been deferred for discussion and resolution outside of this case?

A. Yes. For example, several parties took opposing positions regarding the scope and funding of Energy Efficiency (EE) Programs. Rather than resolve those issues in this docket, the Signatory Parties have agreed that VEDO should discuss EE issues outside of

this case, attempt to resolve the issues via a stipulation in a separate docket, and (failing that) resolve those issues in a separate docket. The Stipulation generally preserves the right for parties to address the larger topics of dispute.

Likewise, issues regarding the scope and timing of VEDO's bare steel and cast iron pipeline replacement program (Replacement Program) and the Distribution Replacement Rider (DRR) are also reserved for separate dockets, if the need arises to revisit them. By signing the Stipulation, VEDO is committed to the terms and conditions included in the Stipulation, such as the December 31, 2023 target date for Replacement Program completion, and the present scope of the DRR. But the Stipulation recognizes that VEDO may later propose, in a separate proceeding, certain modifications, such as an extension of the Replacement Program beyond 2023, or a change in the scope of the Replacement Program. This is subject to a requirement of conferring with Staff, and Staff reserves the right to oppose any modification. No modification to the stipulated terms and conditions could occur without Commission approval. In this way, the Stipulation provides clear requirements applicable to the Replacement Program and DRR, without prejudging or ruling out the permissibility of later modifications.

Meter testing provides another example of an issue being set aside for resolution in another context. The Staff Report recommended that VEDO provide customers with the opportunity to have one meter test without charge every three years. VEDO was concerned that this recommendation for a without-charge meter test would drive incremental cost increases for an activity not reflected in VEDO's revenue requirement, either as an actual or projected expense. Rather than provide for present authority to defer and/or recover such incremental costs, the Stipulation recognizes that VEDO may seek authority to defer and/or recover such costs in a separate proceeding.

1 Issues regarding the return of Tax Cuts and Jobs Act of 2017 (TCJA) savings
2 have also been submitted for resolution in another docket. Depending on the progress of
3 this docket and the TCJA docket (which is outside of VEDO's control), this provides
4 additional procedural flexibility and may permit for the speedier return of tax savings.
5 Similarly, the Stipulation also avoids the need to litigate a number of issues raised
6 by marketer and supplier interests. Rather than seek immediate resolution of issues such
7 as exiting the merchant function and billing enhancements, VEDO has agreed to discuss
8 these and other issues and provide additional information under defined conditions, as
9 supported in the testimony of VEDO witness Albertson.
10 For all of these issues, the Stipulation provides a clear process for resolving areas
11 of concern, if and when such resolution becomes necessary.

12 **III. THE CRITERIA FOR EVALUATING STIPULATIONS**

13 **Q15. What criteria does the Commission use to decide whether to approve a Stipulation?**
14 A. The Commission has applied the following three criteria: First, is the Stipulation a
15 product of serious bargaining among capable, knowledgeable parties? Second, taken as a
16 package, does the Stipulation benefit customers and the public interest? Third, does the
17 Stipulation violate any important regulatory principle or practice?

18 **A. THE STIPULATION IS THE PRODUCT OF SERIOUS BARGAINING.**

19 **Q16. Is the Stipulation supported by parties representing a range of interests?**
20 A. Yes. The Stipulation is supported by parties representing a wide range of interests,
21 including those of VEDO's customers. In addition to the Company, the Signatory Parties
22 include the Commission's Staff; the City of Dayton, which has sought to protect and
23 advance the interests of its residents, the largest city within VEDO's service area; the

Federal Executive Agencies (FEA), representing federal customers, including the largest single site employer within VEDO's service area, Wright Patterson Air Force Base; and two entities representing the interests of natural gas suppliers, Interstate Gas Supply (IGS) and the Retail Energy Supply Association (RESA).

Q17. Was the Stipulation the product of serious bargaining among capable, knowledgeable parties?

A. Yes. All of the intervening parties participated in, or had the opportunity to participate in, the negotiations. The settlement negotiations involved a diverse group of experienced parties. An initial settlement meeting was held following the prehearing conference on November 15, 2018. After that, all-party settlement meetings were held on November 20, November 27, December 4, December 12, December 17, and December 20. The initial meetings focused on reaching a preliminary understanding on the revenue requirement, after which additional meetings were held regarding other issues. All parties that intervened in the case were invited to attend these negotiation sessions. Parties generally circulated term sheets or other written proposals in advance or at the outset of these sessions. A telephone bridge was established for these sessions to accommodate those parties whose counsel could not travel to a particular session. VEDO answered questions from the parties and invited feedback and counterproposals to any proposed settlement terms. All parties made extensive comments on VEDO's proposals, and all Signatory Parties made compromises.

In addition, VEDO invited all of the parties to contact VEDO directly if they wanted to engage in separate settlement discussions with the Company. Numerous parties took advantage of that opportunity, and VEDO had several conversations with individual parties, including but not limited to the Commission's Staff. All agreed upon terms and conditions are reflected in the Stipulation.

All of the negotiations were at arm's length. All of the negotiations were premised on a thorough analysis of the Application by the Staff and by the parties via discovery. The process consumed numerous days, including during the weeks of the holidays of Thanksgiving, Christmas, and New Year's Day. Although it resulted in the extension of this proceeding beyond the 275-day deadline provided in R.C. 4909.42 (which elapsed no later than December 31, 2018), VEDO supported two extensions of the hearing date: first from December 4, 2018, to January 7, 2019, to permit the continuance of negotiations; and then again from January 7 to January 29, to permit further review and evaluation of the Stipulation by the Commission and any opposing parties. Even for those parties who did not sign the Stipulation, numerous proposals and counterproposals were exchanged up until an impasse was recognized.

The result of the negotiations was a compromise, as explained more fully below. Many parties and customers receive benefits under the Stipulation, but as demonstrated by the differences between VEDO's application position and the Staff Report position and corresponding objections, neither VEDO nor any other Signatory Party received everything that it sought in negotiation. The Stipulation strikes a reasonable balance that benefits customers and the public interest.

Q18. Were the parties represented by capable, knowledgeable persons?

A. Yes. All of the parties were represented by attorneys, most if not all of whom have years of experience in regulatory matters before this Commission and who possess extensive information. In addition, all of the parties either employed or had access to technical experts.

1 **B. THE STIPULATION BENEFITS CUSTOMERS AND IS IN THE PUBLIC INTEREST.**

2 **Q19. What facts support that the Stipulation benefits customers and is in the public**
3 **interest?**

4 A. The Stipulation benefits VEDO's customers and the public interest in numerous ways, as
5 shown by the following examples.

6 (1) It will enable VEDO to continue to provide safe and reliable service by promoting its
7 financial condition by implementing just and reasonable rates, which will support
8 VEDO's ability to furnish necessary and adequate service and facilities;

9 (2) It recommends a significant reduction to the revenue requirement proposed by
10 VEDO, reducing that requirement from approximately $34 million to $22.7 million;

11 (3) It will facilitate the continuation of VEDO's accelerated replacement and retirement
12 of bare steel/cast iron (BSCI) pipelines and other targeted infrastructure (the
13 Replacement Program) with cost recovery through the Distribution Replacement
14 Rider (DRR), which supports the accelerated reduction of system risks and
15 compliance with federal pipeline safety regulations;

16 (4) It provides for base rates that reflect the reduction in the federal income tax rate under
17 the Tax Cuts and Jobs Act of 2017 (TCJA);[1]

18 (5) It establishes a rate of return that is significantly below that supported by the
19 Company in its Application and which is within the range recommended in the Staff
20 Report;

21 (6) It provides direct benefits to the City of Dayton and its residents, including
22 provisions: (a) making available direct annual economic and neighborhood
23 development funding and addresses the process applicable to such funding; (b)

[1] The return of other tax benefits is being accomplished via a Tax Savings Credit Rider, which has been proposed in a separate proceeding, *see* 19-0029-GA-ATA.

requiring consultation with Dayton regarding economic development projects eligible for inclusion within an infrastructure development rider; and (c) establishing up to two workshops per year targeting both commercial and industrial customers, and two workshops per year targeting residential customers, regarding various energy efficiency programs and issues;

(7) It establishes procedural mechanisms and cost controls applicable to the continuation of several important programs, including the DRR and Replacement Program; the Capital Expenditure Program (CEP); and gas conservation and energy efficiency programs (EE Programs). Cost recovery associated with these programs after the date certain is not being addressed in these dockets; as has been the case historically, all costs will be subject to Commission review and approval before being recovered from customers. Each of these programs benefits customers and the public, whether by replacing at-risk pipeline, fostering economic development and the provision of just and reasonable service through investment in local infrastructure, or making available programs to improve the efficiency of homes and energy usage;

(8) It provides for VEDO's filing of a future base rate case, with a date certain no later than December 31, 2024, which was recommended by the Staff Report and other parties to this case. In that future base rate case, VEDO has among other things agreed to submit an updated depreciation study; to address Staff preferences for the presentation of rider revenues; to provide a description of budget changes as part of the S-4.2 Schedule; and to update base rates for the inclusion of CEP balances and assets;

(9) It provides for updates to VEDO's tariff, including the updating of several miscellaneous charges in accordance with the Staff Report and the addition of a

provision recommended in the Staff Report to provide for a meter test without charge once every three years;

(10) It addresses marketer and supplier concerns, as explained in the testimony of VEDO witness Albertson; and

(11) Lastly, it will reduce the costs of litigation, which would otherwise increase rate case expense and be recoverable from all customers.

Q20. How does the Stipulation support the continued provision of safe and reliable service?

A. In several ways. The Stipulation permits VEDO to recover just and reasonable rates based on its test period of the 12 months ending September 30, 2018 and date certain of December 31, 2017. VEDO's current base distribution rates are no longer sufficient to yield reasonable compensation for the gas distribution service that VEDO renders and are no longer just and reasonable. The rates proposed in the Stipulation support VEDO's financial health and its ability to provide safe and reliable service. The stipulated revenue requirement is set forth in Joint Exhibit 2.0. The Stipulation also provides for the continuation of the CEP and Replacement Program, with cost recovery respectively under the CEP Rider and DRR. The Commission has previously approved these programs as just and reasonable and necessary to support the provision of safe and adequate service. The Stipulation permits them to continue.

Q21. Are there other commitments that will benefit customers in VEDO's service area?

A. Yes. VEDO has committed to provide direct funding to economic development projects and neighborhood development projects identified by the City of Dayton. Subject to the terms and condition of the Stipulation, at least $75,000 per year shall be provided, and this will directly benefit the residents of the City. VEDO has also committed to regularly consult with Dayton to identify Infrastructure Development Rider (IDR)-eligible

economic development projects, which will further support the local economy. VEDO is also committed to sponsoring energy efficiency workshops in Dayton on a regular basis, for all customer classes. These economic development activities are in conjunction with the ongoing capital investment supported by both the DRR and CEP, which in addition to supporting the provision of safe and reliable service, also provide jobs and increased opportunity for local revenues through taxes and other development. These are merely some examples.

Q22. Does the Stipulation reflect compromises from the position supported in VEDO's Application?

A. Yes. To take a few examples, VEDO's Application supported a $34,021,227 increase in its revenue requirement. VEDO has instead stipulated to a $22,730,487 million increase in its revenue requirement, a reduction of over $11 million dollars, roughly one third of its proposed increase, reflecting numerous individual compromises made by VEDO.

VEDO proposed a $35.41 monthly customer charge for residential customer classes, which *included* the return of TCJA savings via base rates. VEDO has instead stipulated to customer charge of $32.86, which does *not include* the return of TCJA savings.[2] This will be subject to further reductions when VEDO's TCJA application is approved; as filed, VEDO is proposing, starting in 2019, a fixed credit of $3.72 per residential customer per month to pass back TCJA tax savings. *See* Case No. 19-0029-GA-ATA. With the fixed credit, fixed charges for residential customers will total $29.14 per month, an immediate increase to the currently-effective total fixed charge of $1.52.

VEDO proposed a CEP Rider without caps, without a regular prudence and necessity audit of the underlying assets, and without consequence if the date certain of its next rate case is after 2024. But VEDO has stipulated to a defined revenue requirement

[2] Other than the fact that base rates reflect the reduced FIT rate of 21 percent.

cap on the CEP Rider of $1.50 per residential customer per month, regular prudence and necessity audits, and the resetting of the CEP Rider to zero in the event it fails to comply with stipulated future rate case filing requirements.

In its tariffs, VEDO proposed creating a Multi-Family Pilot Program and enhancing its ability to verify the legitimacy of applicants for service; in its objections, it opposed Staff's recommendation that VEDO provide a meter test without charge once every three years. In the Stipulation, however, VEDO has agreed to withdraw the "verification" provision and the Multi-Family Pilot Program, and it has accepted the meter test provision recommended by Staff.

VEDO's Application did not propose any programs or meetings specifically targeted towards the City of Dayton or its residents. In the Stipulation, VEDO has agreed to provide regular and direct funding of economic and neighborhood development projects identified by Dayton; to engage in regular meetings with Dayton to identify IDR-eligible projects; and to sponsor energy efficiency workshops targeted at all customer classes.

These are not the only compromises made by VEDO in this case, but they are sufficient to illustrate the benefits achieved by the Stipulation.

C. THE STIPULATION DOES NOT VIOLATE ANY IMPORTANT REGULATORY PRINCIPLE OR PRACTICE

Q23. Does the Stipulation violate any important regulatory principle or practice?

A. No. The Stipulation does not violate any important regulatory principle or practice. On the contrary, it encourages compromise as an alternative to litigation and allows VEDO to recover just and reasonable rates as provided under R.C. 4909.18. The Stipulation supports VEDO's financial condition and ability to provide safe and reliable service. The

1 DRR and CEP Rider will continue to provide financial support for the policies and goals
2 approved by the Commission in prior orders. The base rate design reflected in the
3 Stipulation is the same rate design approved by the Commission in 2009 in VEDO's last
4 base rate case, as explained by VEDO witness Albertson. All of the positive benefits
5 described above, to both customers and the public interest, confirm that the Stipulation
6 does not violate any important regulatory principles or practices.

7 **Q24. Is the rate base recommended by the Stipulation reasonable?**

8 A. Yes. I am familiar with the Company's books and records, as well as with the filing
9 schedules supporting rate base. The rate base recommended by the Stipulation is less than
10 the rate base supported in the Application, which reflects among other things VEDO's
11 acceptance of certain Staff positions in compromise. At a minimum, the stipulated rate
12 base does not exceed VEDO's actual date certain rate base.

13 **Q25. Is the test period reflected in the stipulated revenue requirement reasonable?**

14 A. Yes. Again, I am familiar with the Company's books and records, as well as with the
15 filing schedules supporting the test period. VEDO's actual test-period expenses were
16 greater than those reflected in the stipulated revenue requirement, and VEDO's
17 Application supported those amounts. Nevertheless, although VEDO could have sought
18 to litigate the Staff Report's recommended adjustments to various revenue and expense
19 items, VEDO accepted significant reductions in the revenue requirement as a
20 compromise to resolve this case.

21 **IV. CONCLUSION**

22 **Q26. Does this conclude your second supplemental direct testimony in support of the**
23 **Stipulation?**

24 A. Yes, it does.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing document was served by electronic mail to the following persons on this 17th day of January, 2019:

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One of the Attorneys for Vectren Energy Delivery of Ohio, Inc.

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in

Case No(s). 18-0049-GA-ALT, 18-0298-GA-AIR, 18-0299-GA-ALT

Summary: Testimony Exhibit 11.2 Second Supplemental Direct Testimony of J. Cas Swiz in Support of the Stipulation electronically filed by Mr. Andrew J Campbell on behalf of Vectren Energy Delivery of Ohio

VEDO EXHIBIT NO. 12.0

BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Vectren Energy Delivery of Ohio, Inc. for Approval of an Increase in Gas Rates	)))	Case No. 18-0298-GA-AIR
In the Matter of the Application of Vectren Energy Delivery of Ohio, Inc., for Approval of an Alternative Rate Plan	)))	Case No. 18-0299-GA-ALT

DIRECT TESTIMONY OF
RUSSELL A. FEINGOLD
ON BEHALF OF
VECTREN ENERGY DELIVERY OF OHIO, INC.

____	Management policies, practices, and organization
____	Operating income
____	Rate base
____	Allocations
____	Rate of return
X	Rates and tariffs
X	Other: Cost of Service Study

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Direct Testimony of
Russell A. Feingold

I. BACKGROUND AND QUALIFICATIONS

Q1. Please state your name and business address.

A. My name is Russell A. Feingold. My business address is 2525 Lindenwood Drive, Wexford, Pennsylvania 15090.

Q2. By whom and in what capacity are you employed?

A. I am employed by Black & Veatch Management Consulting, LLC (Black & Veatch) as a Vice President and I lead its Rates & Regulatory Services Practice.

Q3. Please describe the firm of Black & Veatch.

A. Black & Veatch Corporation (the parent company of Black & Veatch) has provided comprehensive engineering and management services to utility, industrial, and governmental entities since 1915. Black & Veatch delivers management consulting solutions in the energy and water sectors. Our services include broad-based strategic, regulatory, financial, and information systems consulting. In the energy sector, Black & Veatch delivers a variety of services for companies involved in the generation, transmission, and distribution of electricity and natural gas. From an industry-wide perspective, Black & Veatch has extensive experience in all aspects of the North American natural gas industry, including utility costing and pricing, gas supply and transportation planning, competitive market analysis, and regulatory practices and policies gained through management and operating responsibilities at gas distribution, pipeline and other energy-related companies, and through a wide variety of client assignments. Black & Veatch has assisted numerous gas and electric distribution companies located in the U.S. and Canada.

Q4. Please describe your educational background.

A. I received a Bachelor of Science Degree in Electrical Engineering from Washington University in St. Louis and a Master of Science Degree in Financial Management from Polytechnic Institute of New York University.

Q5. Have you previously testified before the Public Utilities Commission of Ohio (Commission) or any other regulatory authority?

A. Yes. I have presented expert testimony before the Federal Energy Regulatory Commission (FERC), the National Energy Board of Canada, and numerous state and provincial regulatory commissions, including this Commission. My expert testimony has dealt with the costing and pricing of energy-related products and services for gas and electric distribution and gas pipeline companies.

In addition to traditional utility costing and rate design concepts and issues, my testimony addressed revenue decoupling concepts and other innovative ratemaking approaches, gas transportation rates, gas supply planning issues and activities, market-based rates, Performance-Based Regulation (PBR) concepts and plans, competitive market analysis, gas merchant service issues, strategic business alliances, market power assessment, merger and acquisition analyses, multi-jurisdictional utility cost allocation issues, inter-affiliate cost separation and transfer pricing issues, seasonal rates, cogeneration rates, and pipeline ratemaking issues related to the importation of gas into the United States.

Q6. What has been the nature of your work in the utility consulting field?

A. I have over forty-two (42) years of experience in the utility industry, the last thirty-nine (39) years of which have been in the field of utility management and economic consulting. Specializing in the gas industry, I have advised and assisted utility

management, industry trade and research organizations and large energy users in matters pertaining to costing and pricing, competitive market analysis, regulatory planning and policy development, gas supply planning issues, strategic business planning, merger and acquisition analysis, corporate restructuring, new product and service development, load research studies and market planning. In addition to my presentation of expert testimony in utility regulatory proceedings that was just discussed, I have spoken widely on issues and activities dealing with the pricing and marketing of gas utility services. Further background information summarizing my work experience, presentation of expert testimony, and other industry-related activities is included in Appendix A to my testimony.

Q7. Please summarize your specific experience in conducting class cost of service studies and designing rates for gas and electric utilities.

A. Over my utility consulting career, I have conducted numerous class cost of service studies for gas and electric utilities to provide guidelines for use in evaluating the utilities' class revenue levels and rate structures. In addition to these cost studies, which are based on a utility's embedded or historical costs, I have conducted long-run and short-run marginal cost, avoided cost, and unbundled service and cost studies. Finally, I have reviewed, evaluated, designed and implemented rate structures and other innovative pricing approaches for numerous gas and electric utilities operating in North America and abroad.

Q8. On whose behalf are you appearing in this proceeding?

A. I am appearing on behalf of Vectren Energy Delivery of Ohio, Inc. (VEDO or the Company).

1 **II. SUMMARY**

2 **Q9. What is the purpose and scope of your testimony in this proceeding?**

3 A. The purpose of my testimony is to sponsor, present and explain the Cost of Service Study
4 (COSS) submitted by VEDO in this rate proceeding. My testimony specifically addresses
5 the structure, content and results of the Company's COSS, its underlying cost allocation
6 methods, and how its results are used for ratemaking purposes.

7 **Q10. Would you please identify the schedules you are sponsoring in this proceeding?**

8 A. I am sponsoring the following schedules:

9 Schedule E-3.1 - Customer Charge/Minimum Bill Rationale

10 Schedule E-3.2 - Cost of Service Study

11 I am also sponsoring those portions of Schedule E-3 that are identified in that schedule
12 and in the direct testimony of Mr. Scott E. Albertson.

13 **Q11. What is the source of the information contained in the schedules you are**
14 **sponsoring?**

15 A. The source of the information generally is the books and operating budgets of VEDO.
16 When data comes from another source, I will note that in my testimony if not made clear
17 in the referenced schedules of the Application.

18 **Q12. Has a COSS been submitted in this proceeding?**

19 A. Yes. Schedule E-3.2 of the Company's filing contains its COSS based upon pro forma
20 revenues and costs for the future test year ended September 30, 2018. The study was
21 performed using Black & Veatch's proprietary, computer-based Gas Cost of Service
22 Model.

23 **Q13. Was this study prepared by you or under your supervision and direction?**

24 A. Yes.

1 **Q14. What was the source of the cost data analyzed in the Company's COSS?**

2 A. All cost of service data have been extracted from the Company's total cost of service
3 (i.e., total revenue requirement) contained in this filing. Where more detailed information
4 was required to perform various subsidiary analyses related to certain plant and expense
5 elements, the data were derived from the historical books and records of the Company.

6 **Q15. What rate classes were included in the Company's COSS?**

7 A. All rate classes are included in VEDO's COSS, representing the following rate schedules:
8 Residential Service (Rates 310, 311 and 315), General Service (Rates 320, 321 and 325),
9 Large General Transportation Service (Rate 345) and Large Volume Transportation
10 Service (Rate 360).

11 **Q16. Please describe Schedule E-3.1.**

12 A. Schedule E-3.1 - Customer Charge/Minimum Bill Rationale presents the components of
13 the customer-classified costs for each of VEDO's rate classes. This information is
14 extracted from the COSS which is presented in Schedule E-3.2.

15 **Q17. Please describe in more detail the Company's COSS presented in Schedule E-3.2.**

16 A. The Company's COSS presented in Schedule E-3.2 is organized as follows:

17 • Schedule E-3.2-1 presents a tabular summary of results for VEDO's COSS based on
18 its future test year at present and proposed rates.

19 ○ Schedule E-3.2-1A presents a unit cost analysis based on the functionalized
20 and classified components of the Company's total revenue requirement.

21 ○ Schedule E-3.2-1B presents the complete output detailing the results of the
22 COSS by FERC or primary account.

23 • Schedule E-3.2-2 presents the complete output detailing the Functionalization phase.

- Schedule E-3.2-3 presents the complete output detailing the Classification phase for the Transmission and Distribution functions.
- Schedules E-3.2-4A through E-3.2-4D present the complete output for allocation to the rate classes of the Company's functionalized and classified revenue requirement for Transmission Demand, Distribution Demand, Distribution Commodity and Distribution Customer, respectively.
- Schedules E-3.2-5A through E-3.2-5C present a complete listing of the allocation factors used in the functionalization, classification and allocation phases of the COSS, respectively.
- Schedule E-3.2-6 lists the functionalization, classification and class allocation factor(s) assigned to each account in the Company's revenue requirement.

In addition, I am presenting the supporting work papers, designated as WPE-3.2-1 through WPE-3.2-13, which show how the cost allocators external to the COSS were developed. WPE-3.2-1 is the index work paper that lists the information contained on the other work papers.

III. CONCEPTUAL BASIS FOR CONDUCTING A UTILITY'S COSS

Q18. Would you please state the purpose of a COSS?

A. A COSS is an analysis of costs which attempts to assign to each customer or rate class its proportionate share of the utility's total cost of service (i.e., the utility's total revenue requirement). The results of these studies can be utilized to determine the relative cost of service for each customer or rate class and to help determine the individual class revenue requirements and rate levels.

Q19. Are there certain guiding principles which should be followed when performing a COSS?

A. Yes. First, the fundamental and underlying philosophy applicable to all cost studies pertains to the concept of cost causation for purposes of allocating costs to customer groups. Cost causation addresses the question - which customer or group of customers causes the utility to incur particular types of costs? To answer this question, it is necessary to establish a linkage between a utility's customers and the particular costs incurred by the utility in serving those customers.

The essential element in the selection and development of a reasonable cost allocation methodology for use in conducting a COSS is the establishment of relationships between customer requirements, load profiles and usage characteristics on the one hand, and the costs incurred by the utility in serving those requirements on the other hand. For example, providing a customer with gas service during peak periods can have much different cost implications for the utility than service to a customer who requires off-peak gas service.

A gas utility's gas distribution system is designed to meet three primary objectives: (1) to extend distribution services to all customers entitled to be attached to the system; (2) to meet the aggregate, coincident design day capacity requirements[1] of all customers entitled to firm service; and (3) to deliver volumes of natural gas to those customers either on a sales or transportation basis. The costs incurred by a utility satisfy one or more of these operational objectives. There is generally a direct link between the manner in which costs are defined and their subsequent allocation.

[1] VEDO's design day capacity requirements are based on the firm customer demands expected to occur on a single day defined by VEDO as having 78 Heating Degree-Days (HDDs), or an average daily temperature of -13 degrees Fahrenheit.

It is a generally accepted concept in the utility industry that customer-related costs are incurred by a gas utility to attach a customer to the distribution system, meter any gas usage and maintain the customer's account. Customer costs are a function of the number of customers served and continue to be incurred whether or not the customer uses any gas. They may include capital costs associated with minimum size distribution mains, services, meters, regulators and customer service and accounting expenses.

Demand or capacity related costs are associated with a plant which is designed, installed and operated to meet maximum hourly or daily gas flow requirements, such as distribution mains, or more localized distribution facilities which are designed to satisfy individual customer maximum demands.

Commodity related costs are those costs which vary with the throughput sold to, or transported for, customers. Costs related to gas supply are classified as commodity related since they vary with the amount of gas volumes utilized by the Company's default sales service customers.

Q20. Please describe the general nature of gas distribution costs.

A. The delivery service costs[2] of a gas distribution utility are primarily fixed costs. Gas utilities design and install a gas distribution system capable of meeting its customers' design day requirements at the time of initial installation. Placing these facilities in service permits the utility to serve the changes in load due to extreme weather (i.e., the design day load). Once facilities serve customers, the costs associated with these facilities are by their nature fixed and do not vary as a function of the volume of gas consumed by customers.

[2] Delivery service costs are the non-gas costs incurred by the utility to move gas volumes from its city-gates to customers' premises.

Q21. Is the fixed nature of these costs widely recognized?

A. Yes. The evidence supporting the fixed nature of these costs is quite significant. For example, utilities routinely normalize for weather both the costs and revenues of a gas utility as part of its rate case. If the costs of distribution mains were in any way related to the volume of gas consumed, it would also be necessary to weather normalize the utility's rate base, but this is not the case. It is widely recognized that the costs of distribution mains are fixed and do not vary with gas volume. Additionally, the Gas Distribution Rate Design Manual, prepared by the NARUC Staff Subcommittee on Gas, defines demand or capacity costs as follows:

> Demand or capacity costs vary with the quantity or size of plant and equipment. They are related to maximum system requirements which the system is designed to serve during short intervals and do not directly vary with the number of customers or their annual usage. Included in these costs are: the capital costs associated with production, transmission and storage plant and their related expenses; the demand cost of gas; and most of the capital costs and expenses associated with that part of the distribution plant not allocated to the customer costs, such as the costs associated with distribution mains in excess of the minimum size.[3]

Q22. Please discuss the factors which can influence the overall cost allocation framework utilized by a gas distribution utility.

A. Three standard steps or phases are followed when performing a COSS: cost functionalization, cost classification and cost allocation. The factors affecting these steps

[3] Gas Distribution Rate Design Manual, Prepared by NARUC Staff Subcommittee on Gas, June 1989, pages 23-24.

can include: (1) the physical configuration of the utility's gas system; (2) the availability of data within the utility; and (3) the state regulatory policies and requirements applicable to the gas utility.

The physical configuration of the utility's gas system refers to considerations such as: (1) the transmission and/or distribution system configuration; (2) the mainline pipeline functionality; (3) the system operating pressure configuration; and (4) the existence of any production-related facilities. These considerations include determining whether: (1) the distribution system is a centralized grid/single city-gate or a dispersed/multiple city-gate configuration; (2) the gas utility has an integrated transmission and distribution system or a distribution-only operation; (3) the system operates under a multiple-pressure based or a single-pressure based configuration; and (4) the production-related facilities are used to support the peak demand or seasonal/annual demand requirements of the gas utility's customers.

With regard to data availability, the structure of the gas utility's books and records can influence its COSS framework. This structure relates to attributes such as the level of detail, segregation of data by customer or rate class, operating unit or geographic region, and the types of load data available.

State regulatory policies and requirements refer to the particular approaches used to establish utility rates in the state jurisdiction. For example, any specific methodological preferences or guidelines for performing COSS or designing rates established by the state regulatory body can affect the particular cost allocation method presented by the gas utility.

1 **Q23. How do these factors relate to the specific circumstances applicable to VEDO?**

2 A. Regarding the physical configuration of the Company's gas system, it is a combination
3 concentrated (in the greater Dayton area) and dispersed/multiple city-gate transmission
4 and distribution system, with a multi-pressure based system.

5 With respect to data availability, VEDO has detailed plant accounting records.
6 Where necessary, it is a customary and accepted practice in the utility industry to rely
7 upon current operating cost experience to derive reasonable cost estimates of customer-
8 related facilities (e.g., services, meters and regulators) by rate class for purposes of
9 assigning the test period costs of those facilities to the utility's rate classes.

10 Finally, I am not aware of any particular methodological preferences or guidelines
11 for performing a COSS established by the Commission.

12 **Q24. What steps did you follow to perform the Company's COSS?**

13 A. I followed three broad steps to perform the Company's COSS: (1) functionalization; (2)
14 classification; and (3) allocation. The first step, the functionalization process, involves
15 separating rate base (primarily plant in service) and expense items into operational
16 components based on the various characteristics of utility operation. For VEDO, the
17 functional cost categories associated with gas delivery service include transmission and
18 distribution.

19 Classification of costs, the second step, further separates the functionalized plant
20 and expenses into the three cost-defining characteristics of services rendered, as
21 previously discussed: (1) customer; (2) demand or capacity; and (3) commodity.

22 The final step is the allocation of each functionalized and classified cost element
23 to the individual customer or rate class. Costs typically are allocated using customer,
24 demand, and commodity allocation factors.

1 **Q25. What objective are you seeking to achieve through this three-step process?**

2 A. The functionalization and classification of the utility's total cost of service (i.e., its total
3 revenue requirement), provides the cost analyst with groupings of costs that are fairly
4 homogeneous, which enables the identification and application of cost allocation methods
5 that have a closer relationship to the causation of the costs that are being assigned to the
6 utility's rate classes.

7 **Q26. How does the cost analyst establish the cost and utility service relationships you**
8 **previously described?**

9 A. To establish these relationships, the cost analyst must analyze the utility's gas system
10 design and operations, its accounting records and its system-wide and customer specific
11 load data. From the results of those analyses, methods of direct assignment and
12 "common" cost allocation methodologies can be chosen for all of the utility's plant and
13 expense elements.

14 **Q27. Please explain what you mean by the term "direct assignment"?**

15 A. The term "direct assignment" relates to a specific identification and isolation of plant
16 and/or expense incurred exclusively to serve a specific customer or group of customers.
17 Direct assignments best reflect the cost causative characteristics of serving individual
18 customers or groups of customers. Therefore, in performing a cost of service study, the
19 cost analyst seeks to maximize the amount of plant and expense directly assigned to
20 particular customer groups.

21 Direct assignment of plant and expenses to particular customers or classes of
22 customers is made on the basis of special studies wherever the necessary data is
23 available. These assignments are developed by detailed analyses of the utility's maps and
24 records, work order descriptions, property records and customer accounting records.

Within time and budgetary constraints, the greater the magnitude of cost responsibility based upon direct assignments, the less reliance need be placed on common plant allocation methodologies associated with joint use plant.

Q28. Is it realistic to assume that a large portion of the plant and expenses of a utility can be directly assigned?

A. No. The nature of utility operations is characterized by the existence of common use facilities. Where a utility provides gas delivery services to two or more rate classes wherein one class uses fungible capacity which could be utilized by the other rate class, common costs are involved. This situation is illustrated through the utility's use of its gas distribution mains to serve multiple rate classes and a wide range of customers within these classes. As a result, to the extent a utility's plant and expenses cannot be directly assigned to customer groups, "common" allocation methods must be derived to assign or allocate the costs to the customer classes. The types of analyses discussed above facilitate the derivation of reasonable allocation factors for cost allocation purposes.

Q29. As part of your work, did you review and analyze the Company's gas system design and operations?

A. Yes. Since it is widely recognized that a utility's plant-in-service components provide the most direct link to a utility's gas service requirements, I initially focused my efforts on better understanding the nature and operation of the Company's gas system. This effort included review of the design and operating characteristics of its gas transmission and distribution systems and the types and levels of costs incurred in connecting various sized customers to its gas distribution system.

Q30. Please explain the most important considerations you relied upon in determining the cost allocation methodologies which were used to conduct VEDO's COSS.

A. As stated above, it is important to recognize the cost causative characteristics of each of the cost elements which are to be directly assigned or allocated within any class cost of service study. Additionally, the cost analyst needs to structure data in the COSS in a format (e.g., by cost classification and function) which is supportive of the appropriate allocation of costs to the utility's customer or rate classes. Of further concern is the availability of data for use in developing alternative cost allocation factors. In evaluating any cost allocation methodology, consideration should be given to:

1. Recognition of cost causality as opposed to value of service;
2. Results which are representative of the true costs of serving different types of customers;
3. A sound rationale or theoretical basis;
4. Stability of results over time;
5. Logical consistency and completeness; and
6. Ease of implementation.

Q31. Please explain the overall approach and guidelines you used to conduct the Company's COSS.

A. Throughout the process of choosing cost allocation methods and deriving cost allocation factors for use in a utility's COSS, I always objectively determine cost causative factors that are grounded in the design and operating characteristics of the particular utility. This was also the case in conducting the COSS filed by VEDO in this proceeding. As a result, the Company's COSS reasonably reflects the appropriate cost causation characteristics across all of the Company's rate classes and derives results that objectively portray the true costs to serve each of the utility's rate classes and the customers within each rate

class. These results can be used with confidence as a guide to establish the Company's class revenues and rates in this proceeding.

Q32. Please describe the key issues related to the allocation of demand-related costs within a gas utility's COSS.

A. An important and complex part of the allocation process is the allocation of demand-related costs. These costs represent a relatively largely portion of the utility's revenue requirements, and the nature of the plant facilities and expenses are joint in nature, meaning that "common" allocation methods must be used instead of direct assignments. A number of methodologies have been used to develop allocation factors for the demand components of costs. It is fair to say that three basic methodologies for allocating demand-related costs are the most common. These three methodologies are Peak Demand Allocations, Average and Excess Demand Allocations and Non-Coincident Demand Allocations. Each of these demand allocation methodologies is discussed below.

The concept of Peak Demand Allocation is premised on the notion that investment in capacity is determined by the peak load or peak loads of the gas utility. Under this methodology, demand-related costs are allocated to each customer class or group in proportion to the demand coincident with the system peak or peaks of that class or group relative to the system peak. The Peak Demand Allocation process might focus on a single peak, such as the utility's design day which is based on the worst case temperature conditions under which the utility's gas distribution system must be designed. Other variations might include the average of several cold days, or the expected contribution to the system peak on a design day.

The Average and Excess Demand Allocation methodology, also referred to as the "used and unused capacity" method, allocates demand related costs to the classes of

service on the basis of system and class load factor characteristics. Specifically, the portion of utility facilities and related expenses required to service the average load is allocated on the basis of each class' average demand. The portion of these facilities is derived by multiplying the total demand related costs by the utility's system load factor. The remaining demand related costs are allocated to the classes based on each class' excess or unused demand (i.e., total class non-coincident demand minus average demand). A more simplistic version of this methodology is the Peak and Average methodology. This cost methodology gives equal weight to peak demands and average demands.[4] As is the case with the Average and Excess method, it has the effect of allocating a portion of the utility's demand-related costs on a commodity-related basis.

The Non-Coincident Demand Allocation methodology recognizes that certain facilities, in particular distribution facilities, may be designed to serve local peaks which may or may not be coincident with the system peak loads. Using this methodology, demand costs are allocated on the basis of each group's (rate class) maximum demand, irrespective of the time of the system peak.

Q33. How have demand-related costs been allocated in VEDO's COSS?

A. The Company's COSS uses a coincident peak demand (derived on a design day basis) to allocate demand-related costs to its rate classes. Demand-related costs for the Company consist of the capacity costs (plant-related and expenses) associated with its city-gate facilities and the capacity or demand-related portion of its gas distribution system.

[4] The Peak and Average demand cost allocation method sometimes is implemented by using the gas utility's annual system load factor to weight the "average demand" and "excess demand" portions of the composite allocation factor.

Q34. Why doesn't the Company use average demand (i.e., annual throughput volumes divided by 365 days) to allocate demand-related costs?

A. Using only average demand to allocate demand related costs is inappropriate because it does not reflect the cost causative characteristics of demand-related costs. If a gas utility's system was sized and installed to accommodate average gas demands, it would be unable to accommodate the design day demands upon which the system was built. That is, by sizing plant investment for design day demands, the gas utility is assured of being able to satisfy its service obligation throughout the year. From a gas engineering perspective, it is clear that a design day demand criteria is always utilized when designing a gas distribution system to accommodate the gas demand requirements of the customers served from that system. As such, cost causation with respect to demand-related costs is unrelated to average demand characteristics.

Additionally, use of average demand characteristics for the allocation of demand-related costs penalizes customers that exhibit efficient gas consumption characteristics (i.e., customers with high load factors) and encourages the inefficient use of the gas utility's system by customers with low load factors. Clearly, under-utilization of a gas utility's system is a result that is not in the interest of the gas utility to encourage.

For the above-stated reasons, it is inappropriate to solely rely upon only a commodity-based allocation factor, as derived from annual gas throughput volumes, for purposes of allocating demand related costs to a gas utility.

Q35. Why did you choose to utilize VEDO's design day demands rather than its actual peak day demands as a demand allocation factor?

A. Use of a gas utility's design day demands is superior to using its actual peak day demands[5] (or an historical average of actual peak day demands over time) for purposes of deriving demand allocation factors for a number of reasons. These include:

1. A gas utility's system is designed, and consequently costs are incurred, to meet its design day demand. In contrast, costs are not incurred on the basis of an average of peak demands over time.
2. Design day demand is directly related to the level of change in customers' maximum daily demands for gas and to the associated change in fixed plant investment over time.
3. Design day demand provides more stable cost allocation results over time.

Q36. Please explain why the Company's design day demand best reflects the factors that actually cause costs to be incurred.

A. VEDO must consistently rely upon design day demand in the design of its own distribution facilities required to serve its firm service customers. This requirement will ensure that the utility has sufficient gas distribution system capacity to continue to provide reliable gas service during design day (worst case) conditions. And perhaps more importantly, design day demand directly measures the gas demand requirements of the Company's firm service customers which create the need for it to acquire resources, build facilities and incur hundreds of millions of dollars in fixed costs on an ongoing basis.

[5] A gas utility's design day demand is derived to represent the highest amount of gas that can be used by its customers on a day with extremely cold weather conditions and serves as a measure of the maximum distribution system capacity that the utility requires to serve all firm customers during design day weather conditions. Actual peak day demand represents, in each year, the single day in which the maximum amount of gas is used by the gas utility's customers, but this amount is unlikely to be as high as the utility's design day demand.

Based on my experience, there is no better way to capture the true cost causative factors of the Company's gas operations than to utilize its design day demand requirements within its COSS.

Q37. What level of firm demand requirements must VEDO consider in designing its gas distribution system to deliver under all conditions?

A. It is my understanding that VEDO designs its gas system, and has sufficient capacity, to serve the maximum delivery service requirements of all its firm sales and transportation service customers. I would consider this to be a reasonable approach, and one that is common across the gas utility industry. Therefore, the demands of all firm customers will be treated on an equivalent basis for purposes of cost allocation based on using the design day demands of the Company's rate classes.

Q38. Why is the use of design day demands closely related to the change in the Company's fixed plant investment over time?

A. Changes in design day demands serve as the primary input into the Company's ongoing decisions to install distribution system facilities to meet firm customer demands for gas delivery service. Simply stated, when customers' design day demands increase to a certain point, the Company needs to consider additional fixed plant investments, as it needs to be able to meet its design day demands.

Q39. Please explain why the use of design day demand provides relatively stable cost allocation results over time.

A. A gas utility's design day demand is the primary determinant of its planned capacity requirements and utilization. As described earlier, the design day demand is a measure of firm customers' maximum daily gas usage under pre-defined worst case weather conditions. As such, design day demand will not vary to the same degree as the utility's actual peak day demands, because those demands can increase or decrease in any year

compared to the peak day demands experienced in past years based on whether the particular day was relatively colder or warmer. Therefore, use of design day demand provides a more stable basis, and one more tied to the basis of investment decisions, than any of the other demand allocators available based on either actual peak day demand or the averaging of multiple peak day demands.

Q40. In addition to the allocation of demand-related costs, are there any other aspects of a gas utility's COSS worthy of focus?

A. Yes. For similar reasons, another critical element of a gas utility's COSS is the cost classification, allocation methods, and related allocation factors used to assign the plant and expenses associated with distribution mains to the utility's classes of service.

Q41. Please describe the system operating conditions that provide a foundation for the choice of classification and allocation methods for the costs of distribution mains.

A. Gas customers in a utility's residential and commercial service classes have exhibited declining use per customer due to the improved efficiency of capital stock replacement and improvements to the housing thermal envelope. This improved efficiency over time lowers the utility's design day requirements compared to the design day requirements at the time when the original plant was designed and installed to serve customer loads. As a result, the growth in transmission plant and distribution plant for gas customers primarily reflects the growth in number of customers using gas service. That is, a utility's system of distribution mains must be extended over time to permit new customers to receive gas service. Therefore, the primary driver of new distribution mains cost is the addition of new customers. Further, there are substantial economies of scale associated with the gas distribution infrastructure such that the unit cost of capacity for gas delivery declines with size at a relatively rapid rate.

Q42. Please discuss the economies of scale associated with gas distribution service.

A. Scale economies for a gas distribution utility reflect the relationship between the installed cost of pipe by size and type, coupled with the increased capacity from pressure and pipe diameter. For example, doubling the size of the gas main results in more than a doubling of the available capacity of the main, at a cost for VEDO that is less than double the cost of the smaller size main. For a lower pressure system, increasing pipe size from two-inch to four-inch allows almost six times the amount of gas to flow. The resulting cost causation results in larger customers imposing lower unit costs of design day capacity on the gas utility's distribution system than do smaller customers.

Q43. Can you please explain how the costs of gas distribution mains should be classified and allocated in a gas utility's COSS?

A. Yes. There are two cost factors that influence the level of distribution main facilities installed by a gas utility in expanding its gas distribution system. First, the total installed footage of distribution mains is influenced by the need to expand the distribution system grid over time to connect new customers to the system. Secondly, the size of the distribution main (i.e., the diameter of the main) is directly influenced by the coincident peak gas demand placed on the gas utility's system by its firm customers. Therefore, to recognize that these two cost factors influence the level of investment in distribution mains, it is appropriate to allocate such investment and the related operation and maintenance (O&M) expenses based on both the number of customers served by the gas utility and its design day demands.

To further explain, the customer component of distribution mains is premised upon the concept of a "minimum system." The "minimum system" for a gas distribution utility is the smallest hypothetical system a gas utility would construct to connect its

customers. The classification of the costs associated with the minimum system as customer-related, rather than capacity-related, recognizes the fact that the gas utility must install a network of distribution mains simply to have a physical connection with its customers, regardless of the level of demand a particular customer will actually impose on the gas system. A customer cannot be served at any level if the customer is not physically interconnected with the utility's gas distribution system.

Using the minimum system concept as a foundation, it is widely recognized that a large portion of a gas utility's total cost of distribution mains must be borne regardless of customers' peak day or annual use. To illustrate this point, it is useful to summarize a gas utility's process for physically connecting new customers. To extend gas service to a typical residential subdivision, the utility must first design the gas system. Based on this design, the utility determines the length and size of pipe needed to serve the area and procures the necessary material. A field crew is then dispatched to the site, together with the materials and equipment required to install the natural gas facilities. The activities necessary to install gas mains include digging a trench, installing the main into the trench, and backfilling the trench. Pipeline boring (i.e., a trenchless installation method) may be necessary to install some main segments if the utility is unable to open trench a portion of the line due to existing surface conditions along the route of the main. After the main is installed, it will be pressure tested, tied into the existing gas system, and purged and filled with natural gas. The main is then ready to provide utility service to the new customers. These steps are necessary regardless of how much gas the new customers are projected to use during the year or during a peak day. The design work must still be completed, the

crews, materials, and equipment dispatched to the site, the trench dug, the main installed in the trench, the trench backfilled, testing performed, and the other activities performed.

The additional costs associated with any larger mains required are mostly the incremental costs of the larger mains themselves, the additional labor involved with digging a wider trench for very large mains, and possibly the need for additional equipment to handle larger diameter pipe. As a result, a large percentage of the costs of providing gas delivery service to a gas utility's customers are incurred before they ever use one unit of gas. These are the costs the gas utility must incur simply to extend its gas distribution system to customers, irrespective of whether they will demand a small or large volume of gas on a peak day. As a result, the costs of such a minimum system are fundamentally customer-related in nature.

Q44. What methods are used in the gas utility industry to determine the customer component of distribution mains?

A. Based on my experience, the two most commonly used methods in the gas utility industry for determining the customer cost component of distribution mains facilities consist of: (1) the zero-intercept method; and (2) the most commonly installed, minimum-sized unit of plant investment. Under the zero-intercept method, a customer cost component is developed through statistical regression analyses to determine the unit cost (i.e., cost per foot) associated with a zero-inch diameter distribution main. This concept can also be thought of as estimating the fixed costs per foot that the utility incurs to design and install a gas distribution main regardless of the main's diameter.

The most commonly installed, minimum-sized unit method, which is the method utilized in VEDO's COSS, is intended to reflect the engineering considerations associated with installing distribution mains to serve the utility's gas customers. That is,

this method utilizes actual installed investment units to determine the minimum gas distribution system rather than a statistical analysis based upon investment characteristics of the utility's entire gas distribution system.

Two of the more commonly accepted literary references relied upon when preparing embedded cost of service studies are *Electric Utility Cost Allocation Manual*, by John J. Doran et al., National Association of Regulatory Utility Commissioners (NARUC) and *Gas Rate Fundamentals*, American Gas Association. Both of these authorities describe minimum system concepts and methods as an appropriate technique for determining the customer component of utility distribution facilities. In its publication, "Gas Distribution Rate Design Manual," NARUC presents a section which describes the zero-intercept approach as a minimum system method to be used when identifying and quantifying a customer cost component of distribution mains investment.[6] Clearly, the existence and utilization of a customer component of distribution facilities, specifically for distribution mains, is a fully supportable and commonly used approach in the gas industry.

Q45. Have you prepared an analysis which supports VEDO's classification and allocation of distribution mains costs?

A. Yes. WPE-3.2-4 provides the derivation of the customer component of distribution mains for VEDO using the minimum system method based on the Company's historical costs of a two-inch main, adjusted to current cost levels using the Handy Whitman index. A further adjustment was made to recognize that the minimum size distribution main of two inches has some level of capacity carrying capability. The resulting percentage of 54.5

[6] Gas Distribution Rate Design Manual, National Association of Regulatory Utility Commissioners, June 1989, pages 22-23.

percent represents the customer cost component of distribution mains and the remaining 45.5 percent represents the demand cost component.

The customer cost component is then allocated to the Company's rate classes based on the number of customers in each rate class for the test year, and the demand cost component is allocated to the rate classes based on the design day demand allocation factor.

Q46. Why was it necessary to make a further adjustment to the customer component of distribution mains to recognize the capacity carrying capability of the minimum size main?

A. If one simply uses the current cost of a two-inch main without an adjustment as the basis for the customer component of distribution mains, it would overstate the customer cost component because a two-inch main functions to connect customers to the utility's gas distribution system and to provide some minimum level of capacity to serve a portion of customers' gas demand requirements. As a result, this adjustment slightly lowers the customer cost component (stated on a percentage basis) to recognize this dual function of a minimum-sized, two-inch distribution main.

Q47. Can you please explain how you determined the capacity carrying capability of VEDO's minimum size distribution main?

A. WPE-3.2-4 provides the calculations that support the derivation of the capacity carrying capability of a two-inch main operating as part of the Company's gas distribution system. The Company's capacity analysis resulted in a capacity carrying capability for a two-inch distribution main equal to approximately 0.13 Dth per day per customer.

Q48. Earlier in your testimony you discussed the use of special studies to assign plant and expenses to a utility's rate classes. Please describe the special studies you conducted to assign the Company's other distribution plant investment to its rate classes.

A. Regarding VEDO's major plant accounts, a series of direct assignments were developed to allocate the following plant accounts: Services - Account No. 680, Meters - Account No. 681, Meter Installations - Account No. 682, House Regulators – Account No. 683, and Industrial Measuring & Regulating Station Equipment - Account No. 685. In particular, the special studies reflect the differences in the unit costs that particular customer groups cause the Company to incur.

Q49. How was intangible plant allocated in VEDO's COSS?

A. Intangible plant (Account No. 601) which is related to the incorporation and reorganizational activities of the Company was allocated to VEDO's rate classes using a composite allocation factor based on an equal weighting of total plant in service and O&M expenses (excluding purchased gas costs). Miscellaneous Intangible Plant (Account No. 602) includes a variety of computer software investments that support the Company's customer service and delivery functions and related tariff modifications. These investments were allocated to the Company's rate classes using a composite allocation factor based on an equal weighting of labor-related expenses and the number of customers.

Q50. Please describe the method used to allocate the Company's reserve for depreciation and depreciation expenses?

A. These items were allocated on the same basis as their associated plant accounts.

Q51. How were distribution-related O&M expenses allocated in VEDO's COSS?

A. In general, these expenses were allocated on the basis of the cost allocation methods used for VEDO's corresponding plant accounts. A utility's O&M expenses generally are

1 considered to support the utility's corresponding plant-in-service accounts. That is, the
2 existence of the particular plant facilities necessitates the incurrence of cost (i.e.,
3 expenses) by the utility to operate and maintain those facilities. As a result, the allocation
4 basis used to allocate a particular plant account will be the same basis as used to allocate
5 the corresponding expense account. For example, Maintenance of Services - Account No.
6 892, is allocated on the same basis as its investment in Services - Account No. 680. With
7 the Company's detailed analyses supporting its assignment of plant-in-service
8 components, where feasible, it was deemed appropriate to rely upon those results in
9 allocating related expenses in view of the overall conceptual acceptability of such an
10 approach.

11 **Q52. How were Customer Account Expenses allocated in VEDO's COSS?**

12 A. VEDO's COSS allocated these expenses on a specific account-by-account basis rather
13 than on an aggregate basis. Meter reading expense (Account No. 902) was allocated to
14 the rate classes based on the number of customers in each rate class since it was
15 determined that there is no difference in the unit cost of reading a meter for a Residential
16 Service customer compared the unit cost for reading the meters of larger customers.
17 Customer records and collection expense (Account No. 903) was allocated to the rate
18 classes based on the number of customers in each rate class. Uncollectible accounts
19 expense (Account No. 904) consists of the amounts included in VEDO's Percentage of
20 Income Payment Plan (PIPP) and Uncollectible Expense (UEX) Riders. These amounts
21 were directly assigned to each rate class based on the corresponding level of revenues by
22 rate class collected through these two riders during the test period.

Q53. How were Customer Service and Informational Expenses allocated in VEDO's COSS?

A. VEDO's COSS allocated these expenses to each rate class based on the number of customers.

Q54. How were Sales Expenses allocated in VEDO's COSS?

A. For Account No. 912 – Demonstration and Selling Expenses, VEDO's COSS allocates these expenses to each rate class based on the results of a special study which evaluated the costs of the energy conservation programs included in Account No. 912. The cost of each program was directly assigned to customers in either the Residential or General Service rate class, and the related common costs of the programs (e.g., program outreach expenses) were allocated to both rate classes in proportion to their directly assigned program costs. Account No. 911 – Sales Expense Supervision, Account No. 913 – Advertising Expenses, and Account No. 916 – Miscellaneous Sales Expenses were allocated to each rate class based on the number of customers.

Q55. How were Administrative and General (A&G) expenses allocated in VEDO's COSS?

A. VEDO's COSS allocated these expenses on a specific account-by-account basis rather than on an aggregate basis. Specifically, the A&G expenses of a utility typically pertain to the following expense categories: (1) labor; (2) plant or rate base; and (3) O&M expenses. In the Company's COSS, each of its A&G accounts was related to one or more of these categories. These categories were then used as a basis to establish an appropriate allocation factor for each account. The allocation factors chosen were broad-based to specifically recognize the corporate-wide nature of A&G expenses.

Specifically, Administrative and General Salaries (Account No. 920), Office Supplies and Expenses (Account No. 921), Employee Pensions and Benefits (Account

No. 926), and Injuries and Damages (Account No. 925) were allocated using a labor-based allocation factor derived from the labor component of the Company's transmission and distribution O&M expenses. Similarly, the plant and O&M allocation factors discussed above were derived based on the Company's total plant investment and total O&M expenses, respectively. Property Insurance (Account No. 924) was allocated on transmission and distribution plant. Outside Services (Account No. 923) and Miscellaneous Expenses (Account No. 930.2) include support activities provided to VEDO directly by outside service providers and its corporate parent organization. These activities relate to various general business functions that support the Company's gas utility operations. Due to the general nature of these costs and their corporate-wide applicability, these costs were allocated to the Company's rate classes using a composite allocation factor based on an equal weighting of total plant in service and O&M expenses (excluding purchased gas costs). Finally, regulatory commission expense (Account No. 928) was allocated using a generalized cost allocation factor based on an equal weighting of total plant in service and O&M expenses (excluding purchased gas costs).

Q56. How were income taxes allocated in VEDO's COSS?

A. Income Taxes were allocated to each rate class based on each class' income before federal income taxes. This approach made certain that the income tax assigned to each rate class reflected the proper weighting of class revenues, previously allocated expenses and the various adjustments made by the Company for tax computation purposes. Income Taxes for each rate class at revenues producing an equal rate of return, and at proposed revenues, were computed in a similar method taking into account class revenues and allocated expenses so that the amounts equaled the income taxes at proposed rates within the Company's revenue requirement.

1 **Q57. How were taxes other than income taxes allocated in the Company's COSS?**

2 A. These expenses were allocated in VEDO's COSS in a manner to reflect the specific cost
3 causative factors associated with the Company's particular tax expense categories.
4 Specifically, these taxes can be cost classified on the basis of the tax assessment method
5 established for each tax category (i.e., property and payroll). As a result, taxes other than
6 income taxes of a utility typically can be grouped into the two categories of plant and/or
7 expenses. In the filed COSS, each of VEDO's taxes other than income taxes accounts
8 was related to one of the above-stated categories. These categories were then used as a
9 basis to establish an appropriate allocation factor for each tax account. Real Estate and
10 State Gross Income Taxes were allocated on total transmission and distribution plant.
11 Excise Tax was allocated using a composite allocation factor based on an equal
12 weighting of total plant in service and O&M expenses (excluding purchased gas costs).

13 **IV. RESULTS OF THE COMPANY'S COST OF SERVICE STUDY**

14 **Q58. Please discuss the results of the Company's COSS.**

15 A. Referring to Schedule E-3.2-1, line 19, VEDO's COSS indicates that at present rates
16 during the test year, its rate classes are contributing to the recovery of the Company's
17 revenue requirement as follows:

18 - Residential Service exhibits a lower than average rate of return on net rate base.
19 - General Service exhibits a higher than average rate of return on net rate base.
20 - Large General Transportation Service exhibits a higher than average rate of return
21 on net rate base.
22 - Large Volume Transportation Service exhibits a higher than average rate of return
23 on net rate base.

1 **Q59. How can COSS results such as these provide guidelines for rate design?**

2 A. Results of a COSS provide cost guidelines for use in evaluating class revenue levels and
3 class rate structures. With regard to rate class revenue levels, the rate of return results
4 show that certain rate classes are being charged rates that recover less than their indicated
5 costs of service. Obviously, because this condition exists, rates for other rate classes
6 provide for recovery of more than the indicated costs of serving these other rate classes.
7 By adjusting rates in accordance with the cost study, rate class revenue levels can be
8 brought closer in line with the indicated costs of service resulting in movement of rate
9 class rates of return toward the system average rate of return and resulting in rates that are
10 more in line with the cost of providing service. At the same time, though, it is recognized
11 that there are non-cost factors such as customer impact considerations (e.g., avoiding rate
12 shock through gradualism) and rate continuity that are often balanced with the cost to
13 serve in apportioning the utility's proposed revenue increase among its rate classes.

14 Concerning cost justification of rates within each rate class, the classified costs, as
15 allocated to each class of service in the cost study, provide cost information that can be of
16 assistance in determining the need for changes in the relative levels of demand, customer
17 and commodity rate block charges.

18 It should be noted, however, that the results produced by a class cost of service
19 study are not always relevant to all classes of service. In particular, this exception applies
20 to the Company's special contract service customers, where rates are based on
21 competitive alternatives or value of service concepts. For these customers, the value of
22 gas delivery service to the customer relative to available alternatives, as captured in class
23 revenues, has much more influence on the relative profitability (i.e., rate of return) of that
24 class than cost causation does, as measured by a gas utility's cost of service study. This

1 view is shared by NARUC in its Gas Distribution Rate Design Manual where it states
2 that, "Setting rates based on value of service bears little relationship to setting them based
3 on cost of service. When using value of service principles, we normally look not to the
4 cost of the utility providing the service, but rather to the cost of alternatives available to
5 the customer." Therefore, the guidelines I discussed above are most useful when
6 evaluating the Company's rate schedules that contain customers charged for gas service
7 at VEDO's standard rates (i.e., full rates).

8 **Q60. Did VEDO's COSS provide the cost basis for the establishment of the Monthly**
9 **Charge proposed for General Service - Group 1 customers under VEDO's Straight**
10 **Fixed-Variable (SFV) rate design proposal presented in the Prepared Direct**
11 **Testimony of Mr. Albertson?**

12 A. Yes. The proposed Monthly Charge for Group 1 customers in VEDO's General Service
13 rate class was based on the unit demand and customer costs in the COSS derived for
14 VEDO's Residential rate class adjusted for the increased daily demand requirements and
15 higher unit meter investment costs of the customers included in General Service – Group
16 1.

17 **Q61. Why was the Monthly Charge proposed for VEDO's General Service - Group 1**
18 **customers guided by the costs of serving its residential service customers?**

19 A. This approach was used in recognition of the relatively similar load characteristics that
20 exist between VEDO's Residential and General Service – Group 1 customers. These load
21 characteristics include the portion of customers' annual gas usage that is heat sensitive
22 and the annual load factor for each of these two customer groups. Similarities in load
23 characteristics mean that the fixed unit cost characteristics of these two customer groups
24 are likely also similar in nature. As a result, it is reasonable to conclude that the cost-
25 based Monthly Charge for VEDO's Residential rate class can be used as a cost of service
26 basis to establish the Monthly Charge for its General Service – Group 1 customers.

V. CONCLUSION

Q62. Does that conclude your prepared direct testimony?

A. Yes, it does.

EDUCATIONAL BACKGROUND, WORK EXPERIENCE AND REGULATORY EXPERIENCE
RUSSELL A. FEINGOLD

EDUCATIONAL BACKGROUND

- Bachelor of Science degree in Electrical Engineering from Washington University in St. Louis
- Master of Science degree in Financial Management from Polytechnic Institute of New York University

WORK EXPERIENCE

2007 – Present	**Black & Veatch Management Consulting, LLC** Vice President and Rates & Regulatory Services Practice Lead
1996 – 2007	**Navigant Consulting, Inc.** Managing Director, Energy Practice - Litigation, Regulatory & Markets Group; Energy Delivery Practice Lead
1990 – 1996	**R.J. Rudden Associates, Inc.** Vice President and Director
1985 – 1990	**Price Waterhouse** Director, Gas Regulatory Services Public Utilities Industry Services Group
1978 – 1985	**Stone & Webster Management Consultants, Inc.** Executive Consultant Regulatory Services Division
1973 – 1978	**Port Authority of New York and New Jersey**

Staff Engineer and Utility Rate Specialist

Design Engineering Division

PRESENTATION OF EXPERT TESTIMONY

- Federal Energy Regulatory Commission
- National Energy Board of Canada
- Arkansas Public Service Commission
- British Columbia Utilities Commission (Canada)
- California Public Utilities Commission
- Connecticut Department of Public Utility Control
- Delaware Public Service Commission
- Georgia Public Service Commission
- Illinois Commerce Commission
- Indiana Utility Regulatory Commission
- Iowa Utilities Board
- Kentucky Public Service Commission
- Manitoba Public Utilities Board (Canada)
- Massachusetts Department of Public Utilities
- Michigan Public Service Commission
- Minnesota Public Utilities Commission
- Missouri Public Service Commission
- Montana Public Service Commission
- Nebraska Public Service Commission
- New Brunswick Energy and Utilities Board (Canada)
- New Hampshire Public Utilities Commission

- New Jersey Board of Public Utilities
- New Mexico Public Regulation Commission
- New York Public Service Commission
- North Carolina Utilities Commission
- North Dakota Public Service Commission
- Public Utilities Commission of Ohio
- Oklahoma Corporation Commission
- Ontario Energy Board (Canada)
- Oregon Public Utility Commission
- Pennsylvania Public Utility Commission
- Philadelphia Gas Commission
- Régie de l'Énergie Quebec (Canada)
- South Dakota Public Service Commission
- Tennessee Regulatory Authority
- Utah Public Service Commission
- Vermont Public Service Board
- Virginia State Corporation Commission
- Washington Utilities and Transportation Commission
- Public Service Commission of Wyoming

EDUCATIONAL AND TRAINING ACTIVITIES

- Past Chairman, Rate Training Subcommittee, Rate and Strategic Issues Committee of the American Gas Association.
- Seminar organizer and co-moderator at the American Gas Association, "Workshop on Unbundling and LDC Restructuring," July 1995.

- Course organizer and speaker at the annual industry course, American Gas Association – Gas Rate Fundamentals Course, University of Wisconsin – Madison and University of Chicago School of Business, 1985 – 2018.
- Course organizer and speaker at the annual industry course, American Gas Association – Advanced Regulatory Seminar, University of Maryland - College Park, 1987 –1992, and University of Chicago School of Business, 2012-2018.
- Co-founder, course director and instructor in the annual course, "Principles of Gas Utility Rate Regulation" sponsored by The Center for Professional Advancement 1982-1987.
- Contributing Author of the Fourth Edition of "Gas Rate Fundamentals," American Gas Association, 1987 edition.
- Organizer, Editor, and Contributing Author of the upcoming Fifth Edition of "Gas Rate Fundamentals," American Gas Association (in progress).
- Contributing Author of "Regulation of the Gas Industry," LexisNexis Matthew Bender, 2016.

PUBLICATIONS AND PRESENTATIONS

- "Properly Balancing the Costs and Benefits of DER When Designing Rates," PowerForward: Ratemaking and Regulation, Public Utilities Commission of Ohio, March 20-22, 2018.
- "Ratemaking for the Modern Utility: A Flawed Approach or Beyond Reproach?" S&P Global Market Intelligence, 2017 Utility Regulatory Conference, December 5-6, 2017.
- "Current Regulatory and Ratemaking Issues", American Gas Association, Accounting Principles Committee Meeting, August 14-16, 2017.
- "Regulatory Update", American Gas Association, Risk Management Committee Meeting, July 17, 2017
- "State Regulatory Issues – Analysis & Trends," American Gas Association Financial Forum, May 20-23, 2017.

- "The Valuing and Pricing of Distributed Energy Resources: Some Inconvenient Truths," SNL Energy Utility Regulation Conference, December 14-15, 2016.
- "Pricing Concepts and Regulatory Issues for Distributed Energy Resources," American Gas Association, State Affairs Committee Meeting, October 9-12, 2016.
- "State Regulatory Update – Regulatory Responses to a Changing Utility Industry," American Gas Association Financial Forum, May 15-17, 2016.
- "State Regulatory Update: Regulatory Responses to a Changing Utility Industry" American Gas Association, Finance Committee Meeting, March 14-16, 2016.
- "Rate Restructuring Tiers and Other Pricing Twists", SNL 2015 Utility Regulation Conference, December 10, 2015.
- "Utility Ratemaking Solutions During a Time of Transition", American Gas Association, State Affairs Committee Meeting, October 4-7, 2015.
- "Current Regulatory and Ratemaking Issues", American Gas Association, Accounting Principles Committee Meeting, August 17-19, 2015.
- "Utility Ratemaking Solutions for a Changing Energy Marketplace", SNL Online Course, July 15, 2015 and October 27, 2015.
- "State Regulatory and Legislative Issues", American Gas Association Financial Forum, May 17-19, 2015.
- "Rate Design and Cost Allocation Issues", SNL 2014 Utility Regulation Conference, December 8-9, 2014.
- "Current Regulatory and Ratemaking Issues", American Gas Association, Accounting Principles Committee Meeting, August 18-20, 2014.
- Regulatory Update", Southern Gas Association, 2014 Management Conference, Accounting & Financial Executives Roundtable, April 2-4, 2014.
- "Emerging Regulatory Issues for Gas Distribution Companies," American Gas Association, Finance Committee Meeting, March 17-19, 2014.
- "Balancing Rising Costs & Customer Expectations," co-authored with Will Williams and Jeff Evans, Western Energy Institute, WE Magazine, Winter 2013 issue.

- "Current Trends in Utility Rates and Economic Regulation," Western Energy Institute, WE Magazine, Fall 2013 issue.
- "Natural Gas Infrastructure and Electric Generation: Proposed Solutions for New England," American Gas Association State Affairs Committee Meeting, October 6-9, 2013
- "Utilities 2.0 Roundtable," 2013 National Town Meeting on Demand Response and Smart Grid, July 10-11, 2013
- "State Regulatory and Legislative Issues," American Gas Association Financial Forum, May 5-7, 2013
- "Providing Natural Gas to Unserved and Underserved Areas," American Gas Association Rate Committee Meeting and Regulatory Issues Seminar, October 28-31, 2012
- "State Regulatory Issues Affecting Gas Utilities," American Gas Association Accounting Principles Committee Meeting, August 13-15, 2012
- "State Regulatory Landscape and Future Trends Affecting Utilities," American Gas Association Financial Forum, May 6-8, 2012.
- "The Continuing Saga of Fixed Cost Recovery: Arguments in Utility Rate Proceedings," American Gas Association Rate Committee Meeting and Regulatory Issues Seminar, October 30 - November 2, 2011.
- "State Regulatory Issues Affecting Utilities," American Gas Association Accounting Principles Committee Meeting, August 15-17, 2011.
- "State Regulatory Issues Affecting Utilities," Edison Electric Institute/American Gas Association Accounting Leadership Conference, June 26-29, 2011.
- "State Regulatory and Legislative Issues Affecting Utilities," American Gas Association Financial Forum, May 15-17, 2011.
- "2011 Forecast – Regulatory Issues and Risks for Utilities," American Gas Association Finance Committee Meeting, March 16-18, 2011.
- "State Regulatory Issues Affecting Utilities," Edison Electric Institute and American Gas Association Accounting Leadership Conference, June 27-30, 2010.
- "State Regulatory and Legislative Issues Affecting Utilities," American Gas Association Financial Forum, May 17-19, 2010.

- "A Utility's Regulatory Compact: Where's the Right Balance? – RMEL Electric Energy Magazine, Issue 1 – Spring 2010.

- "Communicating Ratemaking and Regulatory Concepts to a Utility's Stakeholders," American Gas Association, Communications and Marketing Committee Meeting, March 16-17, 2010.

- "Managing Regulatory Risk Workshop", Rocky Mountain Electric League, October 8, 2009.

- "State Regulatory and Legislative Issues Affecting Utilities," American Gas Association, 2009 Financial Forum, May 3, 2009.

- "Financial Incentives for Energy Efficiency: Lessons Learned to Date," American Gas Association, Rate Committee Meeting and Regulatory Issues Seminar, April 7, 2009.

- "Breaking the Link Between Sales and Profits: Current Status and Trends," Energy Bar Association, Electricity Regulation and Compliance Committee, February 17, 2009.

- "State Ratemaking Issues for Gas Distribution Utilities," Energy Law Journal, Volume 29, No. 2, 2008 (Report of the Natural Gas Regulation Committee).

- "Current Issues in Cost Allocation and Rate Design for Utilities," SNL Energy, Utility Rate Cases Today: The Issues and Innovations, November 6, 2008.

- "Current Issues in Revenue Decoupling for Gas Utilities," American Gas Association, Financial and Investor Relations Webcast, October 16, 2008.

- "Addressing Utility Business Challenges Through the State Regulatory Process," American Gas Association, 2008 Legal Forum, July 20-22, 2008.

- "Earning on Natural Gas Energy Efficiency Programs," American Gas Association Rate and Regulatory Issues Conference Webcast, May 23, 2008.

- "State Regulatory Directions: Utility Challenges and Solutions," American Gas Association Financial Forum, May 4, 2008.

- "Ratemaking and Financial Incentives to Facilitate Energy Efficiency and Conservation," The Institute for Regulatory Policy Studies, Illinois State University, May 1, 2008.

- "Update on Revenue Decoupling and Innovative Rates," American Gas Association, Rate Committee Meeting and Regulatory Issues Seminar, March 10, 2008.

- "Update on Revenue Decoupling and Utility Based Energy Conservation Efforts," American Gas Association, Rate and Regulatory Issues Conference Webcast, May 30, 2007.

- "A Renewed Focus on Energy Efficiency by Utility Regulators," American Gas Association, Rate and Regulatory Issues Seminar and Committee Meetings, March 26, 2007.

- "The Continuing Ratemaking Challenge of Declining Use Per Customer," American Public Gas Association, Gas Utility Management Conference, October 31, 2006.

- "Understanding and Managing the New Reality of Utility Costs in the Natural Gas Industry," Financial Research Institute, Public Utility Symposium, University of Missouri – Columbia, September 27, 2006.

- "Ratemaking and Energy Efficiency Initiatives: Key Issues and Perspectives," American Gas Association, Ratemaking Webcast, September 14, 2006.

- "Ratemaking Solutions in an Era of Declining Gas Usage and Price Volatility," Northeast Gas Association, 2006 Executive Conference, September 10-12, 2006.

- "Rethinking Natural Gas Utility Rate Design," American Gas Foundation and The NARUC Foundation, Executive Forum, Ohio State University, May 2006.

- "Rate Design, Trackers, and Energy Efficiency – Has the Paradigm Shifted?" Energy Bar Assocation, Midwest Energy Conference, March 2006.

- "Key Regulatory Issues Affecting Energy Utilities," American Gas Association, Lunch 'n Learn Session, November 2005.

- "Decoupling, Conservation, and Margin Tracking Mechanisms," American Gas Association, Rate & Regulatory Issues – Audio Conference Series, October 2005.

- "In Search of Harmony, [Utilities and Regulators] Respondents Weigh in with Needed Actions", Public Utilities Fortnightly, November 2005

- "The Use of Trackers as a Regulatory Tool," Midwest Energy Association – Legal, Regulatory, and Government Relations Roundtable, October 9-11, 2005.

- "Rate Design and the Regulatory Environment," American Gas Association Finance Committee Meeting, October 2005.
- "Creative Utility Regulatory Strategies in a High Price Environment," American Gas Association Executive Conference, September 2005.
- "Revenue Decoupling Programs: Aligning Diverse Interests," The Institute for Regulatory Policy Studies, Illinois State University, May 2005.
- "Key Regulatory Issues Affecting Energy Utilities" American Gas Association Financial Forum, May 2005.
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- "Cost Allocation Across Corporate Divisions", American Gas Association, Rate and Strategic Issues Committee Meeting, April 2003.
- "Unbundling Initiatives – How Far Can We Go?" American Gas Association Restructuring Seminar: Service and Revenue Enhancements for the Energy Distribution Business, December 2002.
- "Utility Regulation and Performance-Based Ratemaking (PBR)," PBR Briefing Session sponsored by BC Gas Utility Ltd., April 2002.
- "LDC Perspectives on Managing Price Volatility" American Gas Association, Rate and Strategic Issues Committee Meeting, March 2002.
- "Can a California Energy Crisis Occur Elsewhere?" American Gas Association, Rate and Strategic Issues Committee Meeting, March 2001.

- "Downstream Unbundling: Opportunities and Risks," American Gas Association, Rate and Strategic Issues Committee Meeting, April 2000.

- "Form Follows Function: Which Corporate Strategy Will Predominate in the New Millennium?" American Gas Association 1999 Workshop on Regulation and Business Strategy for Utilities in the New Millennium, August 1999

- "Total Energy Providers: Key Structural and Regulatory Issues," American Gas Association, Rate and Strategic Issues Committee Meeting, April 1999.

- "The Gas Industry: A View of the Next Decade," National Association of Regulatory Utility Commissioners (NARUC) Staff Subcommittee on Accounts, 1998 Fall Meeting, September 1998.

- "Regulatory Responses to the Changing Gas Industry," Canadian Gas Association, 1998 Corporate Challenges Conference, September 1998

- "Trends in Performance-Based Pricing," American Gas Association Financial Analysts Conference, May 1998.

- "Unbundling – An Opportunity or Threat for Customer Care?" presented at the American Gas Association/Edison Electric Institute Customer Services Conference and Exposition, May 1998.

- "Experiences in Electric and Gas Unbundling," presented at the 1997 Indiana Energy Conference, December 1997.

- "Asset and Resource Migration Strategies," presented at the Strategic Marketing For The New Marketplace Conference sponsored by Electric Utility Consultants, Inc. and Metzler & Associates, November 1997.

- "The Status of Unbundling in the Gas Industry," presented at the American Gas Association Finance Committee, March 1997.

- Seminar organizer and co-moderator at the American Gas Association, "Workshop on Unbundling and LDC Restructuring," July 1995.

- "State Regulatory Update," presented at the American Gas Association - Financial Forum, May 1995.

- "Gas Pricing Strategies and Related Rate Considerations," presented before the Rate Committee of the American Gas Association, April 1995.

- "Avoided Cost Concepts and Management Considerations," presented before the Workshop on Avoided Costs in a Post-636 Industry, sponsored by the Gas Research Institute and Wisconsin Center for Demand-Side Research, June 1994.

- "DSM Program Selection Under Order No. 636: Effect of Changing Gas Avoided Costs," presented before the NARUC-DOE Fifth National Integrated Resource Planning Conference, Kalispell, MT, May 1994.

- "A Review of Recent Gas IRP Activities," presented before the Rate Committee of the American Gas Association, March 1994.

- Seminar organizer and co-moderator at the American Gas Association seminar, "The Statue of Integrated Resource Planning," December 1993.

- "Industry Restructuring Issues for LDCs, presented before the American Gas Association–Advanced Regulatory Seminar, University of Maryland, 1993-1996.

- "Acquiring and Using Gas Storage Services," presented before the 8th Cogeneration and Independent Power Congress and Natural Gas Purchasing '93, June 1993.

- "Capitalizing on the New Relationships Arising Between the Various Industry Segments: Understanding How You Can Play in Today's Market," presented before the Institute of Gas Technology's Natural Gas Markets and Marketing Conference, February 1993.

- "The Level Playing Field for Fuel Substitution (or, the Quest for the Holy Grail)," presented before the 4th Natural Gas Industry Forum - Integrated Resource Planning: The Contribution of Natural Gas, October 1992.

- "Key Methodological Considerations in Developing Gas Long-Run Avoided Costs," presented before the NARUC-DOE Fourth National Integrated Resource Planning Conference, September 1992.

- "Mega-NOPR Impacts on Transportation Arrangements for IPPs," co-presented before the 7th Cogeneration and Independent Power Congress and Natural Gas Purchasing '92, June 1992.

- "Cost Allocation in Utility Rate Proceedings," presented before the Ohio State Bar Association - Annual Convention, May 1992.

- "The Long and the Short of LRACs," presented before the Natural Gas Least-Cost Planning Conference April 1992, sponsored by Washington Gas Company and the District of Columbia Energy office.

- Seminar organizer and moderator at the American Gas Association seminar, "Integrated Resource Planning: A Primer," December 1991.

- Session organizer and moderator on integrated resource planning issues at the American Gas Association Annual Conference, October 1991.

- "Strategic Perspectives on the Rate Design Process," presented before the Executive Enterprises, Inc. conference, "Natural Gas Pricing and Rate Design in the 1990s," September 1990.

- "Distribution Company Transportation Rates," presented before the American Gas Association–Advanced Regulatory Seminar, University of Maryland 1987-1992.

- "Design of Distribution Company Gas Rates," presented before the American Gas Association - Gas Rate Fundamentals Course, University of Wisconsin, 1985-1998.

- Seminar organizer, speaker and panel moderator at the American Gas Association seminar, "Natural Gas Strategies: Integrating Supply Planning, Marketing and Pricing," 1988-1990.

- "Local Distribution Company Bypass - Issues and Industry Responses," (Co-author) June 1989.

- "So You Think You Know Your Customers!," presented before the American Gas Association–Annual Marketing Conference, April 1990.

- "Gas Transportation Rate Considerations - A Review of Gas Transportation Practices Based on the Results of the A.G.A. Annual Pricing Strategies Survey," presented before the Rate Committee of the American Gas Association, April 1985-1991.

- "Market-Based Pricing Strategies - Targeted Rates to Meet Competition," presented before the American Gas Association Annual Marketing Conference, March 1989.

- "Gas Rate Restructuring Issues - Targeted Prices to Meet Competition," presented before the Fifteenth Annual Rate Symposium, University of Missouri, February 1989.

- "Gas Transportation Rates - An Integral Part of a Competitive Marketplace," *American Gas Association, Financial Quarterly Review*, Summer 1987.

- "Gas Distributor Rate Design Responses to the Competitive Fuel Situation," *American Gas Association, Financial Quarterly Review*, October 1983.

- "Demand-Commodity Rates: A Second Best Response to the Competitive Fuel Situation," presented before the American Gas Association, Ratemaking Options Forum, September 1983.

- Cofounder, course director and instructor in the annual course, "Principles of Gas Utility Rate Regulation" sponsored by The Center for Professional Advancement 1982-1987.

- "Current Rate and Regulatory Issues," presented before the National Fuel Gas Regulatory Seminar, July 1986.

AFFILIATIONS AND HONORS

- Financial Associate Member, American Gas Association
- Member, State Affairs Committee of the American Gas Association
- Member, Energy Bar Association
- Life Member, Institute of Electrical and Electronic Engineers
- Listed in Who's Who of Emerging Leaders in America, 1989-1992

(Current as of March 2018)

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Case No(s). 18-0298-GA-AIR, 18-0299-GA-ALT

Summary: Exhibit 12.0 - Direct Testimony of Russell A. Feingold electronically filed by Ms. Rebekah J. Glover on behalf of Vectren Energy Delivery of Ohio, Inc.

VEDO EXHIBIT NO. 13.0

BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Vectren Energy Delivery of Ohio, Inc. for Approval of an Increase in Gas Rates	)))	Case No. 18-0298-GA-AIR
In the Matter of the Application of Vectren Energy Delivery of Ohio, Inc., for Approval of an Alternative Rate Plan	)))	Case No. 18-0299-GA-ALT

DIRECT TESTIMONY OF
SCOTT E. ALBERTSON
ON BEHALF OF
VECTREN ENERGY DELIVERY OF OHIO, INC.

____	Management policies, practices, and organization
____	Operating income
____	Rate base
____	Allocations
____	Rate of return
__X__	Rates and tariffs
__X__	Other (Alternative Rate Plan: Energy Conversion Factor, Straight Fixed Variable for Group 1 General Service Customers, Statutory Compliance)

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Direct Testimony of
Scott E. Albertson

1 **I. BACKGROUND AND QUALIFICATIONS**

2 **Q1. Please state your name and business address.**

3 A. Scott E. Albertson, One Vectren Square, Evansville, Indiana 47708.

4 **Q2. What position do you hold with Vectren Energy Delivery of Ohio, Inc. (VEDO or**
5 **the Company)?**

6 A. I am Vice President, Regulatory Affairs and Gas Supply for Vectren Utility Holdings,
7 Inc. (VUHI), the immediate parent company of VEDO. I also hold this same position
8 with two other utility subsidiaries of VUHI – Indiana Gas Company, Inc. d/b/a Vectren
9 Energy Delivery of Indiana, Inc. (Vectren North) and Southern Indiana Gas and Electric
10 Company d/b/a Vectren Energy Delivery of Indiana, Inc. (Vectren South).

11 **Q3. Please describe your educational background.**

12 A. I received a Bachelor of Science degree in mechanical engineering from Rose-Hulman
13 Institute of Technology in 1984. I have been a registered professional engineer in Indiana
14 since 1990 (registration number 900464).

15 **Q4. Please describe your professional experience.**

16 A. I have over 30 years' experience in the utility industry. I began my career with Ohio
17 Valley Gas Corporation in a project engineering position. I have worked at VUHI and its
18 predecessor companies since 1987 in a variety of roles including Operations Staff
19 Manager, Assistant Chief Engineer, Director of Engineering Projects, and Director of
20 Engineering. I was named Director, Regulatory Affairs for VUHI in 2004, and was
21 promoted to my current position in 2012.

Q5. What are your present duties and responsibilities as Vice President, Regulatory Affairs and Gas Supply for VUHI?

A. I am responsible for coordinating regulatory and rate matters of VUHI's regulated utilities in proceedings before the Public Utilities Commission of Ohio (Commission) and the Indiana Utility Regulatory Commission. In addition, I am responsible for overseeing the gas supply and gas transportation functions for VUHI's gas utilities, and for MISO Affairs related to VUHI's Indiana electric utility.

Q6. Have you previously testified before the Commission?

A. Yes. I have sponsored testimony in several cases before the Commission, including VEDO's most recent rate case (Case No. 07-1080-GA-AIR) as well as cases pertaining to VEDO's Distribution Replacement Rider (Case Nos. 13-1571-GA-ALT and 10-595-GA-RDR) and purchased gas adjustment clause (Case Nos. 08-220-GA-GCR, 07-220-GA-GCR, 05-220-GA-GCR, and 04-220-GA-GCR).

II. SUMMARY

Q7. What is the purpose and scope of your testimony in this proceeding?

A. My testimony will provide support for VEDO's rate design and tariff proposals, including proposals contained in VEDO's Alternative Rate Plan. I will begin by discussing various tariff changes, including support for changes to Miscellaneous Charges and VEDO's proposal to adopt an automatic approval mechanism for updates to the Unaccounted For Gas percentage. I next address two of VEDO's Alternative Rate Plan proposals, namely, the Company's proposal to implement an Energy Conversion Factor (ECF), and to expand straight fixed variable (SFV) rate design to VEDO's smallest General Service Customers. I will then discuss VEDO's general approach to

designing rates in this case. Finally, I will support the Company's compliance with the statutory requirements applicable to the Alternative Rate Plan.

I am also responsible for various Standard Filing Requirements schedules including Schedule E-1 (clean copy of the proposed Tariff for Gas Service (Tariff)), Schedule E-2 (clean copy of current tariff), Schedule E-2.1 (scored and redlined copy of current tariff schedules) and Schedule E-3 (narrative rationale for tariff changes), which were either prepared by me or under my direction and supervision.

Schedule E-3 provides cross-references to Schedule E-1 through the use of a Tariff Sheet Identifier. Certain segments of Schedule E-3, and the corresponding sections of the Tariff, are jointly sponsored by other witnesses, as follows:

Witness	**Tariff Sheet No.**	**Schedule E-3 Page**	**Subject Matter**
Patrick C. Edwards	20	20	Creditworthiness
	21	23	Supplier Requirements
	21	24	Supplier Requirements
	23	26	Supplier Requirements
Russell A. Feingold	multiple	1	Rate Design
	multiple	2	Rate Design
	13	9	Rate Design
	14	10	Rate Design
	15	11	Rate Design
K. Chase Kelley	70	79	Alternative Rate Plan

III. PROPOSED TARIFF CHANGES

Q8. *Will you be specifically discussing every tariff change proposed in Schedule E-1 in your direct testimony?*

A. No. As noted, I am sponsoring Schedule E-3, which addresses the tariff revisions contained in Schedule E-1. Given that Schedule E-3 provides explanations of the changes, I will only highlight a few of the proposed revisions in my testimony.

Q9. *Please describe the most significant revisions to VEDO's rate schedules.*

A. As noted above, VEDO is proposing to implement SFV rate design for its smallest General Service customers. Further, many of the rate schedules reflect VEDO's proposal to incorporate the ECF. I provide a detailed discussion of both proposals later in my testimony. The Company is also proposing to eliminate Rate 341 – Dual Fuel Standard Choice Offer Service. Currently only one customer receives service under Rate 341, and VEDO has begun working with that customer on a plan that would move them to a General Service Rate Schedule.

Q10. Does VEDO propose any changes to its Miscellaneous Charges on Sheet No. 30 of the Tariff?

A. Yes. First, the Company has proposed increases to certain Miscellaneous Charges. These include increases to the fees charged to conduct investigations related to a customer's fraudulent or damaging practice, the incremental charge for connecting, reconnecting or disconnecting service outside of normal business hours at the customer's request, and the Trip and Labor charge to conduct investigations of "no gas" or "low pressure" outside of normal business hours. The Trip and Labor charge is only assessed when the source of any problem discovered is not on the Company's system. Charges for all of these work activities have been previously approved by the Commission; the proposed changes are updates to reflect the Company's review of the actual costs associated with performing

1 the work. The analysis supporting the proposed changes to the respective charges is
2 included in Attachment A to my testimony.
3 Second, VEDO has proposed new language to more clearly explain how
4 Unauthorized Gas Usage Charges applicable to Rate 345 and Rate 360 customers, and
5 Pool Operators, are determined.
6 Finally, the Company has clarified the applicability of the Late Payment Charge,
7 and proposed a new Avoided Disconnection Charge.
8 **Q11. What is the basis for the proposed Avoided Disconnection Charge?**
9 A. VEDO's currently effective Miscellaneous Charges include a charge for reconnection of
10 service. The components of that charge include costs to both disconnect and reconnect
11 service; the charge is simply assessed upon reconnection. VEDO also allows customers
12 who are subject to disconnection to make a payment to the Company representative who
13 has been dispatched to the customer's premises to disconnect service—thus allowing the
14 customer to avoid disconnection. The proposed Avoided Disconnection Charge is
15 intended to recover a portion of the cost VEDO incurs to make the trip to the customer's
16 premises. The Company's actual cost related to this activity is greater than the proposed
17 $15.00 charge; however, VEDO has proposed the charge at this level in order to be
18 consistent with a similar charge that has been approved for another Ohio gas utility. If the
19 Avoided Disconnection Charge is approved, customers who cause that cost to be incurred
20 will bear that level of responsibility. Cost support for this proposed charge is also
21 included in Attachment A.
22 **Q12. Is there anything else that you would highlight?**
23 A. Yes, I would note that certain riders are reset to zero as presented in Schedule E-1,
24 namely the Distribution Replacement Rider (DRR) and the Energy Efficiency Funding

Rider (EEFR). As explained in Schedule E-3, the resetting to zero reflects the fact that the costs recoverable in those Riders have been included in base rates in this proceeding. These Riders will remain in place and recover incremental costs beyond those captured in proposed base rates. As also noted in Schedule E-3, following the transition to recovery through base rates, there will likely be an over- or under-recovery variance component for each of these mechanisms that will be captured in the Rider rates in place at the time new rates are implemented. Those variances will remain in the respective Riders. The remaining variance not yet collected in the Rider cannot be estimated at this time, so VEDO did not include a proposed rate in Schedule E-1. At the point when base rates are approved in this proceeding, VEDO will update the DRR and EEFR rates to reflect only the remaining variance component, until the next subsequent annual filing of each respective mechanism. The variance component that will remain will be identified in each Rider filing, and these amounts will also be subject to reconciliation as necessary in later updates to the Riders.

I would also note that the rate reflected in the Tariff for the Exit Transition Cost Rider (Sheet No. 41) includes a non-zero rate. As explained in Schedule E-3, VEDO is proposing to include in base rates certain costs recoverable in that Rider and has removed references to those costs from the currently-effective tariff sheet. The non-zero rate shown in the Tariff represents the cost components currently in the Rider rate that are to remain in the Rider. At the time new base rates are implemented in this proceeding, that rate will almost certainly not be the same as is shown in the Tariff in Schedule E-1.

Q13. What is VEDO's proposal with respect to updates to its Unaccounted For Gas Percentage?

A. As discussed in the Application filed in this proceeding, VEDO is proposing that the Unaccounted For Gas (UFG) Percentage, set forth in updated Sheet No. 54 of the Tariff, be subject to automatic approval. VEDO will continue to update its UFG Percentage periodically, as necessary, via the filing of an application with the Commission. The Company will continue to provide the necessary exhibits and other supporting information as appropriate and requested by Staff. VEDO proposes that after a review period of 45 days, if no action has been taken to approve, suspend, or deny the application, the updated UFG percentage would be deemed approved on the 46th day.

Q14. Why is VEDO proposing automatic approval of updates to the UFG Percentage?

A. The UFG Percentage dictates the necessary supply volumes that Pool Operators, Choice Suppliers, and SCO Suppliers must deliver to the VEDO system on behalf of their respective segments of VEDO's customers. When it becomes apparent that the UFG percentage on the VEDO system has changed, the sooner those changes can be reflected in the Tariff, the sooner that deliveries to the system will be better matched with actual operating conditions. The Commission will certainly retain the right to suspend the automatic approval if it deems that necessary. Typically, however, the information included in the UFG application is very straightforward. VEDO believes that the administrative burden associated with these filings can be minimized under an automatic approval construct.

IV. RATE DESIGN – ENERGY CONVERSION FACTOR

Q15. Is VEDO proposing in this case to modify how costs recovered via volumetric charges are billed to its customers?

A. Yes. As shown on Sheet No. 47 of the Tariff, in Schedule E-1, VEDO is proposing to implement an Energy Conversion Factor (ECF) that, when multiplied by a customer's metered usage, modifies volumetric usage to reflect the actual energy consumed by the customer. The ECF effectively adjusts the customer's metered usage such that the basis for billing (referred to as "Billing CCF" in the Tariff) reflects the volume of gas that the customer would have used (all else equal) had the energy (or Btu) content of the gas through the meter not changed since the utility's last rate case. As noted, the ECF proposal is part of the Alternative Rate Plan in Case No. 18-0299-GA-ALT (the Alt Plan Case).

Q16. Can you provide a definition of the term "Btu"?

A. Yes. The Tariff includes the following definition:

> **British Thermal Unit ("Btu")** - The average amount of heat necessary to increase the temperature of one (1) pound of water by 1° Fahrenheit, in the temperature range of 32° to 212° Fahrenheit, at 14.73 pounds per square inch absolute pressure.

The United States Energy Information Administration provides this discussion regarding the use of Btu and energy content:

> **Why use British thermal units?**
>
> Energy or heat content can be used to compare energy sources or fuels on an equal basis. Fuels can be converted from physical units of measure (such as weight or volume) to a common unit of measurement of the energy or heat content of each fuel. The U.S. Energy Information

Administration (EIA) uses British thermal units as a unit of energy content.

(excerpted from the EIA website at https://www.eia.gov/energyexplained/index.cfm?page=about_Btu, last visited Apr. 11, 2018)

As related to natural gas, and for purposes of VEDO's proposal, Btu is a measure of the amount of energy contained in a unit volume of gas.

Q17. Has VEDO experienced higher Btu levels on its system since its last rate case?

A. Yes. As shown in the table below, the weighted average Btu level on VEDO's system has been materially greater in the last few years than it was at the time of its last rate case. From 2008 through 2013, Btu levels were very stable and ranged from about 1015 to 1021 Btu per cubic foot (cf) of gas. During the three-year period 2015-2017, the weighted average Btu has been about 1070 Btu/cf.

Vectren Energy Delivery of Ohio, Inc.
Annual Weighted Average Btu

Year	MCF	DTH	Btu
2008	57,410,854	58,622,946	1021.11
2009	51,740,332	52,764,158	1019.79
2010	54,159,009	55,003,191	1015.59
2011	53,509,483	54,290,414	1014.59
2012	50,037,369	50,895,671	1017.15
2013	56,056,886	57,239,810	1021.10
2014	59,993,032	62,270,379	1037.96
2015	54,861,865	58,770,878	1071.25
2016	54,196,991	58,075,201	1071.56
2017	53,486,357	57,236,912	1070.12
2018*	17,047,291	18,170,431	1065.88

* through February 2018

DTH = Dekatherm

1 **Q18. What circumstances led to these higher Btu levels on VEDO's system?**

2 A. Higher Btu levels on the Company's system are attributable to significant production of
3 natural gas in the Marcellus and Utica shale in western Pennsylvania, and eastern Ohio
4 Shale. Shale production's impact on natural gas prices (both current and projected) has
5 resulted in significant investments in interstate pipelines in order to access this low-priced
6 resource. Investments have included both new pipelines and "flow reversal" projects that
7 allow a pipeline that had been originally designed to move gas from west-to-east or
8 south-to-north (from the traditional supply basins) to deliver gas from these shale regions
9 to Midwest markets (like VEDO). Gas produced in these regions has exhibited a higher
10 and somewhat more volatile Btu than the Company had previously experienced.

11 **Q19. When did higher Btu levels begin to manifest in the gas on VEDO's system?**

12 A. As shown in Attachment B to my testimony, VEDO first observed a "spike" in Btu
13 content in July 2014, and over the next several months (as Btu levels continued to rise)
14 undertook an evaluation of the impact Btu levels were having on its fixed cost recovery.
15 The upward movement in Btu content beginning in 2014 is reflected in the table above as
16 well.

17 **Q20. What impact has the increase in Btu levels had on VEDO?**

18 A. The primary impact has been a reduction of VEDO's recovery of fixed costs. VEDO
19 estimates that from 2014 onward, the financial impact of the higher Btu content ranged
20 from $1 million to $1.5 million per year.

21 **Q21. Why do changes in natural gas Btu levels have an impact on volumetric cost**
22 **recovery?**

23 A. When rates are determined in a rate case, the billing determinants (CCF volumes) are a
24 function of, and are based on, the assumed weighted average Btu on the utility's system

during the test year. If this Btu level changes, it directly affects the level of fixed cost recovery. That is because gas appliances and other end use equipment require energy, rather than volumes of gas, to operate; as the amount of energy in a given unit volume of gas changes (*i.e.*, decreases or increases), the end use equipment will require greater or lesser volumes. Absent an adjustment, the portion of a gas utility's costs that are recovered volumetrically will inversely vary with the Btu content of the gas.

Q22. Can VEDO control the Btu content of the gas its customers use?

A. No. There is no practicable way to control the Btu content of the gas on VEDO's system. This is true for VEDO, and it is also true for suppliers and customers. The Btu content of the gas supply on the pipelines serving the VEDO system are subject to Btu changes due to activity in the production zones, and the gas flowing at any given time on the interstate pipeline system to VEDO's interconnections with those pipelines is (physically) not necessarily the same supply that suppliers secured on behalf of its customers. Simply put, the Btu content of the gas flowing to VEDO's customers "is what it is." When Btu levels are higher than test year levels, VEDO's volumetric cost recovery (under the current CCF basis) is lessened because customers' end use equipment requires relatively lesser volumes to operate. Conversely, when the Btu levels are lower than in the test year, the end use equipment requires relatively greater volumes and (again, under the current CCF billing basis) the Company's volumetric cost recovery increases.

Q23. Has the Company made the Commission aware of these issues previously?

A. Yes. In Case No. 15-1238-GA-AAM (the Deferral Case), VEDO requested Commission approval to change its accounting methods by establishing a regulatory asset and to defer, for accounting and financial reporting purposes, the impact on its revenues of higher Btu gas.

Q24. Did the Commission approve VEDO's request in that proceeding?

A. No. In its Finding and Order in that case, the Commission denied the Company's application and found that "the issues raised by this deferral application are best addressed in the context of a base rate proceeding . . . where [VEDO] will have the opportunity to revise its rate design." (15-1238 Order at 7.)

Q25. In its Application in the Deferral Case, VEDO stated that at the time of its next rate case, "the method of billing non-residential customers may be changed (from a CCF basis to a therm basis, an approach used in most states), which will eliminate the impact of Btu volatility on fixed-cost recovery and balance the interests of both VEDO and its customers." (*Appl.* at 6.) How does VEDO's proposal in this case differ from a "therm billing" approach?

A. As will be discussed later in my testimony, implementation of the proposed ECF has the same financial impact as would therm billing. In other words, the amount of a customer's bill would be identical under either approach. VEDO has proposed the ECF in order to preserve the per CCF rates to which its customers are accustomed, in an effort to simplify customers' understanding of the billing change.

Q26. As noted above, the Application in the Deferral Case refers to the potential method of billing "non-residential" customers. Please explain what VEDO meant to convey in that statement.

A. The reference to "non-residential" customers in that Application reflects the fact that SFV rate design has been applicable to the Company's residential customers for a number of years; because residential customers pay no volumetric base rate charges, Btu changes have no impact on the base rate portion of the customer's bill. In this proceeding, as will be discussed later in my testimony, VEDO is proposing to expand the applicability of SFV rate design to another group of customers.

Q27. Please describe the proposed Energy Conversion Factor.

A. The ECF is an adjustment applied each month to customer usage to reflect changes in the Btu content of the gas on VEDO's system. Mathematically, the ECF is the ratio of (1) the actual Btu on VEDO's system at the time of billing (updated monthly as described below), to (2) the weighted average Btu on VEDO's system during the test year (1070 per CCF). Applying the ECF to a customer's metered usage modifies that usage to reflect the actual energy consumed by the customer.

Q28. How will the ECF change the presentation of customers' bills?

A. As shown in Attachment C to my testimony, VEDO's current and proposed bills reflect the following information (new or modified billing information is shown in *italics*):

CURRENT BILL	PROPOSED BILL
The Service Period, from [date] to [date]	The Service Period, from [date] to [date]
Beginning and Ending meter readings corresponding to the Service Period	Beginning and Ending meter readings corresponding to the Service Period
CCF used, which is the difference between the Ending and Beginning meter readings	*Metered CCF*, which is the difference between the Ending and Beginning meter readings
"Multiplier"	*Pressure Factor**
	Energy Conversion Factor: the ratio of the actual Btu on VEDO's system at the time of billing to the weighted average Btu on VEDO's system during the test year (1070 per CCF)
	"Billing CCF", which is calculated as the Metered CCF times the Energy Conversion Factor times the Pressure Factor
* As noted on page 2 of the bill, the "Multiplier" is used currently to calculate consumption on meters where the delivery pressure (to the meter) is greater than VEDO's standard delivery pressure; a Multiplier (or *Pressure Factor*) of 1.000 indicates a standard delivery pressure system. VEDO proposes in this proceeding to rename this field as "Pressure Factor." Only the name will change, and this will have no effect on how VEDO actually applies the multiplier.	

In addition to the information shown in Attachment C,[1] a permanent bill message (described later in my testimony) will explain how the Energy Conversion Factor is determined. Volumetric charges applicable to all Rate Schedules will be applied to Billing CCF to calculate the customer's bill.

Q29. Please provide an example illustrating the calculation described above.

A. The following illustration is further detailed in Attachment C. To illustrate the application of the ECF, I will compare two bills for a given month of service, with and without the ECF, assuming the following facts:

- The customer is receiving service under Rate 321, General Service – Group 2.
- The (unadjusted) Metered CCF for that month is 640.
- As of the billing date, the average Btu on VEDO's system is 1060 Btu per cf, a slight drop from the test year level of 1070 Btu per cf.
- The ECF is 0.9907 (1060 divided by 1070).
- When the Metered CCF is multiplied by the ECF (and by the Pressure Factor), the resulting Billing CCF is 634.048.

Q30. Assuming these facts, how would the customer's bill be calculated with and without the ECF?

A. The following table shows how the two bills would be calculated:

[1] Along with current and proposed bill presentations reflecting the ECF, Attachment C includes one sample bill for each customer class (Residential, General Service and Industrial). As shown, the presentation of the Residential customer bill will be the same as the General Service customer bill. As noted previously, since SFV applies to Residential customers, Btu changes (and therefore the ECF) will have no impact on the base rate portion of those customers' bills. However, and as explained later in my testimony, the ECF does influence how volumetric Riders are billed to all customers.

With ECF		Without ECF	
Billing CCF	634.048	Metered CCF	640.000
times Vol. Rate	$0.14308 per CCF	*times* Vol. Rate	$0.14308 per CCF
plus Cust. Charge	$75.00	*plus* Cust. Charge	$75.00
Total Bill	$165.72	Total Bill	$166.57

In this illustration, the customer's bill is higher absent the application of the ECF.

Q31. Please explain the ramifications of the difference between the two illustrative bill amounts shown above.

A. In the illustrative example, the actual Btu has dropped below the test year Btu. All else being equal, the customer's end use equipment would have consumed more CCF simply because the amount of energy in the same volume (CCF) of gas is lower than in the test year. Absent the ECF, the customer simply pays more for the same amount of energy. The customer does not benefit from the ECF adjustment that recognizes that the additional CCF usage resulted from circumstances beyond his control—namely the lower Btu level in the gas consumed. While the incremental, higher bill amount is relatively small in the illustration, it can become more significant as actual system Btu levels move farther away from the test year level. And even relatively small departures from test year Btu levels can materially impact cost recovery when reflected over several thousand customers. Moreover, the impact on cost recovery from VEDO's larger transportation customers of even minor Btu volatility can become material, given those customers' usage is much greater than that of General Service customers.

In summary, the application of the ECF restores the Company's recovery of its fixed costs to what would have occurred absent changes in Btu levels on its system.

Q32. In your example, the actual Btu level was lower than the test year level. If the actual Btu level *exceeds* the test year level, will the ECF be greater than 1.000?

A. Yes; the ECF is symmetrical, which allows the billing adjustment to balance the interests of both the Company and its customers. For example, an actual Btu level of 1075 Btu per cf yields an ECF of 1.0047. In that instance the Billing CCF would be greater than the Metered CCF, reflecting the fact that the customer's end use equipment required lesser volumes to satisfy its requirements.

Q33. Will "Billing CCF" be the basis for charges associated with VEDO's Riders?

A. Yes, any volumetric (per CCF) Rider rates will be applied to the customer's Billing CCF. All Riders will continue to be reconciled, with over- or under-recoveries reflected in a subsequent Rider filing.

Q34. Will the ECF impact commodity cost rates?

A. The derivation of the Standard Choice Offer (SCO) price will change slightly if the ECF is approved. Currently, the New York Mercantile Exchange (NYMEX) settlement price for the applicable month is converted from a per-Dth price to a per-Mcf price by multiplying the settlement price by a standard Btu level established prior to the annual SCO auction for the 12-month auction period. Because the ECF will reflect the Btu applicable to the billing month, the NYMEX price will instead be multiplied by the test year Btu (in this case, 1.070 Dth per Mcf). The test year Btu will remain constant in the SCO price calculation until VEDO's next rate case. Moreover, the application of the ECF would be expected to produce commodity revenues that more closely track the volume of commodity supplied, which, all else equal, would tend to reduce true-ups included in the annual updates to the Exit Transition Cost Rider.

1 **Q35. How often will the ECF be updated?**

2 A. The ECF, as well as Sheet No. 47 in the Tariff, will be updated monthly as VEDO
3 obtains the applicable Btu information from the pipelines interconnected to its system.
4 VEDO proposes that the monthly updates to the ECF be effective as of the first calendar
5 day of the month following their submission. The calculation is very straightforward, but
6 the Company is willing to provide to Staff whatever supporting information it may
7 require to substantiate the ECF in effect at any particular time.

8 **Q36. How does therm billing differ from the use of the ECF?**

9 A. The processes are not entirely dissimilar, but there are differences. First, it is important to
10 understand that in a therm billing environment, a customer's CCF usage is multiplied by
11 a "therm conversion factor" that reflects the actual Btu per cf at the time of billing. Said
12 differently, the "Metered CCF" is multiplied by the therm conversion factor, resulting in
13 the total therms the customer used. In that way—the need to first measure CCF usage,
14 and then adjust it to reflect updated energy content—therm billing and the ECF are quite
15 similar.

16 In order to arrive at "per therm" rates that are consistent with the "per CCF" rates
17 proposed in this proceeding, VEDO would have performed one of two calculations. In
18 this case, the therm conversion factor would be 1.070, reflecting the test year Btu level of
19 1070. The Company would have either (1) multiplied the CCF billing determinants by
20 1.070 to arrive at the equivalent therm usage in the test year, then designed its volumetric
21 rates based on each rate schedule's therm usage, or (2) divided each "per CCF " rate by
22 1.070. Both processes would have produced the same fixed charges and per therm rates.

Q37. You mentioned previously that the customer's bill is the same under the proposed ECF as it would have been had VEDO proposed therm billing. Can you explain?

A. Yes. For the purpose of this explanation, I will assume that the second method just discussed is used to derive "per therm" rates; that is, VEDO's per CCF rates are divided by 1.070, the therm conversion factor.

Considering only the volumetric portion of a customer's bill, I will first restate the proposed volumetric charge applicable to Rate 320, Group 2 as a per therm rate:

$0.14308 per CCF, divided by 1.070 (the test year therm conversion factor), equals $0.13372 per therm

Next, using the same CCF usage as in our previous example, I will calculate the "volumetric" portion of the bill:

640 Metered CCF times 1.060 (the updated, monthly therm conversion factor) equals 678.40 therms

Finally, applying the per therm rate to the therms consumed, I obtain the total bill amount:

678.40 therms times $0.13372 per therm equals $90.72

For the volumetric, base rate portion of the bill, this is the same amount as calculated in the previous example showing the application of the ECF. The difference in the calculation methodology boils down to which value is adjusted for the base rate Btu

level. Under therm billing, the per CCF rate is divided by 1.070[2], and using the ECF, the actual Btu level is divided by 1.070. Stated more simply, the ECF makes the adjustment at the time of billing rather than at the time base rates are set, with the resulting customer bill being the same in either instance. And with the ECF, customers will continue to be billed per CCF rates, to which they are accustomed.

Q38. Is therm billing commonplace in the gas industry?

A. Yes. As shown in Attachment D to my testimony, VEDO has undertaken a review of the tariffs of 125 gas utilities throughout the United States. As shown, therm billing is in place for about 65 percent of those utilities. Moreover, VEDO's research indicates that therm billing is in use in 41 of 50 jurisdictions.

Q39. Does the Company have any experience with therm billing?

A. Yes. Vectren's two Indiana gas utilities both use therm billing, and have done so since at least the mid-1980s.

Q40. Given the Company's understanding and experience in Indiana, why did VEDO not propose therm billing in this proceeding?

A. VEDO's primary objective is to remove the risk Btu volatility has on both customers and the Company. Given that the proposed ECF produces the same financial result as does therm billing, it seemed reasonable to make a proposal that did not require its customers to develop an understanding of "therm billing," per se. Customers are accustomed to rates stated on a per CCF basis, and that will continue under the Company's proposal.

Q41. Will VEDO engage in any customer education activities related to the ECF?

A. Yes. VEDO will explain the ECF using a variety of customer education and communication vehicles. Upon approval in this proceeding of the ECF and new base

[2] 1.070 reflects the relationship between the test year Btu of 1070 per cubic foot and a Btu level of 1000 per cubic foot, which is the basis of therm billing (*i.e.*, 1070 divided by 1000).

rates, VEDO plans to provide a bill insert for all customers that includes a guide explaining the information presented on the bill. The Company is willing to work with Staff on the content of the insert. The Company also intends to include the guide in an e-newsletter to all registered vectren.com customers following Commission approval, and make the guide available online and in conjunction with paperless bills.

Q42. Will the ECF be explained on the customer's bill?

A. Yes. As shown in Attachment C to my testimony, VEDO proposes to include on page 2 of the customer's bill the following definition:

> Energy Conversion Factor (ECF) – The ECF adjusts metered usage for the energy content of the gas used. Energy content can vary monthly. The *ECF is the ratio of the current energy content to the energy content at the* time Vectren's base rates were established.

Q43. Does VEDO propose changes to any of the term definitions reflected on its current bills?

A. Yes. Also reflected on page 2 of the customer's bill, VEDO proposes the following revisions (new language is shown in italics) related to other proposals in this proceeding:

- Under Commercial Rate Codes, delete COM 341; VEDO is proposing to eliminate Rate 341 (Dual Fuel Standard Choice Offer Service)
- Under Miscellaneous Charges – change returned check charges to returned *payment* charges
- As previously noted, change Multiplier to *Pressure Factor*
- Other minor clerical changes

These changes are also included in Attachment C to my testimony.

Q44. If the Commission does not approve the proposed ECF, does that impact the rates VEDO has proposed in this proceeding?

A. No. Absent Commission approval of the ECF, the per CCF rates approved in this proceeding will be applied to the customer's Metered CCF, as is currently the case. The approved per CCF rates can be applied in either instance. Because the ECF adjusts usage,

not the rates, VEDO's proposed rates remain accurate (in and of themselves) regardless of whether the ECF is approved.

Q45. Is therm billing, or the implementation of the ECF, akin to decoupling?

A. No. Under decoupling, the Company would expect to be made whole for its recovery of fixed costs regardless of customer usage. With the ECF, the actual usage (whether greater or lesser than the level assumed in the rate case) is adjusted to reflect the energy content of the gas consumed by the customer. A customer who invests in energy efficiency expects to use less Ccf, and likewise the Billing Ccf (after the ECF is applied) will reflect that lower level of usage—allowing the customer to benefit from the energy efficiency investment.

V. RATE DESIGN – STRAIGHT FIXED VARIABLE FOR SMALL GENERAL SERVICE CUSTOMERS

Q46. What is the Company's proposed rate design for its smallest General Service Customers?

A. VEDO proposes to implement straight fixed variable (SFV) rate design for its "Group 1" General Service Customers receiving service under Rate 320 (General Default Sales Service), Rate 321 (General Standard Choice Offer Service), and Rate 325 (General Transportation Service). "Group 1 Customers," as defined in the current and proposed Tariff , are customers having a meter with a rated capacity of 450 Cfh or less.

VEDO is making this proposal as part of its Alt Plan Case. Exhibits filed in the Alt Plan Case include a description of the Company's SFV proposal.

Q47. Has VEDO previously implemented SFV rate design for any of its customers?

A. Yes. In its order in the Company's last rate case (Case No. 07-1080-GA-AIR), the Commission approved SFV rate design for VEDO's residential customers. Pursuant to

the order, VEDO implemented SFV for residential customers one year after rates approved in that case were implemented. The actual SFV implementation date was February 22, 2010.

VEDO has also extended SFV principles to the design of its Distribution Replacement Rider (DRR), which recovers the costs associated with its program to accelerate the replacement of bare steel and cast iron pipelines. Both residential and Group 1 customers pay a fixed monthly DRR charge. No volumetric DRR charges apply to these customers.

Q48. Are the service requirements and load characteristics of Group 1 Customers similar to those of residential customers?

A. Yes. Group 1 Customers typically require the same service line and meter as do residential customers. As VEDO Witness Russell A. Feingold discusses in his direct testimony, the load characteristics of Group 1 Customers are similar to those of residential customers. For example, in 2017, residential customers' heat sensitive usage was 79 percent of those customers' total usage for the year. Group 1 customers' heat sensitive usage represented 81 percent of that group's total usage.

Q49. Has the Commission previously approved SFV rate design for non-residential customers?

A. Yes. Most recently, the Commission approved SFV rate design for small general service customers of Suburban Natural Gas (*see* Case No. 17-0594-GA-ALT).

Q50. Does the Company believe that the same rationale for approving SFV in prior cases applies here?

A. Yes. In addition to the factors discussed above, the Company believes that SFV rate design continues to provide the benefits recognized by the Commission in prior cases, including by upholding state policy, providing accurate and equitable cost recovery, and

eliminating disincentives to conservation on the part of the utility. These benefits and others are discussed in the exhibits to VEDO's Alternative Rate Plan.

VI. RATE DESIGN APPROACH

Q51. What guiding principles did VEDO consider in determining its proposed rate design in this proceeding?

A. VEDO has consistently supported a rate design framework under which fixed costs are recovered via fixed charges, to the extent practicable. Among other things, fixed charges promote fairness to all customers – the customer's bill reflects the actual cost of providing service rather than being based upon the volume of gas consumed. The Company's SFV proposal for Group 1 General Service customers is consistent with this objective.

VEDO's proposal to implement the ECF is also consistent with this principle. While not impacting the recovery of fixed costs from SFV customers, it nonetheless helps ensure that the recovery of fixed costs does not vary based on Btu content, which neither is within the Company's control nor has any bearing on the actual cost to serve.

Q52. Has VEDO designed the proposed rates and charges to mitigate inter-class subsidies?

A. Yes. The Company's cost of service study (COSS) prepared by Witness Feingold derives the proposed revenue requirement at equalized rates of return applicable to four groups or classes of customers: Residential (Rates 310, 311 and 315), General Service (Rates 320, 321 and 325), Large General Transportation (Rate 345) and Large Volume Transportation (Rate 360). As is almost always the case, allocating the revenue requirement to the rate classes based on equal rates of return can result in not only dissimilar impacts across the classes, but potentially rate shock for some classes. It is

appropriate to mitigate the impact of rate increases on customers to the extent possible, applying the principle of gradualism to the rate changes of all customers.

With that in mind, VEDO developed its proposed rates with the following objectives in mind:

- Each Rate Schedule will receive a rate increase.
- The maximum increase to the bill of any Large Volume Transportation customer (Rate 360) will be approximately equal to the overall increase to the Rate Schedule, which is targeted at approximately 10 percent.
- Proposed rates will demonstrate reasonable movement toward equal rates of return in the COSS.

Q53. Do the rates proposed by VEDO in this proceeding accomplish those three objectives?

A. Yes. As demonstrated on Schedule E-4 and Schedule E-5, sponsored by VEDO Witnesses J. Cas Swiz and Russell A. Feingold, each Rate Schedule has received an increase, and rates proposed under Rate 360 result in increases between 10 percent and 11 percent. Attachment E to my testimony shows the remaining subsidies that exist between the customer classes, and that even with those remaining subsidies the relative rates of return (which are also shown on Schedule E-3.2-1) have improved when compared to current rates.

Q54. How did VEDO determine the apportionment of the proposed revenue requirement applicable to each Rate Schedule in this proceeding between fixed monthly charges and volumetric charges?

A. For those Rate Schedules with both fixed and volumetric charges, the portion of the class revenue requirement to be recovered through each of these charges was guided by a combination of the magnitude of the revenue increase proposed in each class.

For the Large Transportation Rate Schedules with both fixed and volumetric charges (Rate 345 and Rate 360), VEDO worked to ensure that the overall increase in

base rates was apportioned between the fixed component and volumetric component equally. For instance, for Rate 345, the overall increase of $1,069,412 represents roughly a 20 percent increase on overall base rates (*i.e.*, revenues from a combination of the Customer Charge and Volumetric Charge). That being the case, VEDO proposed to increase the Customer Charge by 20 percent (from $150 per customer per month to $180 per customer per month). The volumetric block rates were then increased in a ratable manner such that the difference between Step 1 and Step 2 (and Step 2 and Step 3 for Rate 360) was increased by the same overall percentage, approximately 20 percent.

For the General Service Rate Schedules (Rate 320/321/325), as explained by Witness Feingold, the fixed Monthly Charge for Group 1 customers was derived based on the specific ratios of customer and demand costs per customer between Residential and Group 1. For Group 2 and Group 3 customers, the increase in the fixed Monthly Charge for Group 2 (growth from $40 to $75) drove the increase to Group 3 (growth from $80 to $155) to maintain the same approximate ratio under proposed rates. The remaining amount of the increase was assigned to the Volumetric Charge.

VII. STATUTORY REQUIREMENTS

Q55. Under R.C. 4929.05, before the Commission may approve the Alternative Rate Plan, it must find that VEDO complies with R.C. 4905.35. In your opinion, what facts show that VEDO complies with Section 4905.35, Revised Code?

A. R.C. 4905.35 (*1*) prohibits a public utility from making or giving any undue or unreasonable preference or advantage to any person, corporation, or locality; (*2*) prohibits a public utility from subjecting any person, corporation, or locality to any undue or unreasonable prejudice or disadvantage; (*3*) requires that natural gas companies offer their regulated services or goods to all similarly situated consumers under comparable

terms and conditions, including persons with which it is affiliated or which it controls; (*4*) requires that natural gas companies that offer bundled services that include both regulated and unregulated services or goods offer the regulated services or goods on an unbundled basis of the same quality as, or better quality than, the bundled service; and (*5*) prohibits natural gas companies from conditioning or limiting the availability of any regulated services or goods on the basis of the identity of the supplier of any other services or goods or on the purchase of any unregulated services or goods from the company.

I am not aware of any facts that suggest VEDO does not comply with R.C. 4905.35. I am generally familiar with VEDO's management, operations, and the services that it provides. VEDO makes its public utility services available on a comparable and nondiscriminatory basis. VEDO does not make or give any undue or unreasonable preference or advantage to any person, corporation, or locality, or subject any person, firm, corporation, or locality to any undue or unreasonable prejudice or disadvantage.

Likewise, VEDO offers its regulated services or goods under comparable terms and conditions to all similarly-situated consumers, including persons with which it is affiliated or which it controls. This is evidenced by VEDO's Supplier Code of Conduct and Affiliate Code of Conduct (see Tariff Sheets No. 52 and No. 72), and VEDO has applied these principles in developing its service offerings, the terms and conditions upon which it provides public utility service, and its rates.

Moreover, VEDO does not presently have any bundled service offerings that include a regulated and unregulated service.

Finally, VEDO does not condition or limit the availability of any regulated services or goods, including any discounted rates or quality, price, terms, or condition of

its service or goods, on the basis of the identity of the supplier of any other services or goods, or on the purchase of any unregulated services or goods from VEDO.

Q56. R.C. 4929.05 also requires VEDO to show that it substantially complies with the state policies set forth in R.C. 4929.02 and that it expects to remain in compliance with those policies after the Alternate Rate Plan is implemented. In your opinion, does VEDO substantially comply with state policy, and what facts show that it does?

A. In my opinion, VEDO substantially complies with state policy. Ohio's policy promotes, among other things, the availability of adequate, reliable, and reasonably priced services and goods as well as the unbundling and comparability of those services and goods. It supports effective choices for supplies and suppliers; encourages market access to supply- and demand-side services and goods; and acknowledges the importance of effective competition and the regulatory treatment needed to support competition.

The Alternative Rate Plan exhibits discuss how the individual Plan elements support state policy. These exhibits were prepared under my supervision, or under the supervision of the witness responsible for the element of the Plan in question. I can verify that the statements contained in those exhibits, as pertaining to the ECF and Group 1 SFV proposals, are true and correct.

Q57. Finally, R.C. 4929.05 requires the Commission to find that VEDO's proposal is just and reasonable. Do you believe that the Alternative Rate Plan is just and reasonable?

A. Yes. My testimony above explains why the ECF and Group 1 SFV proposals are just and reasonable, and the other elements are supported by the testimony of Witnesses Russell A. Feingold, Sarah J. Vyvoda, Ellis S. Redd, J. Cas Swiz, and K. Chase Kelley. Again, additional discussion on the justness and reasonableness of all Plan elements may be found in the Alternative Rate Plan exhibits.

VIII. CONCLUSION

Q58. Does that conclude your prepared direct testimony?

A. Yes, it does.

Vectren Energy Delivery of Ohio, Inc.
Investigation Fee

Labor	Time (Minutes)	% of One Hour	Hourly Pay Rate	Truck Rate Per Hour	Loading Rates Per Hour				
					Payroll Taxes	Non-Prod	Benefits	Supervision Overhead	Total Cost
Investigator	90	150.0%	$ 16.50	$ 6.50	7.20%	19.00%	31.30%	10.00%	$52.69

Total Cost	**$52.69**	**per hour**
Propose	**$50.00**	**per hour**

Vectren Energy Delivery of Ohio, Inc.
After-Hours Charge

Labor	Time (Minutes)	% of One Hour	Hourly Pay Rate	Truck Rate Per Hour	Loading Rates Per Hour: Payroll Taxes	Non-Prod	Benefits	Supervision Overhead	Total Cost	
Labor										
During Business Hours										
Service Technician - Reconnect	31.00	51.7%	$ 30.96	$ 6.50	7.20%	19.00%	31.30%	10.00%	$ 30.15	
Dispatcher - Reconnect	2.00	3.3%	$ 21.34		7.20%	19.00%	31.30%	10.00%	$ 1.19	
Customer Service Support - Reconnect	10.50	17.5%	$ 17.53		7.20%	19.00%	31.30%	10.00%	$ 5.14	
									$ 36.48	A
After Normal Business Hours @ same time										
Service Technician - Reconnect (a)	31.00	51.7%	$ 61.92	$ 6.50	7.20%	19.00%	31.30%	10.00%	$ 56.94	
Dispatcher - Reconnect	2.00	3.3%	$ 21.34		7.20%	19.00%	31.30%	10.00%	$ 1.19	
Customer Service Support - Reconnect	10.50	17.5%	$ 17.53		7.20%	19.00%	31.30%	10.00%	$ 5.14	
									$ 63.27	B

Difference (B-A)	**$ 26.79**
Propose	**$ 25.00**

Assumptions:

(1) VEDO Service Technician, Senior per Labor Agreement $30.96 effective 11/1/2017 (original Labor Agreement effective 7/1/2015)

(a) An after-hours service call requires a special Call-out from a Service Technician on call. The labor contract requires a minimum of two hours pay at double the standard hourly rate.

Vectren Energy Delivery of Ohio, Inc.
Trip & Labor Charge - Outside of Normal Business Hours

Labor	Time (Minutes)	% of One Hour	Hourly Pay Rate	Truck Rate Per Hour	Loading Rates Per Hour: Payroll Taxes	Non-Prod	Benefits	Supervision Overhead	Total Cost
Trip Charge									
Customer Service Support	0.00	0.0%	$ 17.53		7.20%	19.00%	31.30%	10.00%	$ -
Dispatcher	14.00	23.3%	$ 21.34		7.20%	19.00%	31.30%	10.00%	$ 8.34
								Total Trip Cost	**$ 8.34**
Labor									
Service Technician Sr.	29.99	50.0%	$ 61.92	$ 6.50	7.20%	19.00%	31.30%	10.00%	$ 55.09
Dispatcher	14.00	23.3%	$ 21.34		7.20%	19.00%	31.30%	10.00%	$ 8.34
Customer Service Support	0.00	0.0%	$ 17.53		7.20%	19.00%	31.30%	10.00%	$ -
									$ 63.43
								Total Labor Cost	**$ 63.43**
								Total Trip & Labor Cost	**$ 71.77**
								Propose	**$ 75.00**

Assumptions:

(1) VEDO Service Technician, Senior per Labor Agreement $30.96 effective 11/1/2017 (original Labor Agreement effective 7/1/2015)

(2) Shift Premium $0.15 during normal business hours (1st shift); and $0.60 after normal business hours (2nd shift)

(3) An after-hours service call requires a call-out. The labor contract requires a minimum of 2 hours pay at double the standard hourly pay rate.

Vectren Energy Delivery of Ohio, Inc.

Avoided Disconnection Fee

Labor	Time (Minutes)	% of One Hour	Hourly Pay Rate	Truck Rate Per Hour	Loading Rates Per Hour: Payroll Taxes	Non-Prod	Benefits	Supervision Overhead	Total Cost
Labor									
Service Tech Sr. - Disconnect	19.0	31.7%	$ 30.96	$ 6.50	7.20%	19.00%	31.30%	10.00%	$ 18.47
Dispatcher - Disconnect	2.0	3.3%	$ 21.34		0.00%	0.00%	0.00%	0.00%	$ 0.71
Customer Service Support - Disconnect	10.5	17.5%	$ 17.53		7.20%	19.00%	31.30%	10.00%	$ 5.14
10 Day Letter (managed by Pinnacle)									0.553
								Total Cost	**$ 24.87**
								Propose	**$ 15.00**

Assumptions:

(1) One man crew to disconnect

(2) VEDO Service Technician, Senior per Labor Agreement $30.96 effective 11/1/2017 (original Labor Agreement effective 7/1/2015)

(3) Shift Premium $0.15 during normal business hours (1st shift); and $0.60 after normal business hours (2nd shift)

Vectren Energy Delivery of Ohio, Inc.
Monthly BTU for 2008

	(MCF DRY)	(MMBTU)	WEIGHTED AVERAGE BTU CONTENT (BTU/CF DRY)
January 2008	9,160,217	9,337,731	1,019.38
February 2008	8,564,546	8,730,262	1,019.35
March 2008	6,899,236	7,029,009	1,018.81
April 2008	3,699,299	3,767,732	1,018.50
May 2008	2,701,282	2,753,815	1,019.45
June 2008	2,067,068	2,109,493	1,020.52
July 2008	2,041,185	2,084,340	1,021.14
August 2008	2,140,295	2,193,229	1,024.73
September 2008	2,040,869	2,083,718	1,021.00
October 2008	3,409,707	3,482,178	1,021.25
November 2008	6,035,245	6,156,478	1,020.09
December 2008	8,651,905	8,894,961	1,028.09
Totals for 2008	57,410,854	58,622,946	1,021.11

Vectren Energy Delivery of Ohio, Inc.
Monthly BTU for 2009

	(MCF DRY)	(MMBTU)	WEIGHTED AVERAGE BTU CONTENT (BTU/CF DRY)
January 2009	10,153,777	10,422,152	1,026.43
February 2009	7,313,440	7,479,301	1,022.68
March 2009	5,345,027	5,457,954	1,021.13
April 2009	3,746,307	3,823,850	1,020.70
May 2009	2,033,530	2,069,144	1,017.51
June 2009	1,769,465	1,797,250	1,015.70
July 2009	1,740,896	1,768,089	1,015.62
August 2009	1,774,871	1,802,294	1,015.45
September 2009	1,851,649	1,881,348	1,016.04
October 2009	3,478,904	3,544,652	1,018.90
November 2009	4,453,742	4,516,137	1,014.01
December 2009	8,078,724	8,201,987	1,015.26
Totals for 2009	51,740,332	52,764,158	1,019.79

Vectren Energy Delivery of Ohio, Inc.
Monthly BTU for 2010

	(MCF DRY)	(MMBTU)	WEIGHTED AVERAGE BTU CONTENT (BTU/CF DRY)
January 2010	9,626,425	9,785,425	1,016.52
February 2010	8,272,594	8,407,730	1,016.34
March 2010	5,469,893	5,562,181	1,016.87
April 2010	2,797,333	2,839,561	1,015.10
May 2010	2,366,078	2,399,017	1,013.92
June 2010	1,966,273	1,994,370	1,014.29
July 2010	1,946,198	1,973,915	1,014.24
August 2010	2,123,829	2,149,236	1,011.96
September 2010	2,028,205	2,055,264	1,013.34
October 2010	3,024,687	3,074,935	1,016.61
November 2010	5,261,846	5,342,300	1,015.29
December 2010	9,275,648	9,419,257	1,015.48
Totals for 2010	54,159,009	55,003,191	1,015.59

Vectren Energy Delivery of Ohio, Inc.
Monthly BTU for 2011

	(MCF DRY)	(MMBTU)	WEIGHTED AVERAGE BTU CONTENT (BTU/CF DRY)
January 2011	9,945,696	10,090,500	1,014.56
February 2011	7,580,658	7,690,471	1,014.49
March 2011	6,235,201	6,322,849	1,014.06
April 2011	3,598,475	3,644,279	1,012.73
May 2011	2,775,859	2,809,642	1,012.17
June 2011	2,043,179	2,076,657	1,016.39
July 2011	1,942,336	1,978,776	1,018.76
August 2011	2,043,990	2,083,054	1,019.11
September 2011	2,204,066	2,248,978	1,020.38
October 2011	3,512,892	3,575,317	1,017.77
November 2011	4,719,670	4,779,396	1,012.65
December 2011	6,907,461	6,990,495	1,012.02
Totals for 2011	53,509,483	54,290,414	1,014.59

Vectren Energy Delivery of Ohio, Inc.
Monthly BTU for 2012

	(MCF DRY)	(MMBTU)	WEIGHTED AVERAGE BTU CONTENT (BTU/CF DRY)
January 2012	8,446,134	8,532,247	1,010.20
February 2012	7,033,246	7,111,152	1,011.08
March 2012	4,074,081	4,144,363	1,017.25
April 2012	3,655,846	3,717,028	1,016.74
May 2012	2,344,543	2,400,007	1,023.66
June 2012	2,175,329	2,224,925	1,022.80
July 2012	1,954,045	2,004,861	1,026.01
August 2012	2,082,281	2,134,778	1,025.21
September 2012	2,254,798	2,300,321	1,020.19
October 2012	3,854,484	3,933,727	1,020.56
November 2012	5,678,715	5,762,668	1,014.78
December 2012	6,483,867	6,629,594	1,022.48
Totals for 2012	50,037,369	50,895,671	1,017.15

Vectren Energy Delivery of Ohio, Inc.
Monthly BTU for 2013

	(MCF DRY)	(MMBTU)	WEIGHTED AVERAGE BTU CONTENT (BTU/CF DRY)
January 2013	8,323,364	8,476,188	1,018.36
February 2013	7,631,355	7,759,165	1,016.75
March 2013	7,436,327	7,586,226	1,020.16
April 2013	3,886,565	3,970,714	1,021.65
May 2013	2,472,397	2,528,832	1,022.83
June 2013	2,063,200	2,114,376	1,024.80
July 2013	2,088,727	2,142,517	1,025.75
August 2013	2,120,889	2,169,848	1,023.08
September 2013	2,099,589	2,142,367	1,020.37
October 2013	3,639,757	3,708,299	1,018.83
November 2013	6,230,489	6,359,978	1,020.78
December 2013	8,064,227	8,281,300	1,026.92
Totals for 2013	56,056,886	57,239,810	1,021.10

Vectren Energy Delivery of Ohio, Inc.
Monthly BTU for 2014

	(MCF DRY)	(MMBTU)	WEIGHTED AVERAGE BTU CONTENT (BTU/CF DRY)
January 2014	11,222,513	11,465,637	1,021.66
February 2014	9,117,142	9,297,623	1,019.80
March 2014	7,459,726	7,594,415	1,018.06
April 2014	3,704,128	3,799,195	1,025.67
May 2014	2,650,728	2,734,789	1,031.71
June 2014	2,059,572	2,124,504	1,031.53
July 2014	2,062,540	2,183,192	1,058.50
August 2014	1,961,348	2,094,895	1,068.09
September 2014	2,215,258	2,351,718	1,061.60
October 2014	3,376,749	3,598,118	1,065.56
November 2014	6,765,318	7,164,714	1,059.04
December 2014	7,398,010	7,861,579	1,062.66
Totals for 2014	59,993,032	62,270,379	1,037.96

Vectren Energy Delivery of Ohio, Inc.
Monthly BTU for 2015

	(MCF DRY)	(MMBTU)	WEIGHTED AVERAGE BTU CONTENT (BTU/CF DRY)
January 2015	9,506,307	10,225,404	1,075.64
February 2015	9,877,700	10,571,364	1,070.23
March 2015	6,873,464	7,348,609	1,069.13
April 2015	3,589,616	3,872,517	1,078.81
May 2015	2,476,555	2,652,807	1,071.17
June 2015	2,248,527	2,385,856	1,061.08
July 2015	2,250,629	2,387,366	1,060.76
August 2015	2,115,896	2,272,904	1,074.20
September 2015	2,230,206	2,365,986	1,060.88
October 2015	3,174,677	3,408,128	1,073.54
November 2015	4,669,072	4,999,938	1,070.86
December 2015	5,849,216	6,279,999	1,073.65
Totals for 2015	54,861,865	58,770,878	1,071.25

Vectren Energy Delivery of Ohio, Inc.
Monthly BTU for 2016

	(MCF DRY)	(MMBTU)	WEIGHTED AVERAGE BTU CONTENT (BTU/CF DRY)
January 2016	9,297,875	9,984,230	1,073.82
February 2016	7,565,008	8,095,355	1,070.11
March 2016	5,062,085	5,410,934	1,068.91
April 2016	4,152,829	4,437,403	1,068.53
May 2016	2,996,788	3,209,460	1,070.97
June 2016	2,251,676	2,413,861	1,072.03
July 2016	2,205,244	2,361,899	1,071.04
August 2016	2,156,754	2,313,384	1,072.62
September 2016	2,247,179	2,407,854	1,071.50
October 2016	2,942,491	3,156,463	1,072.72
November 2016	4,778,878	5,126,062	1,072.65
December 2016	8,540,184	9,158,296	1,072.38
Totals for 2016	54,196,991	58,075,201	1,071.56

Vectren Energy Delivery of Ohio, Inc.
Monthly BTU for 2017

	(MCF DRY)	(MMBTU)	WEIGHTED AVERAGE BTU CONTENT (BTU/CF DRY)
January 2017	7,968,315	8,542,811	1,072.10
February 2017	5,904,300	6,341,102	1,073.98
March 2017	6,418,397	6,868,898	1,070.19
April 2017	3,183,448	3,392,869	1,065.78
May 2017	2,891,364	3,083,251	1,066.37
June 2017	2,188,229	2,328,431	1,064.07
July 2017	2,133,931	2,275,432	1,066.31
August 2017	2,274,225	2,436,791	1,071.48
September 2017	2,269,324	2,438,943	1,074.74
October 2017	3,345,351	3,583,713	1,071.25
November 2017	5,921,517	6,327,055	1,068.49
December 2017	8,987,956	9,617,616	1,070.06
Totals for 2017	53,486,357	57,236,912	1,070.12

Vectren Energy Delivery of Ohio, Inc.
Monthly BTU for 2018

	(MCF DRY)	(MMBTU)	WEIGHTED AVERAGE BTU CONTENT (BTU/CF DRY)
January 2018	10,121,946	10,777,875	1,064.80
February 2018	6,925,345	7,392,556	1,067.46
March 2018			
April 2018			
May 2018			
June 2018			
July 2018			
August 2018			
September 2018			
October 2018			
November 2018			
December 2018			
Totals for 2018	17,047,291	18,170,431	1,065.88

SAMPLE OF CURRENT BILL
RESIDENTIAL CUSTOMER

VECTREN
Live Smart

Vectren 1-800-227-1376 | Ohio Relay Service 711 | Call Before You Dig 811 or 1-800-362-2764
Visit www vectren com for questions energy tips account information and more

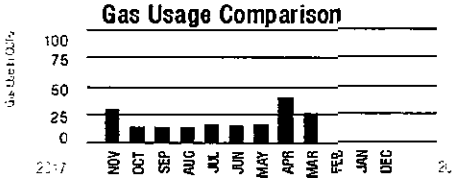
Billing Date: Nov 20, 2017
Date Due: Dec 7, 2017
Amount Due: $94.14
Amount Due After Dec 7, 2017 $95.16

Energy Tip If you are leaving for the holidays turn your water heater to the vacation setting or to the lowest setting available so you are not paying to heat water you won't be using for several days You can also lower your furnace thermostat However do not lower below 50 degrees for risk of frozen pipes

Energy Tip The holiday season is here! Preparing for holiday entertaining can include additional costs You can help manage energy costs by turning down your thermostat when entertaining Extra bodies in the home mean extra warmth at no additional cost to you!

Looking for a gift for that hard to buy for friend or relative? Give the Gift of Energy! Through Vectren's Gift of Energy program you can make a payment toward the energy bill of a friend loved one or neighbor To give the Gift of Energy complete and return the online form located at www vectren com or call 1-800-227-1376

Gas Usage Comparison



Average Temperature for this Billing Period

Current	Previous	Last Year
45°	65°	NA°

Next Scheduled Read Date 12/16/17

Your Account Information

Account Number: [redacted]

Service Address
[redacted]
HUBER HEIGHTS OH 45424

Previous Bill Amount	$105 92
Payment(s) Received	$185 92
Payment Reversal	$105 92
Balance Carried Forward	$25 92
Total Miscellaneous Charges	$25 00
Vectren Delivery and Supply Charges	$68 22
Charges This Period	$68 22
(Includes Late Payment Charges of $1 57)	
Total Amount Due:	**$94.14**

Detailed Account Activity

Natural Gas Service

Meter Number	Service Period From	To	Number of Days	Meter Readings Beginning	Ending	CCF Used	Multiplier	Gas Rate
D0193275	10/19/17	11/15/17	27	6173A	6203A	30	1 000000	Res 311

Energy Delivery Detail

Distribution and Service Charges $28 63
(Includes a Monthly Charge of $18 37)

Total Vectren Energy Delivery Charges $28.63

Gas Supplier Detail

Account Number [redacted]
Standard Choice Offer - [redacted]
0 40467 per CCF $12 14

Sales Tax $0 88
Total Gas Supplier Charges $13.02

Total Current Energy Delivery and Gas Supplier Charges $41.65

Month/Yr	CCF's	Month/Yr	CCF's	Month/Yr	CCF's	Month/Yr	CCF's
NOV 17	30 000	AUG 17	14 000	MAY 17	17 000	FEB 17	
OCT 17	14.000	JUL 17	17.000	APR 17	40 000	JAN 17	
SEP 17	14.000	JUN 17	15 000	MAR 17	26 000	DEC 16	
Total CCF. 187				Monthly Avg. 20.778			

Miscellaneous Charges

Return Check Charge $25 00

Please return this portion with your payment made payable to Vectren.

VECTREN
Live Smart

Change of address or phone?
Contact Customer Service at
1 800 227 1376

Account Number: [redacted]

Date Due	Dec 7 2017
Amount Due:	**$94.14**
Amount Enclosed	$_____
Amount Due After Dec 7, 2017	**$95.16**
Allow 5 business days for mailing	

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[redacted]
HUBER HEIGHTS OH 45424-3364

Write account number on check and mail to
Vectren Energy Delivery
P O Box 6262
Indianapolis IN 46206 6262

[redacted]

Important Vectren Energy Delivery Numbers

Customer Service: 1 800 227 1376 | Call Before You Dig: 811 or 1 800 362 2764 | Ohio Relay Service: 711 | www.vectren.com

General Information

24 Hour Emergency Service: Call 1-800-227-1376 if you smell a gas odor or if all of your natural gas appliances are out.

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PIPP Plus - The Percentage of Income Payment Plan Plus (PIPP Plus) is available if your total income is at or below 150% of the Federal poverty level. This program does not reduce or waive energy costs; it only establishes a payment plan to allow you to maintain your utility service.

Residential Rate Codes
RES 310 DSS Residential Default Sales Service
RES 311 SCO Residential Standard Choice Offer Service
RES 315 Choice Residential Transportation Service
Commercial Rate Codes
COM 320 DSS General Default Sales Service
COM 321 SCO General Standard Choice Offer Service
COM 325 Choice General Transportation Service
COM 341 DSS Dual Fuel Standard Choice Offer Service

Meter Abbreviations
A = Actual meter reading
E = Estimated meter reading

VECTREN
Live Smart

Vectren 1-800-227-1376 I Ohio Relay Service 711 I Call Before You Dig 811 or 1-800-362-2764
Visit www vectren com for questions energy tips account information and more

Page 2

Billing Date:	Nov 20, 2017
Date Due:	Dec 7, 2017
Amount Due:	$94.14
Amount Due After Dec 7, 2017	$95.16

Account Number:
[redacted]

Service Address
[redacted]
HUBER HEIGHTS OH 45424

Miscellaneous Charges

Total Miscellaneous Charges $25 00

Supplier Information

If you have any questions about your gas supply charges call [redacted]

For "Choice" program consumer tips and "apples to apples" comparisons for competitive supplier pricing use the Gas Usage History Chart and visit the Public Utilities Commission of Ohio's (PUCO) web site at www puco ohio gov or call 1-800-686-7826 or visit the Ohio Consumers' Counsel's web site at www pickocc org or call 1-877-742-5622

share the warmth

Helping is easy when you round up your payment on Vectren.com.

When the temperature drops this winter, you can help someone less fortunate keep warm through Vectren's Share the Warmth program.

Share the Warmth, Inc. can help weatherize the homes of less fortunate families throughout our communities with the goal of lowering energy usage and energy bills.

Learn more at www.sharethewarmthinc.com.

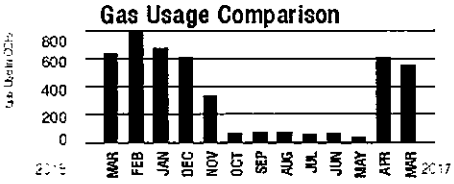
SAMPLE OF CURRENT BILL
GENERAL SERVICE CUSTOMER

VECTREN
Live Smart

Vectren 1-800-227-1376 | Ohio Relay Service 711 | Call Before You Dig 811 or 1-800-362-2764
Visit www vectren com for questions energy tips account information and more

Billing Date: Mar 21, 2018
Date Due: Apr 7, 2018
Amount Due: $444.51
Amount Due After Apr 7, 2018 $450.89

It's time to test your smoke alarms and carbon monoxide detectors as you set your clocks ahead! A good time to remember to test your smoke alarms and carbon monoxide detectors is when you change your clocks twice a year as daylight savings time begins and ends



Average Temperature for this Billing Period

Current	Previous	Last Year
39°	32°	42°

Next Scheduled Read Date 04/18/18

Your Account Information

Account Number: [redacted]

Service Address
[redacted]
DAYTON OH 45405

Previous Bill Amount	$569 98
Payment(s) Received	$569 98
Balance Carried Forward	$0 00
Vectren Delivery and Supply Charges	$444 51
Charges This Period	$444 51
Total Amount Due:	**$444.51**

Detailed Account Activity

Natural Gas Service

Meter Number	Service Period From	To	Number of Days	Meter Readings Beginning	Ending	CCF Used	Multiplier	Gas Rate
D0473866	02/15/18	03/16/18	29	90828A	91468A	640	1 000000	Com 321

Energy Delivery Detail

Distribution and Service Charges $157 40
(Includes a Monthly Charge of $40 00)

Total Vectren Energy Delivery Charges $157.40

Gas Supplier Detail

Account Number [redacted]
Standard Choice Offer - [redacted]
0 41828 per CCF $267 70

Sales Tax $19 41
Total Gas Supplier Charges $287.11

Total Current Energy Delivery and Gas Supplier Charges $444.51

Month/Yr	CCF's	Month/Yr	CCF's	Month/Yr	CCF's	Month/Yr	CCF's
MAR 18	640 000	DEC 17	603 000	SEP 17	72 000	JUN 17	68 000
FEB 18	797 000	NOV 17	334 000	AUG 17	79 000	MAY 17	43.000
JAN 18	673 000	OCT 17	67.000	JUL 17	58 000	APR 17	604 000
Total CCF. 4038				Monthly Avg 336 5			

Supplier Information

If you have any questions about your gas supply charges call [redacted]

Please return this portion with your payment made payable to Vectren.

VECTREN
Live Smart

Change of address or phone?
Contact Customer Service at
1 800 227 1376

Account Number: [redacted]

Date Due	Apr 7 2018
Amount Due:	**$444.51**
Amount Enclosed	$_____
Amount Due After Apr 7, 2018	**$450.89**
Allow 5 business days for mailing	

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[redacted]
BEAVERCREEK OH 45432-4122

Write account number on check and mail to
Vectren Energy Delivery
P O Box 6262
Indianapolis IN 46206 6262

[redacted]

Important Vectren Energy Delivery Numbers

Customer Service: 1 800 227 1376 | Call Before You Dig: 811 or 1 800 362 2764 | Ohio Relay Service: 711 | www.vectren.com

General Information

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Meter Abbreviations
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E = Estimated meter reading

VECTREN
Live Smart

Vectren 1-800-227-1376 | Ohio Relay Service 711 | Call Before You Dig 811 or 1-800-362-2764
Visit www vectren com for questions energy tips account information and more

Billing Date:	Mar 21, 2018
Date Due:	Apr 7, 2018
Amount Due:	$444.51
Amount Due After Apr 7, 2018	$450.89

Account Number:
[redacted]

Service Address
[redacted]
[redacted]
DAYTON OH 45405

Supplier Information

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SAMPLE OF CURRENT BILL
LARGE GENERAL
TRANSPORTATION CUSTOMER

VECTREN
Live Smart

Vectren 1-800-227-1376 | Ohio Relay Service 711 | Call Before You Dig 811 or 1-800-362-2764
Visit www vectren com for questions energy tips account information and more

Billing Date: Mar 6, 2018
Date Due: Mar 23, 2018
Amount Due: $1,927.23
Amount Due After Mar 23, 2018 $1,956.14

Your Account Information

Account Number:
[redacted]

Service Address
[redacted]
DAYTON OH 45417

Previous Bill Amount	$2 819 74
Payment(s) Received	$2 819 74
Balance Carried Forward	$0 00
Charges This Period	$1 927 23
(Includes Late Payment Charges of $42 30)	
Total Amount Due:	**$1,927.23**

Detailed Account Activity

Gas Meter Information

Meter Number	Service Period From	To	Number of Days	Meter Readings Beginning	Ending	CCF Used	Pressure Factor
D0288390	02/01/18	03/01/18	28	1175636A	1188834A	13198	1.000000

Gas Transportation Service

Volumetric Charge	$1 320 33
Customer Charge	$150 00
Excise Tax	$122 91
Gross Receipts Tax	$87 65
DRR	$204 04
Total Current Charges - Rate Schedule 345	**$1,884.93**

Distribution Detail

First 15000 CCF at 0 10004 per CCF	$ 1320 33
Over 15000 CCF at 0 08814 per CCF	$ 0 00

BILL MESSAGE
[redacted]

Please return this portion with your payment made payable to Vectren.

VECTREN
Live Smart

Change of address or phone?
Contact Customer Service at
1 800 227 1376

[redacted]

Date Due	Mar 23 2018
Amount Due:	**$1,927.23**
Amount Enclosed	$_____
Amount Due After Mar 23, 2018	**$1,956.14**
Allow 5 business days for mailing	

000003487 I=0000

Write account number on check and mail to:
Vectren Energy Delivery
P O Box 6262
Indianapolis IN 46206-6262

[redacted]

[redacted]

Important Vectren Energy Delivery Numbers

Customer Service: 1 800 227 1376 | Call Before You Dig: 811 or 1 800 362 2764 | Ohio Relay Service: 711 | www.vectren.com

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Multiplier - Factor used to calculate consumption on meters with higher than the standard delivery pressure. A multiplier greater than 1 indicates a delivery pressure that is greater than Vectren's standard delivery pressure.

PIPP Plus - The Percentage of Income Payment Plan Plus (PIPP Plus) is available if your total income is at or below 150% of the Federal poverty level. This program does not reduce or waive energy costs; it only establishes a payment plan to allow you to maintain your utility service.

Residential Rate Codes
RES 310 DSS Residential Default Sales Service
RES 311 SCO Residential Standard Choice Offer Service
RES 315 Choice Residential Transportation Service
Commercial Rate Codes
COM 320 DSS General Default Sales Service
COM 321 SCO General Standard Choice Offer Service
COM 325 Choice General Transportation Service
COM 341 DSS Dual Fuel Standard Choice Offer Service

Meter Abbreviations
A = Actual meter reading
E = Estimated meter reading

Vectren Energy Delivery of Ohio, Inc.
Proposed Bill Presentation

Rates 310, 311, 315, 320, 321, 325

Current

Meter Number	Service Period From	To	Number of Days	Meter Readings Beginning	Ending	CCF Used	Multiplier	Gas Rate
D0473866	02/15/18	03/16/18	29	90828	91468	640	1.000000	Com XXX

Proposed

Meter Number	Service Period From	To	Number of Days	Meter Readings Beginning	Ending	Metered CCF	Change from "CCF Used" Add Block Energy Conversion Factor	Pressure Factor	Change from "Multiplier" Add Block Billing CCF	Gas Rate
D0473866	02/15/18	03/16/18	29	90828	91468	640	0.9907	1.000000	634.048	Com XXX

Metered CCF X Energy Conversion Factor X Pressure Factor = Billing CCF

Rate 345, 360

Current

Meter Number	Service Period From	To	Number of Days	Meter Readings Beginning	Ending	CCF Used	Pressure Factor
D0288390	02/01/18	03/01/18	28	1175636A	1188834A	13198	1.000000

Proposed

Meter Number	Service Period From	To	Number of Days	Meter Readings Beginning	Ending	Metered CCF	Change from "CCF Used" Add Block Energy Conversion Factor	Pressure Factor	Add Block Billing CCF
D0288390	02/01/18	03/01/18	28	1175636A	1188834A	13198	0.9907	1.000000	13075.259

Metered CCF X Energy Conversion Factor X Pressure Factor = Billing CCF

VECTREN ENERGY DELIVERY OF OHIO, INC.
PROPOSED CHANGES – CUSTOMER BILLS

Important Vectren Energy Delivery Numbers
Customer Service: 1-800-227-1376 | Call Before You Dig: 811 or 1-800-362-2764 | Ohio Relay Service: 711 | www.vectren.com

General Information

24 Hour Emergency Service: Call 1-800-227-1376 if you smell a gas odor or if all of your natural gas appliances are out.

Customer Service Questions or Concerns: To contact Vectren Energy Delivery (Vectren) about your bill or service, visit www.vectren.com or call 1-800-227-1376 between 7 a.m. and 7 p.m., Monday through Friday. Authorized pay sites are available in your neighborhood for your convenience. To locate an authorized pay site nearest you, visit www.vectren.com or call 1-800-227-1376. You can pay your bill through a checking or savings account for free at www.vectren.com or by calling 1-800-227-1376. If you would like to write to Vectren, please send correspondence to P.O. Box 209, Evansville, IN 47702-0209 or visit our web site at www.vectren.com. If you have selected a third-party gas supplier through the natural gas Choice program and have questions regarding your gas supply charges, please refer to the gas supplier and toll free number listed in the "Bill Message" section of your bill. The nonpayment of charges for non-tariffed services that are unrelated to the charges you incurred for the delivery and consumption of gas at your home or business shall not result in the disconnection of your gas service.

Customers with billing or service issues or concerns regarding a disconnect notice should contact Vectren prior to contacting the Public Utilities Commission of Ohio (PUCO). If your complaint is not resolved after you have called Vectren, or for general utility information, residential and business customers may contact the PUCO for assistance at 1-800-686-7826 (toll free) from eight a.m. to five p.m. weekdays, or at www.puco.ohio.gov. Hearing or speech impaired customers may contact the PUCO via 7-1-1 (Ohio relay service). The Ohio consumers counsel (OCC) represents residential utility customers in matters before the PUCO. The OCC can be contacted at 1-877-742-5622 (toll free) from eight a.m. to five p.m. weekdays, or at www.pickocc.org.

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VECTREN ENERGY DELIVERY OF OHIO, INC.
PROPOSED CHANGES – CUSTOMER BILLS

Terms & Definitions

Distribution and Service Charges - Charges billed each month for the delivery of natural gas and other charges approved by the PUCO to ensure safe, reliable service.

Customer/Monthly Charge - Charge billed each month to recover a portion
of the ongoing costs of providing service to the customer. This charge does not vary with gas consumption.

CCF (100 Cubic Feet) - Gas consumption is measured by your meter in hundreds of cubic feet.

Energy Conversion Factor (ECF) – The ECF adjusts metered usage for the energy content of the gas used. Energy content can vary monthly. The ECF is the ratio of the current energy content to the energy content at the time Vectren's base rates were established.

Standard Choice Offer - Under Vectrens Standard Choice Offer (SCO) service, Vectren customers are receiving natural gas provided by third-party suppliers. The SCO suppliers won the right in a competitive auction to provide gas supply to customers at a monthly SCO price, which is calculated by adding a fixed retail price adjustment determined in a periodic auction to the New York Mercantile Exchange (NYMEX) month-end settlement price for natural gas. Because the SCO price reflects the NYMEX-based market price, it can vary with changes in supply and demand. The SCO price is charged to customers who have not selected an alternate gas supplier through the natural gas Choice program. The name of the gas supplier providing SCO service appears on the bill.

Miscellaneous Charges - Examples of miscellaneous charges may include but are not limited to reconnect fees; labor charges and returned payment charges.

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VECTREN ENERGY DELIVERY OF OHIO, INC.
PROPOSED CHANGES – CUSTOMER BILLS

Vectrens costs are then passed on to DSS customers. Because the DSS charge reflects the NYMEX-based market price, it can vary monthly with changes in supply and demand. The DSS price is charged to customers who are not eligible to select an alternate gas supplier through the natural gas Choice program.

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PROPOSED CUSTOMER BILL

PAGE 2

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Vectren Energy Delivery of Ohio, Inc.
Gas Tariff Research - Billing Basis

(Conducted Q4 2017)

	State/Jurisdiction	Number of Utilities Researched	Billing Basis	
			Therm	CCF
1	Alabama	3	1	2
2	Alaska	1		1
3	Arizona	2	2	
4	Arkansas	3		3
5	California	3	3	
6	Colorado	3	2	1
7	Connecticut	2		2
8	Delaware	2		2
9	District of Columbia	1	1	
10	Florida	1	1	
11	Georgia	2	2	
12	Hawaii	1	1	
13	Idaho	3	3	
14	Illinois	4	4	
15	Indiana	1	1	
16	Iowa	3	3	
17	Kansas	3	1	2
18	Kentucky	5		5
19	Louisiana	2		2
20	Maine	2	1	1
21	Maryland	3	3	
22	Massachusetts	2	2	
23	Michigan	4	1	3
24	Minnesota	3	3	
25	Mississippi	3	1	2

Vectren Energy Delivery of Ohio, Inc.
Gas Tariff Research - Billing Basis
(continued)

(Conducted Q4 2017)

	State/Jurisdiction	Number of Utilities Researched	Billing Basis	
			Therm	CCF
26	Missouri	3	1	2
27	Montana	2	2	
28	Nebraska	3	3	
29	Nevada	2	2	
30	New Hampshire	2	2	
31	New Jersey	4	3	1
32	New Mexico	2	2	
33	New York	4	2	2
34	North Carolina	2	2	
35	North Dakota	2	2	
36	Oklahoma	2	1	1
37	Oregon	3	3	
38	Pennsylvania	4	1	3
39	Rhode Island	1	1	
40	South Carolina	2	2	
41	South Dakota	2	2	
42	Tennessee	4	2	2
43	Texas	2		2
44	Utah	1	1	
45	Vermont	1		1
46	Virginia	3	1	2
47	Washington	2	2	
48	West Virginia	2		2
49	Wisconsin	5	5	
50	Wyoming	3	3	
	Totals	125	81	44

Number of States* with Therm Billing 41

* Includes District of Columbia. Ohio has been excluded from this analysis.

Vectren Energy Delivery of Ohio, Inc.
Revenue Requirement Mitigation

Line	(A) Cost of Service Study Class	(B)	(C) COSS Pro Forma Rate Schedule Margin	(D) COSS Proposed Margin for Equalized ROR	(E) COSS ROR at Current Rates	(F) Relative ROR at Current Rates	(G) Proposed Change in Margin	(H) (G / C) Proposed Percent Change in Margin	(I) (C + G) Margin at Proposed Rates	(J) Movement Toward System Average	(K) ROR at Proposed Rates	(L) Relative ROR at Proposed Rates	(M) (I - D) Remaining Subsidy	Line
1	Residential - 310/311/315		$ 110,426	$ 151,127	0.53%	0.14	$ 26,759	24.2%	$ 137,185	62%	5.32%	0.67	$ (13,942)	1
2	General Service - 320/321/325		27,794	28,173	9.14%	2.34	5,125	18.4%	32,919	60%	12.25%	1.54	4,746	2
3	Large General Transport - 345		7,065	5,425	17.17%	4.40	1,069	15.1%	8,135	60%	18.82%	2.36	2,710	3
4	Large Volume Transport - 360		14,230	8,812	25.06%	6.42	1,068	7.5%	15,298	63%	23.84%	2.99	6,486	4
5	Total Delivery Margin		$ 159,515	$ 193,536	3.90%	1.00	$ 34,021	21.3%	$ 193,536		7.97%	1.00	$ (0)	5
6	Miscellaneous Revenues Margin		$ 2,665	$ 2,665					$ 2,665				-	6
7	Total Margin		$ 162,180	$ 196,201					$ 196,201				$ (0)	7

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in

Case No(s). 18-0298-GA-AIR, 18-0299-GA-ALT

Summary: Exhibit 13.0 - Direct Testimony of Scott E. Albertson electronically filed by Ms. Rebekah J. Glover on behalf of Vectren Energy Delivery of Ohio, Inc.

VEDO EXHIBIT NO. 13.2

BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Vectren Energy Delivery of Ohio, Inc., for Approval of an Alternative Rate Plan	)))	Case No. 18-0049-GA-ALT
In the Matter of the Application of Vectren Energy Delivery of Ohio, Inc. for Approval of an Increase in Gas Rates	)))	Case No. 18-0298-GA-AIR
In the Matter of the Application of Vectren Energy Delivery of Ohio, Inc., for Approval of an Alternative Rate Plan	)))	Case No. 18-0299-GA-ALT

SECOND SUPPLEMENTAL DIRECT TESTIMONY OF
SCOTT E. ALBERTSON
IN SUPPORT OF THE STIPULATION AND RECOMMENDATION
ON BEHALF OF
VECTREN ENERGY DELIVERY OF OHIO, INC.

____ Management policies, practices, and organization
____ Operating income
____ Rate base
____ Allocations
____ Rate of return
____ Rates and tariffs
_X_ Other (Stipulation and Recommendation)

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I. BACKGROUND AND QUALIFICATIONS 1
II. THE STIPULATION AND RECOMMENDATION 1
III. CONCLUSION 5

Second Supplemental Direct Testimony of
Scott E. Albertson
in Support of the Stipulation and Recommendation

I. BACKGROUND AND QUALIFICATIONS

Q1. Please state your name and business address.

A. My name is Scott E. Albertson and my business address is One Vectren Square, Evansville, Indiana 47708.

Q2. Are you the same Scott Albertson who filed Direct Testimony on behalf of Vectren Energy Delivery of Ohio, Inc. (VEDO or the Company) in this proceeding on April 13, 2018, and Supplemental Testimony on November 7, 2018?

A. Yes.

Q3. What is the purpose of this testimony?

A. This testimony is intended to provide certain facts showing that the Commission should approve the Stipulation and Recommendation (Stipulation) filed in this matter on January 4, 2019.

II. THE STIPULATION AND RECOMMENDATION

Q4. What portions of the Stipulation are you supporting?

A. I am sponsoring two exhibits related to VEDO's tariffs, Joint Exhibits 4.0 and 5.0, with the exception of the proposed rates in Joint Exhibit 4.0, which are supported by VEDO witness J. Cas Swiz. I also address the provisions of the Stipulation involving marketer and supplier concerns, as well as the rate design reflected in the Stipulation and in Joint Exhibit 4.0.

Q5. How did the Stipulation address marketer and supplier concerns?

A. Joint Exhibit 5.0 reflects a number of changes that affect marketer and supplier interests and that were accepted by the Signatory Parties. These revisions provide for certain

changes and clarifications to VEDO's proposed tariff regarding issues raised by suppliers. For example, the Company had proposed to modify its Mandatory Assignment of Pipeline Capacity provisions contained in sheets 52 and 56 of its tariff to include the following language: "Some capacity contracts may be released only to SCO Suppliers." As reflected in Exhibit 5.0, the Signatory Parties agreed that this language should be modified to only allow VEDO to assign individual contracts equal to or less than 5,000 Dth/day to only SCO Suppliers. The recommended tariff modifications in Exhibit 5.0 will assist SCO Suppliers, Choice Suppliers, and Pool Operators in the provision of service to VEDO's Customers.

Q6. Are these tariff revisions the only way in which marketer and supplier concerns were addressed?

A. No. Paragaph 15 of the Stipulation avoids the need to litigate a number of issues raised by marketers and suppliers. VEDO's Application did not address issues regarding an exit of the merchant function, additional Choice billing options, and the availability of certain customer specific information (*e.g.*, Choice customers whose current commodity rates are in the top 25 percent of all Choice customer rates, and customer peak day information). In the Stipulation, VEDO has agreed to meet with the Signatory Parties and other interested parties to discuss issues regarding an exit of the merchant function and additional billing system upgrades. VEDO also agreed to review the feasibility, cost, prudence, and compliance with regulatory requirements of implementing certain billing system changes and providing certain customer-specific information to Choice Suppliers. Rather than seek immediate resolution of potentially contentious issues, the Stipulation provides a concrete path to discuss these and other issues and provide additional information under defined conditions.

1 **Q7. What rate design does the Stipulation provide for?**

2 A. The Stipulation (as reflected in Joint Exhibit 4.0) continues the Straight Fixed Variable
3 (SFV) rate design approved in VEDO's last base rate case. *See* Case No. 07-1080-GA-
4 AIR. As proposed by VEDO in the Application and recommended (with some
5 modifications) in the Staff Report, the Stipulation expands SFV rate design to General
6 Service – Group 1 customers.

7 **Q8. What fixed charges are residential customers currently paying?**

8 A. Customers are currently paying a fixed charge of $27.62, which is the sum of the
9 Monthly Charge of $18.37 per month and the currently-effective DRR Charge of $9.25
10 per month.

11 **Q9. What residential customer fixed charge is proposed in Joint Exhibit 4.0?**

12 A. The proposed fixed monthly charge is $32.86. The costs previously recovered by the
13 DRR have been rolled into base rates, and the DRR resets upon implementation of new
14 base rates, so the total increase to the current total fixed charge is $5.24 per month.

15 **Q10. Is this the resulting fixed charge that residential customers would pay if VEDO's**
16 **application to return TCJA savings is approved?**

17 A. No. VEDO is proposing a fixed monthly credit of $3.72 applicable to residential
18 customers starting in 2019 under its proposed Tax Savings Credit Rider (TSCR). See
19 Case No. 19-0029-GA-ATA.

20 **Q11. If the Stipulation and the TSCR are approved as filed, what is the net fixed charge**
21 **residential customers will pay each month?**

22 A. Residential customers will pay $29.14 each month.

23 **Q12. So if the Stipulation is approved as filed, and the TSCR is approved as filed, what**
24 **would be the total increase in the fixed monthly charge applicable to residential**
25 **customers?**

26 A. The total increase from currently-effective fixed charges upon approval of the Stipulation
27 and the TSCR would be $1.52. VEDO acknowledges that these monthly charges will

increase over time. VEDO is committed to replacing bare steel and cast iron (BS/CI) infrastructure and investing in Ohio via the Capital Expenditure Program (CEP), and the recovery of these costs will result in gradual fixed charge increases over time.

Q13. With respect to rate design, do you believe that the Stipulation violates any important regulatory principle or practice?

A. No. This is the same rate design approved by the Commission in 2009 in VEDO's last base rate case, and I believe that it has been approved for other utilities since then.

Q14. Are you aware that several parties are opposing the continuation of SFV rate design?

A. Yes. But again, the Stipulation (1) continues the rate design previously approved by the Commission and currently in effect for residential customers of VEDO as well as other natural gas companies, and (2) expands SFV rate design, as supported by the Staff Report and previously implemented at other natural gas companies, to small general service customers.

VEDO reserves the right to present rebuttal testimony in support of SFV rate design if it deems necessary. But VEDO does not believe that it is a reasonable use of the Company's or Commission's resources to repeatedly relitigate a policy issue such as SFV.

Q15. What action do you recommend that the Commission take with respect to rate design?

A. A wide variety of parties recommends approval of the Stipulation continuing the previously approved rate design, including Staff and the City of Dayton, both of whom must consider the interests of residential customers. The Commission has already determined that SFV rate design is just and reasonable. When the impact of the TCJA savings are accounted for, the incremental increase in the residential fixed charge proposed in this case is $1.52 per month. Given the modest increase at issue and all of the

1 other benefits provided by and under the Stipulation, VEDO does not believe that the

2 continuation of SFV rate design provides any basis for questioning the Stipulation.

3 **III. CONCLUSION**

4 **Q16. Does this conclude your second supplemental direct testimony in support of the**
5 **Stipulation?**

6 A. Yes, it does.

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing document was served by electronic mail to the following persons on this 17th day of January, 2019:

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/s/ Andrew J. Campbell
One of the Attorneys for Vectren Energy Delivery of Ohio, Inc.

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in

Case No(s). 18-0049-GA-ALT, 18-0298-GA-AIR, 18-0299-GA-ALT

Summary: Testimony Exhibit 13.2 Second Supplemental Direct Testimony of Scott E. Albertson in Support of the Stipulation electronically filed by Mr. Andrew J Campbell on behalf of Vectren Energy Delivery of Ohio

VEDO EXHIBIT NO. 14.0

BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

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

DIRECT TESTIMONY OF
J. CAS SWIZ
ON BEHALF OF
VECTREN ENERGY DELIVERY OF OHIO, INC.

____	Management policies, practices, and organization
____	Operating income
____	Rate base
____	Allocations
____	Rate of return
____	Rates and tariffs
X	Other (CEP Rider)

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VI. ANNUAL FILING PROCESS 18
VII. CUSTOMER IMPACTS 20
VIII. STATUTORY REQUIREMENTS 20
IX. CONCLUSION 22

Direct Testimony of
J. Cas Swiz

I. BACKGROUND AND QUALIFICATIONS

Q1. Please state your name and business address.

A. My name is J. Cas Swiz and my business address is One Vectren Square, Evansville, Indiana 47708.

Q2. What position do you hold with Vectren Energy Delivery of Ohio, Inc. (VEDO or the Company)?

A. I am Director, Rates and Regulatory Analysis for Vectren Utility Holdings, Inc. (VUHI), the immediate parent company of VEDO. I also hold this same position with two other utility subsidiaries of VUHI – Indiana Gas Company, Inc. d/b/a Vectren Energy Delivery of Indiana, Inc. (Vectren North) and Southern Indiana Gas and Electric Company d/b/a Vectren Energy Delivery of Indiana, Inc. (Vectren South).

Q3. Please describe your educational background.

A. I am a 2001 graduate of the University of Evansville with a Bachelor of Science degree in Accounting, and a 2005 graduate of the University of Southern Indiana with a Masters of Business Administration.

Q4. Please describe your professional experience.

A. From 2001 to 2003, I was employed by ExxonMobil Chemical as a Product and Inventory accountant. Since 2003, I have been employed with VUHI in various accounting capacities. In 2008, I was named Manager, Regulatory and Utility Accounting, and in November 2012, I was promoted to Director, Regulatory Implementation and Analysis. I was named to my current position in August 2015.

Q5. What are your present duties and responsibilities as Director, Rates and Regulatory Analysis?

A. I am responsible for the regulatory and rate matters of the regulated utilities within VUHI in proceedings before the Indiana and Ohio utility regulatory commissions. I also have the responsibility for the financial analysis and implementation of all regulatory initiatives of VUHI, as well as the preparation of accounting exhibits submitted in various regulatory proceedings.

Q6. Have you previously testified before this Commission?

A. Yes. I have testified in VEDO's Distribution Replacement Rider (DRR) proceedings, Case Nos. 13-1121-GA-RDR, 14-0813-GA-RDR, 15-0865-GA-RDR, 16-0904-GA-RDR, and 17-1155-GA-RDR. I am also testifying in VEDO's pending base rate case, Case No. 18-0298-GA-AIR (the Rate Case).

II. SUMMARY

Q7. What is the purpose and scope of your testimony in this proceeding?

A. My testimony will support VEDO's proposal to establish a Capital Expenditure Program (CEP) Rider to recover deferred costs, starting January 1, 2018, authorized under VEDO's CEP in Case Nos. 12-530-GA-UNC and 13-1890-GA-UNC (collectively, the CEP Orders). I will discuss the authority granted under the CEP Orders in accordance with Ohio House Bill 95 (HB95) and how VEDO, in compliance with the CEP Orders, is proposing recovery of the CEP investments and deferred balance as part of its Rate Case. I will discuss the continued deferral of costs starting January 1, 2018, in accordance with the CEP Orders. Finally, I will discuss how the CEP Rider will be calculated and

allocated to VEDO's customer classes in each annual CEP Rider filing, and present an estimate of the customer bill impacts for recovery of the 2018 deferral.

Q8. Are the Company's books and records kept in accordance with the Federal Energy Regulatory Commission (FERC) Uniform System of Accounts?

A. Yes. The Company's books and records are kept in accordance with the FERC Uniform System of Accounts as adopted by this Commission.

Q9. Are you sponsoring any attachments to your testimony in this proceeding?

A. Yes. Attachment A to my testimony presents the illustrative CEP Rider calculation exhibits that are proposed to be filed annually. Attachment B to my testimony presents the proposed CEP Rider Tariff Sheet.

III. CEP BACKGROUND

Q10. Please explain the currently approved HB95 Capital Expenditure Program.

A. On December 12, 2012, in Case No. 12-530-GA-UNC, the Commission issued an Order (the 12-530 Order) that approved accounting authority, inclusive of the deferral of depreciation and property tax expense and the accrual of PISCC, on investments made under the Company's CEP for the period October 1, 2011 through December 31, 2012. The 12-530 Order required VEDO to submit, by April 30 of each year, a report detailing the total deferred balance associated with CEP investments and the estimated impacts on customers if included for recovery in rates. The Commission's Order also required the deferral to be offset by incremental revenues received as a result of these investments, which VEDO has complied with as demonstrated within each annual report submitted in accordance with the Order. This accounting authority was granted on investments made starting October 2011 until such point as the cumulative deferral of activity, if included in

rates, would result in a bill impact to residential and general service group 1 customers of $1.50 per customer per month.

On December 4, 2013, in Case No. 13-1890-GA-UNC, the Commission issued another Order (the 13-1890 Order) that approved the continuation of the CEP investments and deferral beyond December 31, 2012, with such deferrals permitted to continue without further approval up to the point when the deferral would reach the $1.50 per customer per month cap established in the 12-530 Order. The 13-1890 Order did not change the calculation of each of the deferred components, including the offsetting incremental revenue credit, and maintained the requirement for VEDO to file annual reports, by April 30 of each year, detailing the CEP investments, deferral, and estimated impacts on VEDO's customers if included for recovery in rates.

Q11. Please explain how VEDO proposes to recover its CEP investments and deferrals in the Rate Case.

A. VEDO has utilized the approved accounting authority to compile a total deferred balance of approximately $66 million as of December 31, 2017, which has been included for recovery as part of rate base in the Rate Case. As explained in my testimony in that proceeding, VEDO has also requested recovery of this deferral over an extended period, using the proposed composite depreciation rate in that proceeding. The impact of the inclusion of the deferral in base rates is estimated to be approximately $1.35 per residential customer per month, which is below the defined cap. Finally, VEDO's Net Utility Plant balance in the Rate Case includes the eligible CEP investments for which the accounting treatment has been applied.

Q12. How will VEDO account for additional deferred activity related to these CEP investments during the Rate Case proceeding?

A. Under the terms of the CEP Orders, deferrals are required to cease once the balance reaches the $1.50 per customer per month estimated cap, until such time as the Company files to recover the existing deferrals and establish a recovery mechanism. Because VEDO has requested authority in the Rate Case to recover the deferred balance as of December 31, 2017, the Company believes it has met the requirements of the 12-530 Order, and deferral on the CEP investments will continue during the pendency of both the Rate Case and this proceeding. The recovery of deferrals not captured in VEDO's base rate proposal will be addressed in this proceeding.

IV. CEP RIDER

Q13. Please summarize VEDO's proposal to establish the CEP Rider.

A. VEDO proposes to establish the CEP Rider to recover the deferred balance, with a return, in current rates. As reflected in the illustrative calculation schedules included in Attachment A to my testimony, the CEP Rider will be based on a revenue requirement calculation, capturing the return on the deferred balance and the recovery of the deferred balance over the average life of VEDO's assets. The CEP Rider will not include a return on the underlying CEP investments; these will be addressed in VEDO's next base rate case. VEDO proposes to annually update the CEP Rider, to capture deferrals through December 31 of the prior calendar year. The CEP Rider rates and charges will be in effect for twelve months, with any under- or over-recovery variance included for recovery (or pass-back) in the subsequent CEP Rider filing.

1 **Q14. What is VEDO seeking to establish in this proceeding?**

2 A. VEDO is proposing only to establish the CEP Rider mechanism; the initial rate will be
3 set at zero. As explained later in my testimony, VEDO's intention is to make its first
4 filing to establish a CEP Rider rate on April 1, 2019, covering deferrals from January 1
5 through December 31, 2019.

6 **Q15. What are the primary benefits of the proposed CEP Rider?**

7 A. In the Rate Case, VEDO is seeking recovery of the cumulative deferred balance
8 associated with the CEP investments through December 2017. This deferral, at
9 approximately $66 million, is a significant portion of VEDO's proposed revenue increase
10 in the Rate Case. As deferrals on new CEP investments will continue, starting in 2018,
11 the proposed CEP Rider will help mitigate future base rate increases by allowing for
12 gradual recovery of the deferred balance in current rates. This gradual recovery will
13 reduce the amount that will ultimately be included in VEDO's subsequent base rate case.
14 In addition, the CEP Rider will support VEDO's continued investment in the
15 State of Ohio in a reasonable and economic manner. The effect of HB95 has been to
16 support growth in the economy of Ohio by encouraging and incenting utility investment,
17 and the CEP Rider would act as another tool to support these investments and the benefits
18 they provide.

19 **Q16. Please explain the components of the CEP Rider Revenue Requirement.**

20 A. The CEP Rider revenue requirement will be calculated using the total deferred balance as
21 of the end of the prior calendar year. This deferred balance is comprised of the deferred
22 depreciation expense on CEP investments, the accrued and deferred PISCC on CEP
23 investments, deferred property tax expense on CEP investments, and (as discussed
24 below) deferred Shared Asset Charge expense, less incremental revenues associated with

CEP investments. (I will discuss the Shared Asset Charge, and its inclusion within the CEP, in detail in the next section of my testimony.) The total deferred balance will be reduced by estimated deferred income taxes attributed to the deferred depreciation and PISCC. Attachment A, Schedule 1 to my testimony shows the calculation of the illustrative CEP Rider revenue requirement.

Q17. Are there assets currently in utility plant in service that are being retired as part of the CEP projects?

A. Yes. Each component of the deferral will include the impact of retirements attributed to CEP projects. For example, deferred depreciation expense is calculated on the net asset additions – the total costs recorded on the Work Order related to the new asset less the assets retired as a result of the project. Attachment A, Schedule 2 shows an illustrative calculation of the net CEP investments eligible for deferred treatment.

Q18. Please describe how the Deferred Depreciation Expense is calculated.

A. The deferred depreciation is calculated on eligible CEP investments consistent with VEDO's fixed asset policies and procedures. Costs attributed to a capital project are captured within a Project or Work Order within VEDO's Fixed Asset system, PowerPlant. The costs within a Work Order are booked within FERC Account 107, Construction Work in Progress (CWIP), until such time as the investments are complete and the assets are used and useful in providing utility service to VEDO customers. At that point, the Work Order is placed in-service, and the costs are transferred to FERC Account 101, Gas Plant In Service. This transfer to FERC Account 101 also identifies the appropriate FERC Plant Account for each cost component of the Work Order, assigning the costs to a specific asset type or category.

VEDO's Fixed Asset system calculates depreciation on the investment at the moment the Work Order is placed in-service. In that initial month, 50 percent of the Work Order costs (or Asset Costs at this point) are multiplied by the applicable depreciation rate assigned to the FERC Plant Account where the asset is assigned. The applicable depreciation rates will be those most recently approved by the Commission.[1] In each subsequent month, depreciation is calculated in full for each asset that remains in-service.

The formula for the deferred depreciation is as follows:

[(Previous Month's Cumulative Gross Plant Additions – Previous Month's Cumulative Retirements) + (50% x Current Month Plant Additions – 50% x Current Month Retirements)] x (Depreciation Rate / 12 months)

Attachment A, Exhibit Nos. 3a through 3e to my testimony reflect the illustrative calculation of the deferred depreciation on CEP investments.

Q19. Is the calculation of deferred depreciation the same one that VEDO has utilized for prior CEP deferrals?

A. Yes, this calculation matches what VEDO has used since the approval in the 12-530 Order, as disclosed in its annual reports.

Q20. Please describe how the Deferred PISCC is calculated.

A. Deferred PISCC is calculated on in-service CEP investments using a one-month lag approach. Once the Work Order is placed in-service, FERC requirements specify that the Allowance for Funds Used During Construction (AFUDC), which captures the financing costs (debt and equity) on the project during construction, ceases in the month the Work Order is complete. The accrual of PISCC will begin in the month following the completion of the Work Order.

[1] VEDO has filed a request to adjust its depreciation rates as part of its base rate case in Case No. 18-0298-GA-AIR.

The basis for the calculation will be the Net Plant Balance of CEP investments, which is calculated by taking the cumulative gross plant additions through the prior calendar month (net of retirements of existing assets) less the Accumulated Depreciation on these CEP Assets through the prior calendar month. This net plant balance is multiplied by VEDO's Cost of Long-Term Debt (Cost of Debt) established in its base rate proceeding[2] to determine the PISCC accrued for the current month.

The formula for the deferred PISCC is as follows:

[(Previous Month's Cumulative Gross Plant Additions – Previous Month's Cumulative Retirements) – (Previous Month's Accumulated Depreciation)] x (Cost of Long-Term Debt Rate / 12 months)

Attachment A, Schedule 4 shows the illustrative calculation of the PISCC deferral on eligible CEP investments.

Q21. Is the calculation of the PISCC deferral the same one that VEDO has utilized for prior CEP deferrals?

A. Yes, this calculation matches what VEDO has used since the approval in the 12-530 Order, as disclosed in its annual reports.

Q22. Please describe how the Deferred Property Tax Expense is calculated.

A. Deferred property tax expense is calculated based on the cumulative gross plant additions less cumulative retirements for the prior calendar year. Because VEDO's property tax expense reflects the liability in the current calendar year on prior year investments, any additions during the current year are not resulting in incremental property tax expense. For example, VEDO's 2018 property tax expense is based on VEDO's 2017 gross plant balance included within its property tax returns. Any 2018 additions would not create incremental property tax expense until 2019.

[2] VEDO's proposed base rates reflect a Cost of Debt of 5.07 percent in Case No. 18-0298-GA-AIR.

All eligible investments (additions less retirements) are multiplied by a Percent Good Adjustment, which is based on the State of Ohio's personal property tax tables by asset type. This adjustment recognizes the declining value of assets over time for tax purposes. The resulting net amount is multiplied by a valuation percentage of 25 percent, dictated by the Ohio Department of Taxation Annual Natural Gas Property Tax Report. Finally, this amount is then multiplied by the most recent available property tax rate for VEDO, calculated by taking the total property tax paid as a percentage of total taxable value of plant in service.

The formula for the deferred property tax expense is as follows:

[(Previous Month's Cumulative Gross Plant Additions – Previous Month's Cumulative Retirements)] x (Percent Good Adjustment) x (25%) x (Effective Property Tax Rate / 12 months)

Attachment A, Schedule 5 shows the illustrative calculation of the deferred property tax expense on eligible CEP investments.

Q23. Is the calculation of the deferred property tax expense the same one that VEDO has utilized for prior CEP deferrals?

A. Yes, this calculation matches what VEDO has used since the approval in the 12-530 Order, as disclosed in its annual reports.

Q24. Please explain how the Incremental Revenue Credit is calculated.

A. The Incremental Revenue Credit will be calculated in two components. For those Rate Schedules and customers subject to a straight fixed variable rate design, VEDO will compare actual annual customers against the Rate Case "baseline" customer count by Rate Schedule. If the actual customers are greater than the baseline, meaning VEDO has added more customers than it has lost since the Rate Case, VEDO will multiply the increase in customers by the cost portion of VEDO's base rates. The cost portion of

VEDO's base rates will exclude any equity return, and will be determined once base rates are approved in VEDO's Rate Case. If the actual customers are less than the baseline, meaning VEDO's net customer count has dropped since the Rate Case, then no incremental revenue adjustment is needed.

For those Rate Schedules with volumetric base rates and charges, VEDO will identify the CEP investments made that resulted in the extension of main to serve new customers. Any volumetric sales attributed to these investments will be multiplied by the cost portion of the applicable volumetric rates to determine the incremental revenue credit applied to the deferred balance.

The formula for calculating the Incremental Revenue Credit will be as follows:

[(Actual Customers – Baseline Customers) x (Cost Portion of Customer Charge)] + [(Additional Volumetric (CCF) Sales Attributed to CEP Investments) x (Cost Portion of Volumetric Rate)]

Attachment A, Schedule 7 shows the illustrative calculation of the incremental revenue credit associated with CEP investments.

Q25. Is the calculation of the incremental revenue credit essentially the same one that VEDO has utilized for prior CEP deferrals?

A. Yes. The formula for determining the incremental revenue credit is unchanged, but for the cost portion of the rates and charges, which is pending update in the Rate Case, applied to determine the appropriate revenue credit.

Q26. Please explain how the Deferred Taxes attributed to these deferred costs is calculated.

A. VEDO will include as part of the net CEP deferred balance the associated Deferred Income Taxes (DIT) attributed to the CEP deferred depreciation and PISCC. Under current tax laws, certain expenses like depreciation are treated differently for tax purposes than they are for book purposes, resulting in a DIT Liability. These deferred

1 taxes represent a cost-free source of funding for capital investments. VEDO will calculate
2 the associated DIT Liability for CEP investments by multiplying the deferred
3 depreciation and PISCC portion of the deferred balance by 21 percent (current Federal
4 statutory income tax rate), with the resulting amount becoming a reduction to the net
5 deferred balance on which VEDO will earn a return.

6 **Q27. What rate of return will be used to determine the return on the deferred balance?**

7 A. The rate of return applied to the net deferred balance will be the pre-tax rate of return
8 from VEDO's most recent base rate case. VEDO's proposed rates reflect a pre-tax rate of
9 return of 9.43 percent in the Rate Case proceeding. In the event this rate of return is
10 adjusted in the Rate Case, VEDO will adjust the CEP Rider revenue requirement
11 calculation to match the rate of return approved in the Rate Case.

12 **Q28. What Amortization rate is VEDO proposing to use for the deferred balance?**

13 A. VEDO proposes to use the composite depreciation rate of 3.10 percent, proposed within
14 its Rate Case proceeding. This is consistent with how VEDO has estimated the impact of
15 its CEP deferrals since the inception in the 12-530 Order. In the event this rate is adjusted
16 during the Rate Case, VEDO will adjust the CEP Rider revenue requirement to match the
17 approved composite depreciation rate.

18 **Q29. How will the Revenue Requirement be allocated amongst VEDO's Rate Schedules?**

19 A. VEDO will allocate the CEP Rider revenue requirement using the Rate Base allocations
20 from its proposed Cost of Service Study in its Rate Case proceeding. In the event these
21 allocations are updated during the Rate Case, VEDO will adjust the CEP Rider allocators
22 to match the final approved amounts. Attachment A, Schedule 10 shows the proposed
23 allocation percentages for the CEP Rider.

Q30. Please describe how the allocated CEP revenue requirement will be recovered from customers.

A. VEDO proposes to recover the allocated CEP revenue requirement from each Rate Schedule consistent with its current DRR rate design. For the Residential Rate Schedules (Rates 310, 311, and 315), VEDO will utilize a fixed charge per customer per month.

For the Group 1 customers in the General Service Rate Schedules (Rates 320, 321, and 325), VEDO will apply the ratio of the monthly base rate charge for Residential customers and General Service Group 1 customers to the CEP Rider charges. As an example, VEDO has proposed in the Rate Case a Residential Monthly Charge of $35.41 and a Group 1 Customer Charge of $46.19. The proposed Group 1 charge is approximately 130 percent of the Residential Monthly charge. In future CEP Rider proceedings, the proposed Residential CEP Rider charge will be multiplied by 130 percent (or other applicable ratio, depending on the respective charges approved in the Rate Case) to arrive at the Group 1 CEP Rider monthly charge.

The remaining revenue requirement for the General Service Rate Schedules, applicable to Group 2 and Group 3 customers, will be recovered via a volumetric (per CCF) rate.

For the large transportation Rate Schedules (Rate 345 and Rate 360, the allocated CEP revenue requirement will be recovered via a volumetric (per CCF) rate.

Attachment A, Schedule 11 shows the calculation of the illustrative CEP Rider rates and charges. VEDO is not proposing to implement these rates in this proceeding, and will make a filing on April 1, 2019, to seek initial CEP Rider rates and charges.

Q31. How will the CEP Rider recoveries be captured in the annual CEP revenue requirement calculation?

A. In each CEP Rider filing, VEDO will reduce the deferred balance by the amount authorized for recovery in the CEP Rider for the prior year.

V. SHARED ASSET CHARGE

Q32. What is the Shared Asset Charge?

A. The Shared Asset Charge reflects the cost of assets used by VEDO in the provision of regulated service, and owned by VEDO's parent, VUHI, in support of utility operations. VUHI owns specific assets that are used by all of VUHI's utility subsidiaries—for example, customer billing systems, financial systems, buildings and facilities. Because these assets serve a common utility purpose, it is more efficient and cost effective to have them centrally owned and operated. Without this consolidated approach, each utility subsidiary would be required to invest in the same kind of assets, and include these costs in rate base within its base rate proceedings. An individual, utility-specific approach to these investments would be duplicative and more costly, whether considered at the level of the individual utility or for the consolidated system as a whole. In contrast, the consolidated approach creates economies of scale, reducing the overall cost to each utility subsidiary.

The Shared Asset Charge results in the same treatment and rate impact that would be achieved if the assets or an allocated share of the assets were in rate base. The charge calculates a return on the net investment at the authorized rate of return for each utility subsidiary, and adds to this the depreciation expense and property tax expense associated with these shared assets. Each component (net asset balance and associated expenses) is

then allocated to VEDO (and the other utility subsidiaries) based on specific VUHI defined allocation rules, and charged to each utility as an operating expense. By design, however, this allocated expense has the same impact, both on VEDO's books and for ratemaking purposes, as if VEDO's share of the assets were held as plant in service.

Q33. Would these assets consolidated and held by VUHI be included in VEDO rate base absent the Shared Asset Charge treatment?

A. Yes. Without the consolidated approach, to provide adequate service to its customers, it would be necessary for VEDO to invest in the same assets, or the same kind of assets, and include these investments on its books as plant in service in rate base.

Q34. Assuming VEDO could directly own the same share of the same assets included in the Shared Asset Charge, would VEDO's rates and charges change?

A. No. As noted, the Shared Asset Charge mirrors the treatment that would exist if these assets, in full or in part, were included as plant in service on VEDO's general ledger. Customer rates and charges would continue to include a return on these investments at the approved rate of return, and recovery of depreciation and property tax on these investments.

Q35. Based on your understanding of R.C. 4929.111, would the underlying assets and investments reflected in the Shared Asset Charge be eligible for inclusion within VEDO's CEP?

A. Yes, subject to the review and approval of the Commission. As an example, a large component of the VUHI Shared Asset Charge reflects modifications, upgrades, and in some instances replacements of the utility customer billing systems and components. These investments, in accordance with Ohio Revised Code 4929.111, would be eligible capital expenditure program investments as a "program to install, upgrade, or replace information technology systems."

Q36. Earlier, you explained how the Shared Asset Charge is generally determined; please explain how the Shared Asset Charge will be calculated within the CEP.

A. As previously explained, the Shared Asset Charge is an operating expense for VEDO. This operating expense has been included for recovery in VEDO's base rates, both the current rates approved in Case No. 07-1080-GA-AIR and those proposed in the Rate Case, at a specific defined amount. However, the Shared Asset Charge in base rates is calculated using a full rate of return. To ensure compliance with the provisions of R.C. 4929.111, VEDO will calculate the carrying cost component of the Shared Asset Charge within the CEP using the cost of long-term debt approved in the Rate Case (the proposed rates reflect VEDO's cost of 5.07 percent).

Q37. Will VEDO annually include the entire Shared Asset Charge in the CEP?

A. No. VEDO proposes to include the Shared Asset Charge within the CEP deferral only to the extent the annually allocated investment used to calculate the Shared Asset Charge, and associated depreciation and property tax expenses, exceeds what was included for recovery in base rates, with necessary adjustments to reflect the application of the cost of long-term debt. If the actual Shared Asset Charge during a calendar year is in excess (or below) the baseline amount, the difference will be captured (or passed back) in the CEP Rider deferral.

Attachment A, Schedule 6 shows the illustrative calculation of the Shared Asset Charge deferral, along with the calculation of the proposed base rate level of the Shared Asset Charge to adjust for the use of long-term debt rate.

Q38. R.C. 4929.111(D) specifies that, if approved a capital expenditure program investment, a regulatory asset will be authorized to capture the PISCC on in-service assets, and depreciation and property tax expense attributed to the assets. Do you believe the Company's proposal to include the Shared Asset Charge complies with R.C. 4929.111(D)?

A. Yes. As explained earlier in my testimony, the Shared Asset Charge captures the same three components authorized for deferral and recovery under R.C. 4929.111(D): carrying costs on the net plant in service balance, depreciation expense attributed to this plant balance, and property tax expense attributed to this balance. The Company's proposal is to include only the amount of the Shared Asset Charge in excess of what is currently proposed to be recovered in VEDO's base rates and charges in the Rate Case, adjusted to reflect the PISCC at the cost of long-term debt. The depreciation and property tax component, when compared to the amounts in base rates, represent the incremental costs directly attributable to assets not yet included in rates.

The growth in net plant shown in the asset charge, when comparing to what is included in base rates, would be an investment made by VEDO that would otherwise qualify as eligible CEP investments *absent* the Shared Asset Charge treatment. As such, the calculated return (PISCC), depreciation, and property tax expense would be appropriately deferred in a regulatory asset under R.C. 4929.111(D).

Q39. Has VEDO included Shared Asset Charge deferrals in its prior CEP?

A. No, these costs were not included in VEDO's prior CEPs. As previously explained in my testimony, VEDO believes that the investments made at VUHI on behalf of utility operations, including VEDO, would constitute eligible CEP investments for R.C. 4929.111 authorized accounting treatment. Resetting the level of the Shared Asset Charge within VEDO's base rates provides an opportunity to review this treatment. As

such, VEDO is proposing to begin including these amounts within its deferred balance starting in 2018.

VI. ANNUAL FILING PROCESS

Q40. Please describe the annual CEP Rider filing process and timeline.

A. VEDO proposes to file annually on April 1 for an adjustment to its CEP Rider rates. The revenue requirement in the filing will be based on the total deferred balance through December 31 of the prior calendar year. As the following schedule shows, VEDO proposes that Commission Staff conduct its investigation over a sixty-day period, reviewing the deferral activity and CEP investments over the prior calendar year, at which point Staff will provide a report of its findings. VEDO, and other interested parties, would then have 14 days to respond to the report, and another week to resolve any issues raised in the comments. If any issues were not resolved, the Commission could then conduct a hearing. VEDO proposes to implement updated CEP Rider rates and charges by August 1 of each year.

Date[3]	Activity
April 1	File CEP Rider Application
June 1	Staff Report
June 15	Motions to Intervene and Comments by VEDO and Other Parties
June 22	Notification Whether Issues Raised in Comments Have Been Resolved
July	Hearing
August 1	Rate Effective Date

[3] These dates are approximate and may vary depending on weekends. VEDO expects that a specific procedural schedule would be established in each case.

As part of this annual CEP Rider filing, VEDO will also present its estimated CEP budget for the current calendar year (Attachment A, Schedule 9). In each subsequent CEP Rider filing, VEDO will provide a reconciliation of the actual CEP investments against the CEP budget, with explanations for significant variances (Attachment A, Schedule 8). This is consistent with how VEDO has presented its past annual reports under the CEP Orders. Going forward, the annual CEP Rider filing will replace the current annual reporting requirements under the CEP Orders.

Q41. Will VEDO reconcile the actual CEP Rider recoveries against the revenue requirement in each annual CEP filing?

A. Yes. VEDO will include a reconciliation of actual CEP Rider recoveries against the amounts authorized for recovery in each annual CEP filing, with any under- or over-recovery variance included for recovery (or pass-back) in each CEP Rider filing.

Q42. Will VEDO continue deferring eligible costs once the CEP Rider is established?

A. Yes. The CEP Rider will only recover past deferrals. As such, VEDO will continue to defer accrued PISCC, depreciation expense, and property tax expense, and with Commission approval will begin deferring Shared Asset Charge expense, until such point as the CEP investments and the associated costs are included for recovery within base rates.

Q43. Will the CEP Rider include recovery of deferrals on CEP investments during the pendency of the Rate Case?

A. Yes. The deferred balance included for recovery in future CEP Rider filings will include any deferrals on CEP investments through December 31, 2017, until such point as base rates are approved in the Rate Case. At that point, deferrals on these investments will cease.

VII. CUSTOMER IMPACTS

Q44. Has VEDO prepared an estimate of the impact of the CEP Rider on its customers?

A. Yes. Attachment A to my testimony presents an example calculation of the CEP Rider for 2018 investments, resulting in estimated customer rates on Schedule 11. For the Residential Rate Schedules, the estimated impacted of the CEP Rider for 2018 deferrals is $0.06 per customer per month. As noted previously, this does not reflect VEDO's initial proposed CEP Rider rate; rather, this provides an example of the estimate of the initial rate based on current projections and reflecting current assumptions, including some that may be modified during the Rate Case. The actual rate will be calculated, based on updated, actual figures, and filed on April 1, 2019, for Commission approval.

VIII. STATUTORY REQUIREMENTS

Q45. Under R.C. 4929.05, before the Commission may approve the Alternative Rate Plan, it must find that VEDO complies with R.C. 4905.35. In your opinion, what facts show that VEDO complies with Section 4905.35, Revised Code?

A. R.C. 4905.35 (*1*) prohibits a public utility from making or giving any undue or unreasonable preference or advantage to any person, corporation, or locality; (*2*) prohibits a public utility from subjecting any person, corporation, or locality to any undue or unreasonable prejudice or disadvantage; (*3*) requires that natural gas companies offer their regulated services or goods to all similarly situated consumers under comparable terms and conditions, including persons with which it is affiliated or which it controls; (*4*) requires that natural gas companies that offer bundled services that include both regulated and unregulated services or goods offer the regulated services or goods on an unbundled basis of the same quality as, or better quality than, the bundled service; and (*5*) prohibits

natural gas companies from conditioning or limiting the availability of any regulated services or goods on the basis of the identity of the supplier of any other services or goods or on the purchase of any unregulated services or goods from the company.

I am not aware of any facts that suggest VEDO does not comply with R.C. 4905.35. I am generally familiar with VEDO's management, operations, and the services that it provides. VEDO makes its public utility services available on a comparable and nondiscriminatory basis. VEDO does not make or give any undue or unreasonable preference or advantage to any person, corporation, or locality, or subject any person, firm, corporation, or locality to any undue or unreasonable prejudice or disadvantage.

Likewise, VEDO offers its regulated services or goods under comparable terms and conditions to all similarly-situated consumers, including persons with which it is affiliated or which it controls. This is evidenced by VEDO's Supplier Code of Conduct and Affiliate Code of Conduct (see VEDO Tariff for Gas Service, Sheets No. 52 and No. 72), and VEDO has applied these principles in developing its service offerings, the terms and conditions upon which it provides public utility service, and its rates.

Moreover, VEDO does not presently have any bundled service offerings that include a regulated and unregulated service.

Finally, VEDO does not condition or limit the availability of any regulated services or goods, including any discounted rates or quality, price, terms, or condition of its service or goods, on the basis of the identity of the supplier of any other services or goods, or on the purchase of any unregulated services or goods from VEDO.

Q46. R.C. 4929.05 also requires VEDO to show that it substantially complies with the state policies set forth in R.C. 4929.02 and that it expects to remain in compliance with those policies after the Alternate Rate Plan is implemented. In your opinion, does VEDO substantially comply with state policy, and what facts show that it does?

A. In my opinion, VEDO substantially complies with state policy. Ohio's policy promotes, among other things, the availability of adequate, reliable, and reasonably priced services and goods as well as the unbundling and comparability of those services and goods. It supports effective choices for supplies and suppliers; encourages market access to supply- and demand-side services and goods; and acknowledges the importance of effective competition and the regulatory treatment needed to support competition.

The Alternative Rate Plan exhibits discuss how the Plan supports state policy. These exhibits were prepared under my supervision. I can verify that the statements contained in those exhibits are true and correct.

Q47. Finally, R.C. 4929.05 requires the Commission to find that VEDO's proposal is just and reasonable. Do you believe that the Alternative Rate Plan is just and reasonable?

A. Yes, for the reasons stated above and in the Alternative Rate Plan exhibits.

IX. CONCLUSION

Q48. Does that conclude your prepared direct testimony?

A. Yes, it does.

FOR ILLUSTRATIVE PURPOSES ONLY

VECTREN ENERGY DELIVERY OF OHIO, INC.
CAPITAL EXPENDITURE PROGRAM (CEP) RIDER
CUMULATIVE REVENUE REQUIREMENT CALCULATION
AS OF DECEMBER 31, 2018

Line No.	Description		Balance at 12/31/2018	Reference
1	Deferred Depreciation Expense	$	679,529	Schedule 3a, Line 1 + Schedule 3b, Line 1 + Schedule 3c, Line 1 + Schedule 3d, Line 1 + Schedule 3e, Line 1
2	Deferred PISCC	$	970,898	Schedule 4, Line 6
3	Deferred Property Tax Expense	$	-	Schedule 5, Line 6 [1]
4	Deferred Shared Service Asset Charge Expense	$	632,430	Schedule 6, Line 2
5	Incremental Revenue Offset Deferral	$	-	Schedule 7, Line 5 [2]
6	Total Deferred CEP Amounts	$	2,282,857	Sum of Lines 1 - 5
7	Deferred Taxes - Depreciation	$	(142,701)	Line 1 x -21%
8	Deferred Taxes - PISCC	$	(203,889)	Line 2 x -21%
9	Net Cumulative Deferred CEP Amounts	$	1,936,267	Sum of Lines 6 - 8
10	Rate of Return		9.43%	Pre-Tax rate of return proposed in Case No. 18-0298-GA-AIR
11	**Pre-Tax Return on Deferred CEP Amounts**	**$**	**182,590**	Line 9 x Line 10
12	Amortization of Deferred Depreciation Regulatory Asset	$	21,065	Line 1 x 3.10% [3]
13	Amortization of Deferred PISCC Regulatory Asset	$	30,098	Line 2 x 3.10% [3]
14	Amortization of Deferred Property Tax Regulatory Asset	$	-	Line 3 x 3.10% [3]
15	Amortization of Deferred Shared Service Asset Charge Regulatory Asset	$	19,605	Line 4 x 3.10% [3]
16	Amortization of Deferred Revenue Offset Regulatory Asset	$	19,605	Line 5 x 3.10% [3]
17	**Total Annual Revenue Requirement**	**$**	**272,963**	**Sum of Lines 11 - 16**

[1] As proposed in Case No. 18-0298-GA-AIR, VEDO will accrue property tax expense one year in arrears; therefore, no property tax will be deferred in 2018. Property tax expense deferred in 2019 will be based on assets placed in service as of December 31,2018.
[2] VEDO has not estimated incremental revenues associated with approved CEP projects; however, VEDO commits to offsetting the deferred costs with incremental revenues consistent with the methodology presented in Case No. 18-0049-GA-ALT.
[3] VEDO used the composite depreciation rate as proposed in Case No. 18-0298-GA-AIR.

FOR ILLUSTRATIVE PURPOSES ONLY

VECTREN ENERGY DELIVERY OF OHIO, INC.
CAPITAL EXPENDITURE PROGRAM (CEP)
MONTHLY CEP INVESTMENTS
FOR THE 12 MONTHS - JANUARY 2018-DECEMBER 2018

Description: Report on all CEP Investments placed in-service
Represents Net Asset Balance eligible for Accounting Authority.

[A] Cumulative Balance
Description: Net Cumulative Asset Balance eligible for Accounting treatment proposed in 18-0298-GA-UNC.
Calculation: Prior Month Asset Balance + Current Month Asset Activity

Line No.	Budget Category	Beg Balance 1/1/2018	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	Balance at 12/31/2018
1	Infrastructure Expansion	$ -	$ 627,746	$ 1,480,793	$ 2,436,582	$ 3,189,618	$ 3,735,531	$ 4,686,786	$ 5,320,207	$ 6,252,913	$ 7,231,394	$ 8,102,394	$ 9,051,016	$ 10,689,562
2	Infrastructure Improvement	$ -	$ 163,157	$ 993,504	$ 2,429,254	$ 4,452,033	$ 5,369,410	$ 6,587,056	$ 7,288,833	$ 8,540,319	$ 10,396,255	$ 10,943,747	$ 12,476,795	$ 13,648,471
3	Programs Reasonably Necessary to Comply	$ -	$ 169,690	$ 497,626	$ 1,275,998	$ 1,645,107	$ 2,135,252	$ 2,776,548	$ 3,353,676	$ 4,013,649	$ 4,477,724	$ 5,219,091	$ 5,791,051	$ 7,415,365
4	Federal Pipeline Safety Requirements	$ -	$ 354,951	$ 482,336	$ 685,849	$ 825,413	$ 901,764	$ 1,253,283	$ 2,454,663	$ 3,563,823	$ 5,412,595	$ 10,515,831	$ 11,121,365	$ 15,259,946
5	Distribution Replacement	$ -	$ 364,417	$ 937,755	$ 1,745,981	$ 2,344,205	$ 2,977,028	$ 3,735,134	$ 4,449,042	$ 5,038,845	$ 5,824,105	$ 6,605,305	$ 7,210,690	$ 8,222,985
6	Total CEP In-Service	$ -	$ 1,679,960	$ 4,392,014	$ 8,573,665	$ 12,456,377	$ 15,108,984	$ 19,038,808	$ 22,866,422	$ 27,409,548	$ 33,342,072	$ 41,386,367	$ 45,650,918	$ 55,236,330

[B] Monthly Activity - Net Assets
Description: Monthly activity for all Assets placed in-service and eligible for Accounting Treatment
Calculation: Total Asset Activity [C] + Total Retirement Activity [D]

	Budget Category	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	12/31/2018	Activity for Twelve Months Ended 12/31/2018
7	Infrastructure Expansion	$ 627,746	$ 853,048	$ 955,789	$ 753,036	$ 545,912	$ 951,256	$ 633,421	$ 932,706	$ 978,480	$ 871,000	$ 948,622	$ 1,638,547	$ 10,689,562
8	Infrastructure Improvement	$ 163,157	$ 830,346	$ 1,435,751	$ 2,022,779	$ 907,377	$ 1,227,646	$ 701,777	$ 1,251,485	$ 1,855,936	$ 547,492	$ 1,533,048	$ 1,171,675	$ 13,648,471
9	Programs Reasonably Necessary to Comply	$ 169,690	$ 327,936	$ 778,372	$ 368,110	$ 490,144	$ 641,297	$ 577,128	$ 659,972	$ 464,075	$ 741,367	$ 571,961	$ 1,624,314	$ 7,415,365
10	Federal Pipeline Safety Requirements	$ 354,951	$ 127,385	$ 203,514	$ 139,564	$ 76,351	$ 351,519	$ 1,201,380	$ 1,109,160	$ 1,848,772	$ 5,103,236	$ 605,533	$ 4,138,581	$ 15,259,946
11	Distribution Replacement	$ 364,417	$ 573,338	$ 808,226	$ 598,224	$ 632,823	$ 758,107	$ 713,907	$ 589,803	$ 785,260	$ 781,200	$ 605,386	$ 1,012,295	$ 8,222,985
12	Total CEP In-Service Activity - Net Assets	$ 1,679,960	$ 2,712,053	$ 4,181,651	$ 3,882,713	$ 2,652,607	$ 3,929,824	$ 3,827,614	$ 4,543,126	$ 5,932,524	$ 8,044,295	$ 4,264,550	$ 9,585,412	$ 55,236,330

[C] Monthly Activity - Assets (Total)
Description: Monthly activity for all Assets placed in-service.
Source: WP 3.1

	Budget Category	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	12/31/2018	Activity for Twelve Months Ended 12/31/2018
13	Infrastructure Expansion	$ 627,748	$ 853,048	$ 955,789	$ 753,393	$ 557,933	$ 951,890	$ 633,421	$ 932,740	$ 978,925	$ 859,598	$ 949,423	$ 1,701,985	$ 10,755,891
14	Infrastructure Improvement	$ 174,354	$ 840,024	$ 1,501,471	$ 2,051,665	$ 902,888	$ 1,244,320	$ 713,129	$ 1,271,267	$ 1,912,238	$ 559,473	$ 1,580,753	$ 1,197,768	$ 13,949,351
15	Programs Reasonably Necessary to Comply	$ 202,637	$ 368,991	$ 797,335	$ 413,069	$ 554,278	$ 707,584	$ 671,461	$ 706,164	$ 662,007	$ 783,273	$ 563,404	$ 1,720,404	$ 8,150,608
16	Federal Pipeline Safety Requirements	$ 355,079	$ 128,057	$ 215,858	$ 144,333	$ 62,224	$ 383,180	$ 1,204,864	$ 1,142,218	$ 1,918,108	$ 5,096,377	$ 584,971	$ 4,172,788	$ 15,508,054
17	Distribution Replacement	$ 376,414	$ 616,551	$ 819,722	$ 611,232	$ 664,388	$ 773,994	$ 725,529	$ 608,071	$ 793,531	$ 797,239	$ 616,225	$ 1,033,451	$ 8,436,346
18	Total CEP In-Service Activity - Gross Assets	$ 1,736,232	$ 2,806,671	$ 4,290,172	$ 3,973,693	$ 2,741,711	$ 4,060,968	$ 3,948,403	$ 4,660,460	$ 6,264,809	$ 8,095,961	$ 4,394,775	$ 9,826,397	$ 56,800,252

[D] Monthly Activity - Retirements (Total)
Description: Monthly activity for all Retirements processed.
Source: WP 3.2

	Budget Category	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	12/31/2018	Activity for Twelve Months Ended 12/31/2018
19	Infrastructure Expansion	$ (3)	$ -	$ -	$ (357)	$ (12,021)	$ (634)	$ 1	$ (34)	$ (444)	$ 11,402	$ (801)	$ (63,438)	$ (68,329)
20	Infrastructure Improvement	$ (11,197)	$ (9,678)	$ (65,720)	$ (28,887)	$ 4,489	$ (16,674)	$ (11,352)	$ (19,782)	$ (56,302)	$ (11,981)	$ (47,704)	$ (26,093)	$ (300,881)
21	Programs Reasonably Necessary to Comply	$ (32,948)	$ (41,055)	$ (18,963)	$ (43,959)	$ (64,134)	$ (66,287)	$ (94,333)	$ (46,192)	$ (197,932)	$ (41,906)	$ 8,557	$ (96,090)	$ (735,242)
22	Federal Pipeline Safety Requirements	$ (128)	$ (672)	$ (12,342)	$ (4,768)	$ 14,127	$ (31,661)	$ (3,484)	$ (33,058)	$ (69,336)	$ 6,859	$ (79,437)	$ (34,207)	$ (248,108)
23	Distribution Replacement	$ (11,997)	$ (43,213)	$ (11,495)	$ (13,009)	$ (31,565)	$ (15,887)	$ (11,621)	$ (18,268)	$ (8,271)	$ (18,040)	$ (10,839)	$ (21,156)	$ (213,361)
24	Total CEP In-Service Activity - Retirements	$ (56,272)	$ (94,618)	$ (108,521)	$ (90,980)	$ (89,104)	$ (131,144)	$ (120,789)	$ (117,334)	$ (332,285)	$ (51,655)	$ (130,225)	$ (240,985)	$ (1,563,921)

VEDO EXHIBIT NO. 14.0
ATTACHMENT A

FOR ILLUSTRATIVE PURPOSES ONLY

VECTREN ENERGY DELIVERY OF OHIO, INC.
CAPITAL EXPENDITURE PROGRAM (CEP)
DEFERRED DEPRECIATION
INFRASTRUCTURE EXPANSION
FOR THE 12 MONTHS - JANUARY 2018-DECEMBER 2018

Description: Provide detailed calculation of deferred depreciation on CEP investments
Represents the Deferred Depreciation on Infrastructure Expansion.

[A] Cumulative Balance
Description: Cumulative Deferred Depreciation Balance for Infrastructure Expansion
Calculation: Prior Month Deferred Balance + Current Month Deferred Depreciation

Line No.	Budget Category	Beg Balance 1/1/2018	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	Balance at 12/31/2018
1	Infrastructure Expansion - Deferred Depreciation	$ -	$ 904	$ 3,917	$ 9,443	$ 17,312	$ 27,010	$ 38,748	$ 52,622	$ 68,656	$ 87,303	$ 108,608	$ 132,527	$ 159,883

[B] Net Plant Additions Eligible for Deferred Depreciation
Description: Monthly Activity of Net Plant Additions for Infrastructure Expansion
Source: Schedule 2

	Utility Account	1/1/2018	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	12/31/2018	Activity for Twelve Months Ended 12/31/2018
2	667 Mains	$ -	$ 429.18	$ 7.96	$ (898.00)	$ 272.18	$ 87	$ -	$ (361)	$ 1	$ -	$ -	$ -	$ 482	$ -
3	669 Meas & Reg Station Equip	$ -	$ -	$ -	$ -	$ 18,021.54	$ 572	$ 624	$ 627	$ 17	$ 107	$ -	$ -	$ -	$ 20,168
4	674.2 Land Rights	$ -	$ -	$ -	$ -	$ 27,725.45	$ 880	$ 1,267	$ 964	$ 26	$ 164	$ -	$ -	$ -	$ 31,027
6	676 Mains	$ -	$ 154,978.25	$ 279,162.85	$ 388,042.35	$ 234,418.62	$ 127,161	$ 500,930	$ 186,500	$ 392,934	$ 371,535	$ 139,407	$ 379,800	$ 671,209	$ 3,826,077
6	678 Meas & Reg Station Eq-Gen	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
7	680 Services	$ -	$ 423,053.57	$ 531,998.20	$ 529,491.99	$ 449,573.04	$ 389,638	$ 420,756	$ 379,709	$ 504,927	$ 533,677	$ 712,580	$ 515,876	$ 886,194	$ 6,277,473
8	681 Meters	$ -	$ -	$ 3.35	$ -	$ -	$ -	$ -	$ (7)	$ -	$ (3)	$ -	$ 5	$ 2	$ -
9	682 Meter Installations	$ -	$ 24,642.30	$ 26,342.07	$ 19,514.87	$ 12,870.72	$ 16,381	$ 14,635	$ 32,977	$ 2,088	$ 36,906	$ 14,318	$ 29,102	$ 42,630	$ 271,407
10	683 House Regulators	$ -	$ 24,642.31	$ 15,533.44	$ 19,637.36	$ 10,154.87	$ 12,193	$ 12,844	$ 33,013	$ 32,712	$ 36,095	$ 4,695	$ 23,840	$ 38,050	$ 263,410
11	685 Indus Meas & Reg St Equip	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
12	689.1 Land and Land Rights	$ -	$ -	$ -	$ -	$ -	$ (0.00)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (0)
13	690 Structures & Improvements	$ -	$ -	$ -	$ -	$ -	$ (0.00)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (0)
14	Total Infrastructure Expansion	$ -	$ 827,746	$ 853,048	$ 955,789	$ 753,036	$ 545,912	$ 951,256	$ 633,421	$ 932,706	$ 978,480	$ 871,000	$ 948,622	$ 1,638,547	$ 10,689,562

[C] Deferred Depreciation Calculation
Description: Deferred Depreciation Calculation by Month
Calculation: Prior Month Asset Balance x Depreciation Rate/12 Months + Current Month Asset Activity x 50% x Depreciation Rate/12 Months

	Utility Account	Depreciation Rate [1]	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	12/31/2018	Activity for Twelve Months Ended 12/31/2018
13	667 Mains	2.57%	$ 0	$ 1	$ (0)	$ (1)	$ (0)	$ (0)	$ (1)	$ (1)	$ (1)	$ (1)	$ (1)	$ (0)	$ (5)
14	669 Meas & Reg Station Equip	2.00%	$ -	$ -	$ -	$ 15	$ 31	$ 32	$ 33	$ 33	$ 34	$ 34	$ 34	$ 34	$ 278
15	674.2 Land Rights	1.43%	$ -	$ -	$ -	$ 17	$ 34	$ 35	$ 36	$ 37	$ 37	$ 37	$ 37	$ 37	$ 306
16	676 Mains	2.57%	$ 166	$ 631	$ 1,345	$ 2,012	$ 2,399	$ 3,072	$ 3,808	$ 4,428	$ 5,247	$ 5,794	$ 6,350	$ 7,475	$ 42,727
17	678 Meas & Reg Station Eq-Gen	2.00%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
18	680 Services	3.85%	$ 679	$ 2,211	$ 3,914	$ 5,484	$ 6,830	$ 8,130	$ 9,414	$ 10,834	$ 12,500	$ 14,499	$ 16,469	$ 18,719	$ 109,682
19	681 Meters	3.25%	$ -	$ 0	$ 0	$ 0	$ 0	$ 0	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)
20	682 Meter Installations	3.00%	$ 31	$ 95	$ 152	$ 192	$ 228	$ 265	$ 326	$ 369	$ 417	$ 481	$ 536	$ 625	$ 3,715
21	683 House Regulators	2.78%	$ 29	$ 75	$ 116	$ 150	$ 176	$ 205	$ 258	$ 334	$ 414	$ 461	$ 494	$ 566	$ 3,280
22	685 Indus Meas & Reg St Equip	2.20%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
23	689.1 Land and Land Rights	1.54%	$ -	$ -	$ -	$ -	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)
24	690 Structures & Improvements	2.10%	$ -	$ -	$ -	$ -	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)
	Total Infrastructure Expansion Deferred Depreciation		$ 904	$ 3,012	$ 5,526	$ 7,869	$ 9,697	$ 11,739	$ 13,874	$ 16,034	$ 18,647	$ 21,305	$ 23,919	$ 27,456	$ 159,983

[1] FERC Account specific depreciation rate proposed in Case No. 18-0298-GA-AIR.

VEDO EXHIBIT NO. 14.0
ATTACHMENT A

FOR ILLUSTRATIVE PURPOSES ONLY

VECTREN ENERGY DELIVERY OF OHIO, INC.
CAPITAL EXPENDITURE PROGRAM (CEP)
DEFERRED DEPRECIATION
INFRASTRUCTURE IMPROVEMENT
FOR THE 12 MONTHS - JANUARY 2018-DECEMBER 2018

Description: Provide detailed calculation of deferred depreciation on CEP Investment
Represents the Deferred Depreciation on Infrastructure Improvemer

Line No.

[A] Cumulative Balance
Description: Cumulative Deferred Depreciation Balance for Infrastructure Improvement
Calculation: Prior Month Deferred Balance + Current Month Deferred Depreciation

	Budget Category	Beg Balance 1/1/2018	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	Balance at 12/31/2018
1	Infrastructure Improvement - Deferred Depreciation	$ -	$ 200	$ 1,596	$ 5,632	$ 13,369	$ 24,168	$ 37,405	$ 52,871	$ 70,620	$ 92,035	$ 118,251	$ 142,908	$ 172,711

[B] Net Plant Additions Eligible for Deferred Depreciation
Description: Monthly Activity of Net Plant Additions for Infrastructure Improvemer
Source: Schedule 2

	Utility Account	1/1/2018	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	12/31/2018	Activity for Twelve Months Ended 12/31/2018
1	665.1 Rights-of-Way	$ -	$ -	$ 1	$ 43	$ 72,048	$ 1,416	$ 1,165	$ 159	$ (42)	$ 121	$ 214	$ (128)	$ (27)	$ 74,969
2	665.2 Rights-of-Way	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
3	666.2 Meas & Reg Station Strct	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
4	667 Mains	$ -	$ (97,704.27)	$ 124,568	$ 98,966	$ 767,171	$ (32,123)	$ 14,118	$ 14,593	$ (5,802)	$ 6,536	$ 19,471	$ (159,413)	$ 114,034	$ 884,414
5	669 Meas & Reg Station Equip	$ -	$ 840.73	$ 38	$ 3,743	$ 484,400	$ 13,075	$ 4,893	$ 2,491	$ 9,135	$ 3,059	$ 10,592	$ 255	$ 11,954	$ 544,478
6	674.2 Land Rights	$ -	$ 4,659.20	$ -	$ 4,580	$ -	$ -	$ 3,433	$ -	$ (482)	$ 0	$ -	$ -	$ (4,661)	$ 7,529
7	675 Structures & Improvements	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (956)	$ -	$ -	$ -	$ (956)
8	676 Mains	$ -	$ 115,593.82	$ 215,786	$ 795,180	$ 335,873	$ 692,164	$ 586,567	$ 325,465	$ 553,481	$ 996,779	$ 407,902	$ 835,959	$ 634,152	$ 6,494,882
9	678 Meas & Reg Station Eq-Gen	$ -	$ 1,673.29	$ 5,084	$ 20,584	$ 30	$ 5,340	$ 29,667	$ 8,672	$ (1,601)	$ (22,248)	$ 4,030	$ (2,038)	$ 69,773	$ 115,967
10	679 Meas & Reg Station Eq-Cit	$ -	$ -	$ -	$ -	$ -	$ -	$ (1,451)	$ -	$ -	$ -	$ -	$ -	$ -	$ (1,451)
11	680 Services	$ -	$ 10,069.23	$ 8,967	$ 65,923	$ 15,958	$ 2,409	$ 5,676	$ (44,967)	$ 51,749	$ 61,748	$ 41,092	$ 48,214	$ 66,778	$ 333,818
12	681 Meters	$ -	$ 1,213.42	$ 166,599	$ 421	$ 138,399	$ 3,451	$ 170,034	$ 20,383	$ 36,022	$ 104,306	$ 30,184	$ 87,057	$ 2,179	$ 760,248
13	682 Meter Installations	$ -	$ 126,812.25	$ 309,302	$ 446,309	$ 186,902	$ 221,645	$ 416,545	$ 374,981	$ 609,027	$ 706,679	$ 34,009	$ 723,142	$ 277,403	$ 4,434,755
14	683 House Regulators	$ -	$ (0.18)	$ -	$ 3	$ 0	$ -	$ -	$ -	$ 17	$ (89)	$ (3)	$ -	$ 89	$ 17
15	685 Indus Meas & Reg St Equip	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
16	Total Infrastructure Improvement	$ -	$ 183,157	$ 830,346	$ 1,435,751	$ 2,022,779	$ 907,377	$ 1,227,645	$ 701,777	$ 1,251,485	$ 1,855,936	$ 547,492	$ 1,533,048	$ 1,171,675	$ 13,648,471

[C] Deferred Depreciation Calculation
Description: Deferred Depreciation Calculation by Month
Calculation: Prior Month Asset Balance x Depreciation Rate/12 Months + Current Month Asset Activity x 50% x Depreciation Rate/12 Months

	Utility Account	Depreciation Rate [1]	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	12/31/2018	Activity for Twelve Months Ended 12/31/2018
17	665.1 Rights-of-Way	0.00%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
18	665.2 Rights-of-Way	1.43%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
19	666.2 Meas & Reg Station Strct	1.91%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
20	667 Mains	2.57%	$ (105)	$ (76)	$ 164	$ 1,112	$ 1,921	$ 1,902	$ 1,932	$ 1,942	$ 1,943	$ 1,970	$ 1,821	$ 1,772	$ 16,298
21	669 Meas & Reg Station Equip	2.00%	$ 1	$ 1	$ 5	$ 411	$ 826	$ 841	$ 847	$ 857	$ 887	$ 876	$ 887	$ 898	$ 7,319
22	674.2 Land Rights	1.43%	$ 3	$ 6	$ 8	$ 11	$ 11	$ 13	$ 15	$ 15	$ 15	$ 15	$ 15	$ 12	$ 137
23	675 Structures & Improvements	1.91%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (1)	$ (2)	$ (2)	$ (2)	$ (5)
24	676 Mains	2.57%	$ 124	$ 479	$ 1,561	$ 2,772	$ 3,873	$ 5,243	$ 6,219	$ 7,160	$ 8,820	$ 10,325	$ 11,657	$ 13,231	$ 71,464
25	678 Meas & Reg Station Eq-Gen	2.00%	$ 1	$ 7	$ 28	$ 46	$ 50	$ 77	$ 106	$ 112	$ 92	$ 77	$ 79	$ 135	$ 811
26	679 Meas & Reg Station Eq-Cit	2.00%	$ -	$ -	$ -	$ -	$ -	$ (1)	$ (2)	$ (2)	$ (2)	$ (2)	$ (2)	$ (2)	$ (16)
27	680 Services	3.65%	$ 16	$ 47	$ 167	$ 298	$ 328	$ 341	$ 278	$ 288	$ 471	$ 635	$ 779	$ 963	$ 4,610
28	681 Meters	3.25%	$ 2	$ 229	$ 455	$ 643	$ 835	$ 1,070	$ 1,328	$ 1,404	$ 1,594	$ 1,776	$ 1,935	$ 2,056	$ 13,328
29	682 Meter Installations	3.00%	$ 159	$ 704	$ 1,648	$ 2,442	$ 2,955	$ 3,753	$ 4,743	$ 5,673	$ 7,617	$ 8,543	$ 9,489	$ 10,740	$ 58,766
30	683 House Regulators	2.78%	$ (0)	$ (0)	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0	$ (0)	$ (0)	$ (0)	$ (0)	$ (0)
31	685 Indus Meas & Reg St Equip	2.20%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
32	Total Infrastructure Improvement		$ 200	$ 1,396	$ 4,036	$ 7,738	$ 10,799	$ 13,237	$ 15,466	$ 17,749	$ 21,415	$ 24,216	$ 26,657	$ 29,803	$ 172,711

[1] FERC Account specific depreciation rate proposed in Case No. 18-0298-GA-AIR.

VEDO EXHIBIT NO. 14.0
ATTACHMENT A

FOR ILLUSTRATIVE PURPOSES ONLY

VECTREN ENERGY DELIVERY OF OHIO, INC.
CAPITAL EXPENDITURE PROGRAM (CEP)
DEFERRED DEPRECIATION
PROGRAMS REASONABLY NECESSARY TO COMPLY
FOR THE 12 MONTHS - JANUARY 2018-DECEMBER 2018

Description: Provide detailed calculation of deferred depreciation on CEP Investments
Represents the Deferred Depreciation on Programs Reasonably Necessary to Comply

Line No.

[A] Cumulative Balance
Description: Cumulative Deferred Depreciation Balance for Programs Reasonably Necessary to Comply
Calculation: Prior Month Deferred Balance + Current Month Deferred Depreciation

	Budget Category	Beg Balance 1/1/2018	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	12/31/2018
1	Programs Reasonably Necessary - Deferred Depreciation	$ -	$ 263	$ 1,243	$ 3,897	$ 8,293	$ 13,969	$ 21,428	$ 31,065	$ 42,840	$ 56,463	$ 72,168	$ 89,996	$ 111,484

[B] Net Plant Additions Eligible for Deferred Depreciation
Description: Monthly Activity of Net Plant Additions for Programs Reasonably Necessary to Comply
Source: Schedule 1

	Utility Account	1/1/2018	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	12/31/2018	Activity for Twelve Months Ended 12/31/2018
2	603 Miscellaneous Int Plant	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
3	604.1 Land	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (117)	$ -	$ -	$ (117)
4	611.1 Liquid Petroleum Gas Eq.	$ -	$ 3,748	$ -	$ 141	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,889
5	611.3 Supply Lines Cav to Pit	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
6	665.1 Land and Land Rights	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
7	665.2 Rights-of-Way	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
8	669 Meas & Reg Station Equip	$ -	$ 272	$ -	$ 3,583	$ 1,666	$ -	$ 536	$ 81	$ 375	$ 4,712	$ 6,073	$ 19,500	$ 8,024	$ 44,822
9	674.1 Land	$ -	$ -	$ -	$ (11)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (11)
10	674.2 Land Rights	$ -	$ 3,284	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,284
11	674.4 Land Rights (25 yr Amortz)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
12	674.5 Land Rights (20 yr Amortz)	$ -	$ -	$ -	$ 16,808	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 16,808
13	675 Structures & Improvements	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (475)	$ -	$ 3,369	$ 2,894
14	678 Meas & Reg Station Eq-Gen	$ -	$ 543	$ -	$ 8,956	$ 3,075	$ 1,412	$ 475	$ 72	$ 4,879	$ 13,328	$ 2,149	$ (17,262)	$ (3,235)	$ 12,392
15	679 Meas & Reg Station Eq-Ct	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (2,749)	$ -	$ -	$ -	$ (2,749)
16	681 Meters	$ -	$ 132,529	$ 315,118	$ 642,995	$ 336,915	$ 416,295	$ 458,428	$ 346,516	$ 589,905	$ 456,590	$ 497,288	$ 325,416	$ 475,845	$ 4,992,840
17	682 Meter Installations	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
18	687 Other Equipment	$ -	$ -	$ -	$ -	$ -	$ 1,658	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 1,658
19	689.1 Land and Land Rights	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (71,956)	$ -	$ -	$ -	$ (71,956)
20	690 Structures & Improvements	$ -	$ (0)	$ -	$ 3,547	$ 1,518	$ (6,022)	$ 41,947	$ 5,290	$ 3,548	$ (60,695)	$ 13,217	$ 81,221	$ 482,513	$ 566,084
21	691.1 Electronic Equipment	$ -	$ -	$ -	$ -	$ -	$ 46	$ -	$ 19,822	$ -	$ 356	$ (52)	$ 5	$ -	$ 20,178
22	691.2 Furniture & Fixtures	$ -	$ 409	$ 963	$ 1,100	$ -	$ -	$ 571	$ (156)	$ -	$ (571)	$ -	$ 7,389	$ 40,653	$ 50,359
23	692.1 Automobiles	$ -	$ 14,381	$ -	$ 47,384	$ 5,823	$ 0	$ 80,887	$ 61,813	$ 43,911	$ 21,165	$ 42,980	$ 5,121	$ 42,037	$ 365,501
24	692.2 Light Trucks	$ -	$ (10,787)	$ -	$ 43,765	$ -	$ 62,910	$ 7,384	$ 123,223	$ 8,697	$ 76,475	$ 30,310	$ 88,617	$ 30,980	$ 441,572
25	692.3 Trailers	$ -	$ -	$ -	$ 412	$ 1,611	$ -	$ 2,302	$ 1,379	$ 1,088	$ 1,330	$ 1,569	$ (1,267)	$ 780	$ 9,164
26	692.4 Heavy Trucks	$ -	$ (1,984)	$ -	$ -	$ -	$ (2,031)	$ -	$ -	$ -	$ (2,103)	$ -	$ 33,903	$ 124,528	$ 152,302
27	694 Tools, Shop & Garage Equip	$ -	$ 11,996	$ 7,525	$ 3,265	$ 8,792	$ 15,024	$ 13,279	$ 9,020	$ 2,525	$ 16,921	$ 6,374	$ 31,336	$ 40,737	$ 166,792
28	696 Power Operated Equipment	$ -	$ 104	$ -	$ -	$ -	$ (2,030)	$ 33,030	$ (35,619)	$ 3,743	$ -	$ (82)	$ 9	$ 14,518	$ 13,673
29	697 Communication Equipment	$ -	$ 15,207	$ 4,331	$ 8,429	$ 2,343	$ 1,812	$ 2,171	$ 46,688	$ 1,322	$ 4,209	$ 1,582	$ 2,260	$ 339,829	$ 429,183
30	698 Miscellaneous Equipment	$ -	$ (1)	$ -	$ -	$ 7,365	$ 1,068	$ 2,288	$ -	$ -	$ 7,065	$ 140,549	$ 15,732	$ 22,737	$ 196,804
31	Total Programs Reasonably Necessary	$ -	$ 169,690	$ 327,936	$ 778,372	$ 369,110	$ 490,144	$ 641,297	$ 577,128	$ 659,972	$ 464,075	$ 741,367	$ 571,981	$ 1,624,314	$ 7,415,365

[C] Deferred Depreciation Calculation
Description: Deferred Depreciation Calculation by Month
Calculation: Prior Month Asset Balance x Depreciation Rate/12 Months + Current Month Asset Activity x 50% x Depreciation Rate/12 Months

	Utility Account	Depreciation Rate [1]	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	12/31/2018	Activity for Twelve Months Ended 12/31/2018
32	603 Miscellaneous Int Plant	0.00%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
33	604.1 Land	0.00%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
34	611.1 Liquid Petroleum Gas Eq.	3.50%	$ 5	$ 11	$ 11	$ 11	$ 11	$ 11	$ 11	$ 11	$ 11	$ 11	$ 11	$ 11	$ 130
35	611.3 Supply Lines Cav to Pit	2.10%	$ -	$ -	$ -	$ -	$ 3	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 3
36	665.1 Land and Land Rights	0.00%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
37	665.2 Rights-of-Way	1.43%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
38	669 Meas & Reg Station Equip	2.00%	$ 0	$ 0	$ 3	$ 8	$ 9	$ 10	$ 10	$ 11	$ 15	$ 24	$ 45	$ 88	$ 203
39	674.1 Land	0.00%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
40	674.2 Land Rights	1.43%	$ 2	$ 4	$ 4	$ 4	$ 4	$ 4	$ 4	$ 4	$ 4	$ 4	$ 4	$ 4	$ 45
41	674.4 Land Rights (25 yr Amortz)	4.00%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
42	674.5 Land Rights (20 yr Amortz)	5.00%	$ -	$ -	$ 35	$ 70	$ 70	$ 70	$ 70	$ 70	$ 70	$ 70	$ 70	$ 70	$ 665
43	675 Structures & Improvements	1.91%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (0)	$ (1)	$ 2	$ 1
44	678 Meas & Reg Station Eq-Gen	2.00%	$ 0	$ 1	$ 7	$ 15	$ 19	$ 20	$ 21	$ 25	$ 40	$ 53	$ 40	$ 23	$ 265
45	679 Meas & Reg Station Eq-Ct	2.00%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (2)	$ (5)	$ (5)	$ (5)	$ (16)
46	681 Meters	3.25%	$ 179	$ 786	$ 2,083	$ 3,410	$ 4,430	$ 5,812	$ 6,699	$ 7,967	$ 9,384	$ 10,676	$ 11,790	$ 12,877	$ 75,894
47	682 Meter Installations	3.00%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
48	687 Other Equipment	3.33%	$ -	$ -	$ -	$ -	$ 2	$ 5	$ 5	$ 5	$ 5	$ 5	$ 5	$ 5	$ 35
49	689.1 Land and Land Rights	1.54%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (46)	$ (92)	$ (92)	$ (92)	$ (323)
50	690 Structures & Improvements	2.10%	$ (0)	$ (0)	$ 3	$ 8	$ 4	$ 35	$ 76	$ 84	$ 34	$ (7)	$ 75	$ 568	$ 880
51	691.1 Electronic Equipment	6.67%	$ -	$ -	$ -	$ -	$ 0	$ 0	$ 55	$ 110	$ 111	$ 112	$ 112	$ 112	$ 614
52	691.2 Furniture & Fixtures	5.00%	$ 1	$ 4	$ 8	$ 10	$ 10	$ 11	$ 12	$ 12	$ 11	$ 10	$ 25	$ 125	$ 240
53	692.1 Automobiles	7.73%	$ 45	$ 93	$ 245	$ 417	$ 435	$ 696	$ 1,156	$ 1,496	$ 1,708	$ 1,912	$ 2,057	$ 2,219	$ 12,488
54	692.2 Light Trucks	6.54%	$ (29)	$ (59)	$ 60	$ 180	$ 351	$ 543	$ 899	$ 1,258	$ 1,490	$ 1,781	$ 2,051	$ 2,322	$ 10,847
55	692.3 Trailers	4.31%	$ -	$ -	$ 1	$ 4	$ 7	$ 11	$ 18	$ 22	$ 27	$ 32	$ 32	$ 32	$ 187
56	692.4 Heavy Trucks	5.63%	$ (5)	$ (9)	$ (9)	$ (9)	$ (14)	$ (19)	$ (19)	$ (19)	$ (24)	$ (29)	$ 51	$ 422	$ 317
57	694 Tools, Shop & Garage Equip	4.00%	$ 20	$ 53	$ 71	$ 91	$ 130	$ 177	$ 215	$ 234	$ 266	$ 305	$ 368	$ 488	$ 2,417
58	696 Power Operated Equipment	3.91%	$ 0	$ 0	$ 0	$ 0	$ (3)	$ 48	$ 43	$ (9)	$ (3)	$ (3)	$ (3)	$ 21	$ 93
59	697 Communication Equipment	6.67%	$ 42	$ 97	$ 132	$ 162	$ 174	$ 185	$ 318	$ 448	$ 464	$ 480	$ 490	$ 1,441	$ 4,432
60	698 Miscellaneous Equipment	5.00%	$ (0)	$ (0)	$ (0)	$ 15	$ 33	$ 40	$ 45	$ 45	$ 59	$ 367	$ 693	$ 773	$ 2,069
61	Total Programs Reasonably Necessary Deferred Depreciation		$ 263	$ 979	$ 2,654	$ 4,396	$ 5,676	$ 7,459	$ 9,638	$ 11,775	$ 13,623	$ 15,706	$ 17,829	$ 21,486	$ 111,484.29

[1] FERC Account specific depreciation rate proposed in Case No. 18-0298-GA-AIR.

VEDO EXHIBIT NO. 14.0
ATTACHMENT A

FOR ILLUSTRATIVE PURPOSES ONLY

VECTREN ENERGY DELIVERY OF OHIO, INC.
CAPITAL EXPENDITURE PROGRAM (CEP)
DEFERRED DEPRECIATION
FEDERAL PIPELINE SAFETY REQUIREMENTS
FOR THE 12 MONTHS - JANUARY 2018-DECEMBER 2018

Description: Provide detailed calculation of deferred depreciation on CEP Investments
Represents the Deferred Depreciation on Federal Pipeline Safety Requirements

[A] Cumulative Balance
Description: Cumulative Deferred Depreciation Balance for Federal Pipeline Safety Requirements
Calculation: Prior Month Deferred Balance + Current Month Deferred Depreciation

Line No.	Budget Category	Beg Balance 1/1/2018	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	Balance at 12/31/2018
1	Federal Pipeline Safety Requirements - Deferred Depreciation	$ -	$ 377	$ 1,260	$ 2,477	$ 4,053	$ 5,858	$ 8,106	$ 11,994	$ 18,271	$ 27,554	$ 43,962	$ 68,193	$ 93,171

[B] Net Plant Additions Eligible for Deferred Depreciation
Description: Monthly Activity of Net Plant Additions for Federal Pipeline Safety Requirements
Source: Schedule 1

	Utility Account	1/1/2018	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	12/31/2018	Activity for Twelve Months Ended 12/31/2018
2	665.1 Land and Land Rights	$ -	$ (16,170)	$ 1,643	$ (38)	$ (135)	$ 26	$ 354	$ (223)	$ 50	$ (177,249)	$ 173,043	$ 5,149	$ 27,138	$ 13,584
3	665.2 Rights-of-Way	$ -	$ 697	$ 65	$ 5	$ 2	$ 4	$ 3	$ 9	$ (904)	$ 2	$ 5,525	$ 435	$ 986	$ 6,830
4	666.2 Meas & Reg Station Strct	$ -	$ -	$ -	$ -	$ -	$ 3,784	$ -	$ -	$ (0)	$ -	$ -	$ -	$ -	$ 3,784
5	667 Mains	$ -	$ 240,977	$ 13,114	$ 27,578	$ 54,473	$ 31,634	$ (23,138)	$ 1,175,948	$ 743,749	$ 1,430,065	$ 3,914,608	$ 478,835	$ 2,672,546	$ 10,760,393
6	669 Meas & Reg Station Equip	$ -	$ 70,752	$ 7,907	$ 47,002	$ 3,398	$ 10,876	$ 98,583	$ 49,836	$ 197,542	$ 50,827	$ 427,913	$ 50,006	$ 1,119,797	$ 2,132,421
7	674.2 Land Rights	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 518,905	$ -	$ -	$ -	$ 518,905
8	676 Mains	$ -	$ 44,350	$ 75,364	$ 129,850	$ 85,585	$ 25,924	$ 237,511	$ (30,402)	$ 222,830	$ 13,095	$ 474,038	$ 123,859	$ 233,457	$ 1,635,521
9	678 Meas & Reg Station Equip-Gen	$ -	$ 13,520	$ 27,069	$ (1,818)	$ (4,205)	$ -	$ 15,820	$ -	$ -	$ 32,024	$ 814	$ 15,728	$ 33,574	$ 132,529
10	680 Services	$ -	$ 790	$ 2,012	$ 920	$ 410	$ 4,096	$ 23,567	$ 5,105	$ (55,953)	$ (16,205)	$ 106,887	$ (66,982)	$ 51,126	$ 53,775
11	681 Meters	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
12	682 Meter Installations	$ -	$ 33	$ 210	$ 13	$ 36	$ 8	$ 837	$ 1,107	$ 1,766	$ (692)	$ 408	$ (1,499)	$ (44)	$ 2,203
13	683 House Regulators	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
14	Total Federal Pipeline Safety Requirements	$ -	$ 354,951	$ 127,385	$ 203,514	$ 139,564	$ 76,351	$ 351,519	$ 1,201,380	$ 1,109,160	$ 1,848,772	$ 5,103,236	$ 605,533	$ 4,138,581	$ 15,259,946

[C] Deferred Depreciation Calculation
Description: Deferred Depreciation Calculation by Month
Calculation: Prior Month Asset Balance x Depreciation Rate/12 Months + Current Month Asset Activity x 50% x Depreciation Rate/12 Months

	Utility Account	Depreciation Rate [1]	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	12/31/2018	Activity for Twelve Months Ended 12/31/2018
15	665.1 Land and Land Rights	0.00%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
16	665.2 Rights-of-Way	1.43%	$ 0	$ 1	$ 1	$ 1	$ 1	$ 1	$ 1	$ 0	$ (0)	$ 3	$ 7	$ 8	$ 24
17	666.2 Meas & Reg Station Strct	1.91%	$ -	$ -	$ -	$ -	$ 3	$ 6	$ 8	$ 6	$ 8	$ 6	$ 6	$ 6	$ 45
18	667 Mains	2.57%	$ 258	$ 530	$ 574	$ 662	$ 754	$ 763	$ 1,997	$ 4,053	$ 8,381	$ 12,104	$ 16,809	$ 20,183	$ 65,067
19	669 Meas & Reg Station Equip	2.00%	$ 59	$ 125	$ 170	$ 212	$ 224	$ 314	$ 438	$ 642	$ 849	$ 1,248	$ 1,846	$ 2,621	$ 8,545
20	674.2 Land Rights	1.43%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 309	$ 618	$ 618	$ 618	$ 2,164
21	676 Mains	2.57%	$ 47	$ 176	$ 395	$ 628	$ 748	$ 1,028	$ 1,249	$ 1,456	$ 1,708	$ 2,230	$ 2,970	$ 3,253	$ 15,784
22	678 Meas & Reg Station Equip-Gen	2.00%	$ 11	$ 45	$ 66	$ 81	$ 58	$ 71	$ 84	$ 84	$ 111	$ 138	$ 152	$ 193	$ 1,073
23	680 Services	3.85%	$ 1	$ 6	$ 10	$ 13	$ 20	$ 64	$ 110	$ 29	$ (90)	$ 52	$ 116	$ 91	$ 421
24	681 Meters	3.25%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
25	682 Meter Installations	3.00%	$ 0	$ 0	$ 1	$ 1	$ 1	$ 2	$ 4	$ 8	$ 9	$ 9	$ 7	$ 6	$ 47
26	683 House Regulators	2.78%	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
27	Total Federal Pipeline Safety Requirements Deferred Depreciation		$ 377	$ 882	$ 1,218	$ 1,575	$ 1,806	$ 2,248	$ 3,888	$ 6,277	$ 9,282	$ 16,408	$ 22,231	$ 26,978	$ 93,171

[1] FERC Account specific depreciation rate proposed in Case No. 18-0298-GA-AIR.

VEDO EXHIBIT NO. 14.0
ATTACHMENT A

FOR ILLUSTRATIVE PURPOSES ONLY

VECTREN ENERGY DELIVERY OF OHIO, INC.
CAPITAL EXPENDITURE PROGRAM (CEP)
DEFERRED DEPRECIATION
DISTRIBUTION REPLACEMENT
FOR THE 12 MONTHS - JANUARY 2018-DECEMBER 2018

Description: Provide detailed calculation of deferred depreciation on CEP Investment
Represents the Deferred Depreciation on Distribution Replacement[2]

Line No.

[A] Cumulative Balance
Description: Cumulative Deferred Depreciation Balance for Distribution Replacement
Calculation: Prior Month Deferred Balance + Current Month Deferred Depreciation

	Budget Category	Balance at 1/1/2018	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	Balance at 12/31/2018
1	Distribution Replacement - Deferred Depreciation	$ -	$ 560	$ 2,561	$ 6,686	$ 13,040	$ 21,371	$ 31,826	$ 44,639	$ 59,590	$ 76,694	$ 96,244	$ 117,945	$ 142,180

[B] Net Plant Additions Eligible for Deferred Depreciation
Description: Monthly Activity of Net Plant Additions for Distribution Replacement
Source: Schedule 1

	Utility Account	1/1/2018	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	12/31/2018	Activity for Three Months Endec 12/31/2018
2	680 Services	$ -	$ 304,273	$ 474,894	$ 674,713	$ 682,443	$ 573,868	$ 543,112	$ 953,402	$ 512,791	$ 733,627	$ 669,166	$ 534,922	$ 931,799	$ 7,588,812
3	681 Meters	$ -	$ -	$ -	$ -	$ (1,033)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (1,033)
4	682 Meter Installations	$ -	$ 26,308	$ 51,354	$ 70,293	$ (118,838)	$ 11,466	$ 162,955	$ (327,401)	$ 48,382	$ 4,949	$ 56,655	$ 34,417	$ 36,508	$ 57,049
5	683 House Regulators	$ -	$ 33,835	$ 47,090	$ 63,220	$ 35,652	$ 47,689	$ 52,040	$ 87,906	$ 28,630	$ 46,684	$ 55,376	$ 36,047	$ 43,968	$ 578,157
6	Total Distribution Replacement	$ -	$ 364,417	$ 573,338	$ 808,226	$ 598,224	$ 632,823	$ 758,107	$ 713,907	$ 589,803	$ 785,260	$ 781,200	$ 605,386	$ 1,012,295	$ 8,222,985

[C] Deferred Depreciation Calculation
Description: Deferred Depreciation Calculation by Month
Calculation: Prior Month Asset Balance x Depreciation Rate/12 Months + Current Month Asset Activity x 50% x Depreciation Rate/12 Months

	Utility Account	Depreciation Rate [1]	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	12/31/2018	Activity for Three Months Endec 12/31/2018
7	680 Services	3.85%	$ 488	$ 1,738	$ 3,582	$ 5,759	$ 7,774	$ 9,566	$ 11,966	$ 14,318	$ 16,318	$ 18,568	$ 20,500	$ 22,853	$ 133,431
8	681 Meters	3.25%	$ -	$ -	$ -	$ (1)	$ (3)	$ (3)	$ (3)	$ (3)	$ (3)	$ (3)	$ (3)	$ (3)	$ (24)
9	682 Meter Installations	3.00%	$ 33	$ 130	$ 282	$ 221	$ 87	$ 305	$ 100	$ (249)	$ (183)	$ (108)	$ 8	$ 97	$ 726
10	683 House Regulators	2.78%	$ 39	$ 133	$ 261	$ 375	$ 472	$ 587	$ 749	$ 884	$ 972	$ 1,090	$ 1,195	$ 1,288	$ 8,047
11	Total Distribution Replacement Deferred Depreciation		$ 560	$ 2,001	$ 4,125	$ 6,354	$ 8,330	$ 10,455	$ 12,813	$ 14,951	$ 17,104	$ 19,550	$ 21,701	$ 24,235	$ 142,180

[1] FERC Account specific depreciation rate proposed in Case No. 18-0298-GA-AIR.
[2] Represents capital investment for Distribution Replacement activity not recovered via the Company's Distribution Replacement Rider (DRR) - as proposed in 18-0298-GA-AIR.

VEDO EXHIBIT NO. 14.0
ATTACHMENT A

FOR ILLUSTRATIVE PURPOSES ONLY

VECTREN ENERGY DELIVERY OF OHIO, INC.
CAPITAL EXPENDITURE PROGRAM (CEP)
POST IN-SERVICE CARRYING COSTS (PISCC)
FOR THE 12 MONTHS - JANUARY 2018-DECEMBER 2018

Description: Provide detailed calculation of post in-service carrying costs (PISCC) on CEP investments
Represents the deferred PISCC on eligible investments

Line No.

[A] Cumulative Balance
Description: Cumulative Deferred PISCC Balance for eligible CEP Investments
Calculation: Prior Month Deferred Balance + Current Month Deferred PISCC

	Budget Category	Balance at 1/1/2018	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	12/31/2018
1	Infrastructure Expansion - Deferred PISCC	$ -	$ -	$ 2,648	$ 8,888	$ 19,143	$ 32,546	$ 48,215	$ 67,853	$ 90,109	$ 116,237	$ 146,421	$ 180,195	$ 217,876
2	Infrastructure Improvement - Deferred PISCC	$ -	$ -	$ 688	$ 4,879	$ 15,119	$ 33,872	$ 56,413	$ 84,085	$ 114,657	$ 150,441	$ 193,978	$ 239,722	$ 291,833
3	Programs Reasonably Necessary to Comply - Deferred PISCC	$ -	$ -	$ 718	$ 2,813	$ 8,188	$ 15,104	$ 24,068	$ 35,706	$ 49,744	$ 66,521	$ 85,201	$ 106,947	$ 131,034
4	Federal Pipeline Safety Requirements - Deferred PISCC	$ -	$ -	$ 1,498	$ 3,531	$ 6,418	$ 9,888	$ 13,673	$ 18,934	$ 29,254	$ 44,234	$ 66,986	$ 111,230	$ 157,938
5	Distribution Replacement - Deferred PISCC	$ -	$ -	$ 1,537	$ 5,488	$ 12,837	$ 22,688	$ 35,174	$ 50,820	$ 69,428	$ 90,466	$ 114,749	$ 142,250	$ 172,217
6	Total CEP - Deferred PISCC	$ -	$ -	$ 7,087	$ 25,599	$ 61,705	$ 114,098	$ 177,541	$ 257,398	$ 353,193	$ 487,899	$ 607,333	$ 780,344	$ 970,898

[B] Net Plant Additions Eligible for Deferred PISCC
Description: Net Plant Addition Balance by Month for eligible CEP Investments
Source: Schedule 2

	Utility Account	Balance at 1/1/2018	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	12/31/2018	
7	Infrastructure Expansion	$ -	$ 627,746	$ 1,480,793	$ 2,436,582	$ 3,189,618	$ 3,735,531	$ 4,686,786	$ 5,320,207	$ 6,252,913	$ 7,231,394	$ 8,102,394	$ 9,051,016	$ 10,689,562	Schedule 2, Line 1
8	Infrastructure Improvement	$ -	$ 163,157	$ 993,504	$ 2,429,254	$ 4,452,033	$ 5,359,410	$ 6,587,056	$ 7,288,833	$ 8,540,319	$ 10,396,255	$ 10,943,747	$ 12,476,795	$ 13,648,471	Schedule 2, Line 2
9	Programs Reasonably Necessary to Comply	$ -	$ 169,690	$ 497,628	$ 1,275,998	$ 1,645,107	$ 2,135,252	$ 2,776,548	$ 3,353,678	$ 4,013,649	$ 4,477,724	$ 5,219,091	$ 5,791,061	$ 7,415,365	Schedule 2, Line 2
10	Federal Pipeline Safety Requirements	$ -	$ 354,951	$ 482,338	$ 685,849	$ 825,413	$ 901,764	$ 1,253,283	$ 2,454,663	$ 3,563,823	$ 5,412,595	$ 10,515,831	$ 11,121,385	$ 15,259,948	Schedule 2, Line 4
11	Distribution Replacement	$ -	$ 364,417	$ 937,755	$ 1,745,981	$ 2,344,205	$ 2,977,028	$ 3,735,134	$ 4,449,042	$ 5,038,845	$ 5,824,105	$ 6,605,305	$ 7,210,690	$ 8,222,985	Schedule 2, Line 5
12	Total CEP In-Service	$ -	$ 1,679,960	$ 4,392,014	$ 8,573,665	$ 12,456,377	$ 15,108,984	$ 19,038,808	$ 22,866,422	$ 27,409,548	$ 33,342,072	$ 41,386,387	$ 45,550,918	$ 55,236,330	

[C] Accumulated Depreciation on Net Plant Additions
Description: Accumulated Depreciation Balance by Month on eligible CEP Investments
Source: Schedule 3a, Schedule 3b, Schedule 3c, Schedule 3d, Schedule 3e

	Utility Account	Balance at 1/1/2018	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	12/31/2018	
13	Infrastructure Expansion	$ -	$ (904)	$ (3,917)	$ (9,443)	$ (17,312)	$ (27,010)	$ (38,748)	$ (52,622)	$ (68,658)	$ (87,303)	$ (108,608)	$ (132,527)	$ (159,983)	Schedule 3a, Line 1
14	Infrastructure Improvement	$ -	$ (200)	$ (1,596)	$ (5,632)	$ (13,359)	$ (24,186)	$ (37,405)	$ (52,871)	$ (70,620)	$ (92,035)	$ (116,251)	$ (142,908)	$ (172,711)	Schedule 3b, Line 1
15	Programs Reasonably Necessary to Comply	$ -	$ (263)	$ (1,243)	$ (3,897)	$ (8,293)	$ (13,969)	$ (21,428)	$ (31,065)	$ (42,840)	$ (56,463)	$ (72,168)	$ (89,998)	$ (111,484)	Schedule 3c, Line 1
16	Federal Pipeline Safety Requirements	$ -	$ (377)	$ (1,260)	$ (2,477)	$ (4,053)	$ (5,858)	$ (8,106)	$ (11,994)	$ (18,271)	$ (27,554)	$ (43,962)	$ (66,193)	$ (93,171)	Schedule 3d, Line 1
17	Distribution Replacement	$ -	$ (560)	$ (2,561)	$ (6,686)	$ (13,040)	$ (21,371)	$ (31,826)	$ (44,639)	$ (59,590)	$ (78,694)	$ (96,244)	$ (117,945)	$ (142,180)	Schedule 3e, Line 1
18	Total CEP Accumulated Depreciation	$ -	$ (2,306)	$ (10,576)	$ (28,136)	$ (56,057)	$ (92,375)	$ (137,514)	$ (193,191)	$ (259,977)	$ (340,049)	$ (437,233)	$ (549,571)	$ (679,529)	

[D] Deferred PISCC Calculation
Description: Deferred PISCC Calculation by Month
Source: (Net Plant Addition Balance Prior Month + Accumulated Depreciation Balance Prior Month) x PISCC Rate/12 Months

	Utility Account	PISCC Rate	1/31/2018	2/28/2018	3/31/2018	4/30/2018	5/31/2018	6/30/2018	7/31/2018	8/31/2018	9/30/2018	10/31/2018	11/30/2018	12/31/2018	Activity for Three Months Ended 12/31/2018
19	Infrastructure Expansion	5.07%	$ -	$ 2,648	$ 6,240	$ 10,255	$ 13,403	$ 15,669	$ 19,638	$ 22,258	$ 26,128	$ 30,184	$ 33,774	$ 37,681	$ 217,876
20	Infrastructure Improvement	5.07%	$ -	$ 688	$ 4,191	$ 10,240	$ 18,753	$ 22,541	$ 27,672	$ 30,572	$ 35,784	$ 43,535	$ 45,746	$ 52,111	$ 291,833
21	Programs Reasonably Necessary to Comply	5.07%	$ -	$ 718	$ 2,097	$ 5,375	$ 6,916	$ 8,962	$ 11,640	$ 14,038	$ 16,777	$ 18,660	$ 21,746	$ 24,087	$ 131,034
22	Federal Pipeline Safety Requirements	5.07%	$ -	$ 1,498	$ 2,033	$ 2,887	$ 3,470	$ 3,785	$ 5,261	$ 10,320	$ 14,980	$ 22,752	$ 44,244	$ 48,708	$ 157,938
23	Distribution Replacement	5.07%	$ -	$ 1,537	$ 3,951	$ 7,349	$ 9,849	$ 12,488	$ 15,646	$ 18,609	$ 21,037	$ 24,283	$ 27,501	$ 29,967	$ 172,217
24	Total CEP Deferred PISCC		$ -	$ 7,087	$ 18,512	$ 36,106	$ 52,391	$ 63,445	$ 79,857	$ 95,796	$ 114,706	$ 139,434	$ 173,011	$ 190,554	$ 970,898

VEDO EXHIBIT NO. 14.0
ATTACHMENT A

FOR ILLUSTRATIVE PURPOSES ONLY

VECTREN ENERGY DELIVERY OF OHIO, INC.
CAPITAL EXPENDITURE PROGRAM (CEP)
PROPERTY TAX DEFERRAL
FOR THE PERIOD ENDED DECEMBER 31, 2018

Description: Provide summary of calculation of deferred property taxes on CEP Investments
Represents the deferred property taxes on eligible investments

Line No.

[A] Cumulative Balance
Description: Cumulative Deferred Property Tax Balance for eligible CEP Investments
Calculation: Prior Year Deferred Balance + Current Year Deferred Activity

	Budget Category	12/31/2018	12/31/2019
1	Infrastructure Expansion - Deferred Property Taxes	$ -	$ 242,387
2	Infrastructure Improvement - Deferred Property Taxes	$ -	$ 312,476
3	Programs Reasonably Necessary to Comply - Deferred Property Taxes	$ -	$ 164,642
4	Federal Pipeline Safety Requirements - Deferred Property Taxes	$ -	$ 347,931
5	Distribution Replacement - Deferred Property Taxes	$ -	$ 188,785
6	Total CEP - Deferred Property Taxes	$ -	$ 1,256,222

[B] Annual Property Tax Deferrals by Investment Year
Description: Property Tax Deferrals for Annual Period on eligible CEP Investments, by Investment Year
Source: Work Paper 5.1

	Utility Account	12/31/2019
7	Infrastructure Expansion	
8	2018 Investment - Pay 2019	$ 242,387
9	Total Infrastructure Expansion	$ 242,387
10	Infrastructure Improvement	
11	2018 Investment - Pay 2019	$ 312,476
12	Total Infrastructure Improvement	$ 312,476
13	Programs Reasonably Necessary to Comply	
14	2018 Investment - Pay 2019	$ 164,642
15	Total Programs Reasonably Necessary to Comply	$ 164,642
16	Federal Pipeline Safety Requirements	
17	2018 Investment - Pay 2019	$ 347,931
18	Total Federal Pipeline Safety Requirements	$ 347,931
19	Distribution Replacement	
20	2018 Investment - Pay 2019	$ 188,785
21	Total Distribution Replacement	$ 188,785
22	Total CEP Property Tax Activity	$ 1,256,222

FOR ILLUSTRATIVE PURPOSES ONLY

VECTREN ENERGY DELIVERY OF OHIO, INC.
CAPITAL EXPENDITURE PROGRAM (CEP)
CALCULATION OF SHARED SERVICE ASSET CHARGE EXPENSE DEFERRED

Description: Provide detailed calculation of Shared Service Asset Charge incremental expense deferred.
Represents the cost of the additional CEP-eligible investments at VUHI, charged to VEDO.

[A] Cumulative Balance
Description: Cumulative Shared Asset Charge Incremental Expense related to CEP Investments
Calculation: Prior Year Incremental Expense + Current Year Incremental Expense

Line No.	Category		Balance at 12/31/2018
1	Shared Asset Charge Incremental Expense		$ 632,430
2	Total Shared Asset Charge Incremental Expense		$ 632,430

[B] Annual Incremental Asset Charge Expense
Description: Incremental Shared Asset Expense for Annual Period compared to Base Rate Level
Source: Adjustment C-3.19, Case No. 18-0298-GA-AIR

	Category		Activity Through 12/31/2018	Base Rate Case 18-0298-GA-AIR	Incremental Costs
3	Utility Holdings Net Plant Balance at December 31		$ 177,387,452	$ 163,515,339	
4	Less: Plant Related Utility Holdings Accumulated Deferred Income Taxes at December 31		$ (29,997,413)	$ (9,924,019)	
5	Net Utility Holdings Balance at December 31	[Line 3 + Line 4]	$ 147,390,039	$ 153,591,320	
6	Weighted Average Cost of Capital (Pre-Tax)	18-0298-GA-AIR	5.07%	5.07%	
7	Utility Holdings Asset Return	[Line 5 x Line 6]	$ 7,472,675	$ 7,787,080	
8	VEDO Allocation		21.29%	21.25%	
9	VEDO Allocated Utility Holdings Asset Return	[Line 7 x Line 8]	$ 1,590,933	$ 1,654,743	
10	Utility Holdings Depreciation Expense		$ 26,348,189	$ 22,908,007	
11	VEDO Allocation		21.13%	21.13%	
12	VEDO Allocated Utility Holdings Depreciation Expense	[Line 10 x Line 11]	$ 5,566,623	$ 4,840,996	
13	Utility Holdings Property Tax Expense		$ 1,997,368	$ 2,134,050	
14	VEDO Allocation		21.50%	21.50%	
15	VEDO Allocated Utility Holdings Property Tax Expense	[Line 13 x Line 14]	$ 429,434	$ 458,821	
16	VEDO Asset Charge	[Lines 9 + 12 + 15]	$ 7,586,990	$ 6,954,560	$ 632,430

FOR ILLUSTRATIVE PURPOSES ONLY

VECTREN ENERGY DELIVERY OF OHIO, INC.
CAPITAL EXPENDITURE PROGRAM (CEP)
CALCULATION OF INCREMENTAL REVENUE ASSOCIATED WITH CEP INVESTMENTS

Description: Provide detailed calculation of incremental revenues on CEP Investments.
Represents the incremental revenues associated with CEP Investments, treated as offset to deferred expenses.

Line No.

[A] Cumulative Balance
Description: Cumulative Incremental Revenue related to CEP Investments
Calculation: Prior Year Incremental Revenue + Current Year Incremental Revenue

	Category	Balance at 12/31/2018
1	Residential Incremental Revenue	$ -
2	General Service Incremental Revenue	$ -
3	Large Industrial Incremental Revenue	$ -
4	Other Revenues Directly Attributable to CEP Investment	$ -
5	Total Incremental Revenue - (Increase)	$ -

[B] Annual Incremental Revenue by Category
Description: Incremental Revenues for Annual Period related to CEP Investments by Category
Source: Work Paper 6.1-1, Work Paper 6.1-2, Work Paper 6.2

	Category	Activity Through 12/31/2018
6	Residential Incremental Revenue	$ -
7	General Service Incremental Revenue	$ -
8	Large Industrial Incremental Revenue	$ -
9	Other Revenues Directly Attributable to CEP Investment	$ -
10	Total Incremental Revenue	$ -

FOR ILLUSTRATIVE PURPOSES ONLY

VECTREN ENERGY DELIVERY OF OHIO, INC.
CAPITAL EXPENDITURE PROGRAM (CEP)
ACTUAL-AUTHORIZED CEP EXPLANATIONS
FOR THE 12 MONTHS ENDED DECEMBER 31, 2018

Description: Provide explanations on the variance between Actual and Authorized CEP Investment.
Total Additions (net of retirements) during the calendar year compared to authorized level.

Line No.	Category	[A] 2018 Budget	[B] Less: 2018 Investments in DRR	[C]=[A]-[B] Estimated CEP Budget	[D] Actual Total Additions	[E]=[C]-[D] Total Variance	[F] Less: Ineligible Additions	[G]=[E]-[F] Remaining Variance
1	Infrastructure Expansion	$ 11,300,000	$ -	$ 11,300,000	$ 11,300,000	$ -	$ -	$ -
2	Infrastructure Improvement & Replacement	$ 11,100,000	$ -	$ 11,100,000	$ 11,100,000	$ -	$ -	$ -
3	Programs Reasonably Necessary to Comply	$ 6,100,000	$ -	$ 6,100,000	$ 6,100,000	$ -	$ -	$ -
4	Federal Pipeline Safety Requirements	$ 19,300,000	$ -	$ 19,300,000	$ 19,300,000	$ -	$ -	$ -
5	Distribution Replacement	$ 78,500,000	$ 69,555,400	$ 8,944,600	$ 8,944,600	$ -	$ -	$ -
6	Total CEP Investment	$ 126,300,000	$ 69,555,400	$ 56,744,600	$ 56,744,600	$ -	$ -	$ -

Explanations: (Estimated prior year CEP Budget vs. Actual CEP Addition Variances

Notes:
[A] Schedule 1 - Case No. 18-0298-GA-UNC, Schedule 9.
[B] Estimated investments to be recovered in the Distribution Replacement Rider. Recovery is pending the approval in a separate cause.
[C] Total Capital Expenditures estimated for CEP Accounting Treatment.
[D] Sum of Schedule 3, Lines 13-17
[E] Total Variance - (Over)/Under spend on additions.
[F] Sum of Schedule 3, Lines 19-24 + Sum of Schedule 3, Lines 31-36
Amounts represent those additions that were ineligible for accounting treatment
[G] Eligible Addition Variance - (Over)/Under spend on additions.

FOR ILLUSTRATIVE PURPOSES ONLY

VECTREN ENERGY DELIVERY OF OHIO, INC.
CAPITAL EXPENDITURE PROGRAM (CEP)
ESTIMATED CAPITAL BUDGET
FOR THE 12 MONTHS ENDED DECEMBER 31, 2019
($ MILLIONS)

Description: Provide estimated Capital Budget for the previous year as proposed 18-0298-GA-UNC

Line No.	Category			2019
1	Infrastructure Expansion		$	11.6
2	Infrastructure Improvement and Replacement		$	12.6
3	Programs Reasonably Necessary to Comply with Commission Rules, Regulations, and Orders		$	6.2
4	Federal Pipeline Safety Requirements		$	21.1
5	Distribution Replacement	[A]	$	80.2
6	Total		$	131.7

[A] Certain investments to be removed from CEP if recovered through DRR cost-recovery mechanism.

FOR ILLUSTRATIVE PURPOSES ONLY

VECTREN ENERGY DELIVERY OF OHIO, INC.
CAPITAL EXPENDITURE PROGRAM (CEP)
ALLOCATION OF CEP RIDER COSTS
FOR THE 12 MONTHS ENDED DECEMBER 31, 2018

Description: Allocation of CEP Rider Revenue Requirement to Rate Schedules

Line No.	Rate Schedule	Rate Base Allocation	Reference
1	Residential - Rates 310/311/315	74.8630%	Case No. 18-0298-GA-AIR
2	General Service - Rates 320/321/325	15.7720%	Case No. 18-0298-GA-AIR
3	Large Transportation - Rate 345	3.5520%	Case No. 18-0298-GA-AIR
4	Large Volume Transportation - Rate 360	5.8130%	Case No. 18-0298-GA-AIR
5	Total	100.0000%	Sum of Lines 1-4
6	Total Revenue Requirement	$ 272,963	Schedule 1, Line 17
7	Residential - Rates 310/311/315	$ 204,348	[Line 1 x Line 6]
8	General Service - Rates 320/321/325	$ 43,052	[Line 2 x Line 6]
9	Large Transportation - Rate 345	$ 9,696	[Line 3 x Line 6]
10	Large Volume Transportation - Rate 360	$ 15,867	[Line 4 x Line 6]
11	Total	$ 272,963	Sum of Lines 7-10

FOR ILLUSTRATIVE PURPOSES ONLY

VECTREN ENERGY DELIVERY OF OHIO, INC.
CAPITAL EXPENDITURE PROGRAM (CEP)
CALCULATION OF CEP RIDER RATES
FOR THE 12 MONTHS ENDED DECEMBER 31, 2018

Description: Derivation of CEP Rider Rates

Line No.	Rate Schedule	[A] Revenue Requirement	[B] Customers	[C]=[A]/[B]/12 Rate per Customer per Month	[D] Throughput (CCF)	[E]=[A]/[D] Rate per CCF
1	Rate 310/311/315	$ 204,348	295,099	$ 0.06		
2	Rate 320/321/325	$ 43,052				
3	Group 1	$ 1,151	15,285	$ 0.08		
4	Group 2 & 3	$ 41,901			76,569,266	$ 0.00055
5	Rate 345	$ 9,696			50,753,816	$ 0.00019
6	Rate 360	$ 15,867			184,040,109	$ 0.00009
7	Total	$ 272,963				

8	Proposed CEP Rate - Rate 310/311/315	$	0.06	[Line 1, [C]]
9	Case No. 18-0298-GA-AIR Ration		130%	**
10	Proposed CEP Rate - Rate 320/321/325 Group 1	$	0.08	[Line 8 x Line 9]
11	Group 1 Customers		15,285	[Line 3, [B]]
12	Group 1 Revenue Requirement	$	1,151	[Line 10 x Line 11]
13	Group 2 & 3 Revenue Requirement	$	41,901	[Line 2, [A] - Line 12]

**	Residential Customer Charge	$	35.41
	General Service Group 1 Customer Charge	$	46.19
	Ration		130%

CAPITAL EXPENDITURE PROGRAM RIDER

APPLICABILITY

The Capital Expenditure Program ("CEP") Rider is applicable to any Customer served under the Rate Schedules identified below.

- Rate 310 - Residential Default Sales Service
- Rate 311 - Residential Standard Choice Offer Service
- Rate 315 - Residential Transportation Service
- Rate 320 - General Default Sales Service
- Rate 321 - General Standard Choice Offer Service
- Rate 325 - General Transportation Service
- Rate 345 - Large General Transportation Service
- Rate 360 - Large Volume Transportation Service

DESCRIPTION

The CEP will recover deferred costs, including depreciation and property tax expense and accrued post-in-service carrying costs, associated with Company's capital expenditure program under Ohio Revised Code 4929.111, approved by the Commission in Case No. 18-0049-GA-ALT. All applicable Customers shall be assessed either (a) a monthly charge in addition to the Monthly Charge or Customer Charge component of their applicable Rate Schedule, or (b) a volumetric charge applicable to each Billing Ccf of metered gas usage each month.

Actual costs and actual recoveries are reconciled in each annual CEP update, with any under- or over-recovery being recovered or returned over the next twelve (12) month period.

CAPITAL EXPENDITURE PROGRAM RIDER CHARGE

The charges for the respective Rate Schedules are:

Rate Schedule	$ Per Month	$ Per Billing Ccf
310, 311 and 315	$0.00	
320, 321 and 325 (Group 1)	$0.00	
320, 321 and 325 (Group 2 and 3)		$0.00000
345		$0.00000
360		$0.00000

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

4/13/2018 4:06:15 PM

in

Case No(s). 18-0049-GA-ALT

Summary: Application for Approval of an Alternative Rate Plan electronically filed by Ms. Rebekah J. Glover on behalf of Vectren Energy Delivery of Ohio, Inc.

VEDO EXHIBIT 15.0

BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Vectren Energy Delivery of Ohio, Inc., for Approval of an Alternative Rate Plan	)))	18-0049-GA-ALT
In the Matter of the Application of Vectren Energy Delivery of Ohio, Inc. for Approval of an Increase in Gas Rates	)))	18-0298-GA-AIR
In the Matter of the Application of Vectren Energy Delivery of Ohio, Inc., for Approval of an Alternative Rate Plan	)))	18-0299-GA-ALT

VECTREN ENERGY DELIVERY OF OHIO, INC. EXHIBIT 15.0

1. 18-298-GA-AIR Application and Alternative Rate Plan Exhibits (filed March 30, 2018).
2. 18-298-GA-AIR Application - Volume 1 (Schedules A-D) (filed March 30, 2018).
3. 18-298-GA-AIR Application - Volume 2 (Schedule E-1) (filed March 30, 2018).
4. 18-298-GA-AIR Application - Volume 3 (Schedule E-2) (filed March 30, 2018).
5. 18-298-GA-AIR Application - Volume 4 (Schedule E-2.1) (filed March 30, 2018).
6. 18-298-GA-AIR Application - Volume 5 (Schedule E-3) (filed March 30, 2018).
7. 18-298-GA-AIR Application - Volume 6 (Schedules E-3.1 - E-5) (filed March 30, 2018).
8. 18-298-GA-AIR Application - Volume 7 (S Schedules) (filed March 30, 2018).
9. 18-0049-GA-ALT Application and Alternative Rate Plan Exhibits (filed April 13, 2018).
10. 18-298-GA-AIR Proof of Pub (Part 1) (filed August 23, 2018).
11. 18-298-GA-AIR Proof of Pub (Part 2) (filed August 23, 2018).