

**A report by the Staff of 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

BEFORE

THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of)
Of Vectren Energy Delivery of Ohio,)
Inc. for Approval of Alternative Rate) Case No. 18-49-GA-ALT
Plan

In the Matter of the Application of)
Of Vectren Energy Delivery of Ohio,)
Inc. for Approval of an Increase in) Case No. 18-298-GA-AIR
Gas Rates

In the Matter of the Application of)
Of Vectren Energy Delivery of Ohio,)
Inc. for Approval of Alternative Rate) Case No. 18-299-GA-ALT
Plan

Asim Z. Haque, Chairman
M. Beth Trombold, Commissioner
Thomas W. Johnson, Commissioner
Lawrence K. Friedeman, Commissioner
Daniel R. Conway, Commissioner

To the Honorable Commission:

In accordance with the provisions of the Ohio Revised Code Section 4909.19, the Staff of the Public Utilities Commission of Ohio (Staff) has conducted its investigation in the above matter and hereby submits its findings to the Commissioners of the Public Utilities Commission of Ohio (PUCO or Commission) in this Staff Report.

The Staff Report has been jointly prepared by the Staff's Rates & Analysis Department and Service Monitoring and Enforcement Department.

Copies of the Staff Report have been filed with the Docketing Division of the PUCO and served by certified mail upon the mayors of all affected municipalities affected by the

application. A copy of this report has also been served upon the utility or its authorized representative. Interested parties are advised that written objections to any portion of the Staff Report must be filed within 30 days of the date of the filing of this report, after which time the Commission will promptly set this matter for public hearing. Written notice of the time, place, and date of such hearing will be served upon all parties to the proceeding.

The Staff Report is intended to present for the Commission's consideration the results of Staff's investigation. It does not purport to reflect the views of the Commission nor should any party to the proceeding consider the Commission as bound in any manner by the representations or recommendations. The Staff Report, however, is legally cognizable evidence upon which the Commission may rely in reaching its decision in this matter. (See *Lindsey v. Pub. Util. Comm.*, 111 Ohio St. 6 (1924).

Respectfully submitted,

PUCO Rates and Analysis Department



Tammy Turkenton
Director

PUCO Service Monitoring and Enforcement Department



Robert Fadley
Director

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BACKGROUND

Vectren Corporation is an energy holding company headquartered in Evansville, Indiana. Vectren owns and operates 22,000 miles of natural gas pipeline to serve its nearly one million natural gas customers. Vectren's three operating utilities (Vectren Energy Delivery of Indiana – South, Vectren Energy Delivery of Indiana – North, and Vectren Energy Delivery of Ohio) provide delivery service to nearly one million customers in Indiana and Ohio.

On April 23, 2018, CenterPoint Energy and Vectren Corporation announced they have entered into a definitive merger agreement to form one company that will serve more than 7 million customers across the United States. This transaction, however, must be approved by several federal agencies and Vectren's shareholders. This process will take several months and the parties expect to close the transaction by the first quarter of 2019.

The applicant, Vectren Energy Delivery of Ohio, Inc. (VEDO, Applicant, or the Company), is a natural gas company and a public utility engaged in the business of transporting and distributing natural gas. VEDO provides natural gas transportation and distribution service to 318,000 customers in Dayton and west central Ohio, a 17-county area, including all or portions of Auglaize, Butler, Champaign, Clark, Clinton, Darke, Fayette, Greene, Highland, Logan, Madison, Miami, Montgomery, Pickaway, Preble, Shelby, and Warren Counties in Ohio.

On February 21, 2018, in Case Nos. 18-0298-EL-AIR and 18-0299-GA-ALT, the Applicant filed two notices of intent – one for an increase in gas rates and one for approval of an alternative rate plan for its entire service area subject to the jurisdiction of the PUCO. The Applicant requested that its test period begin October 31, 2017 and end September 30, 2018, and that the date certain for property valuation be December 31, 2017.

By its Entry of March 14, 2018, the Commission approved the requested test period and date certain. On March 30, 2018, the Applicant filed its combined application for an increase in rates and for an alternative rate plan. By entry dated May 30, 2018, the Commission ordered that the application be accepted as of March 30, 2018.

The rates proposed by the Applicant, when applied to test year sales volumes, would increase gross revenues by \$34,021,227. The total revenue increase over test year operating revenues is approximately 20 percent.

Summary of Staff's Recommendations

As shown on Schedule A-1, the Staff recommends a revenue increase in the range of \$12,094,296 to \$16,187,084. This represents an increase of 8.05 percent to 10.77 percent over test year operating revenue. This determination is based on Staff's examination of the accounts and records of the Applicant for the twelve months ending September 30, 2018, as summarized in this report, including schedules which incorporate Staff's recommended rate of return, rate base, and adjusted operating income.

OPERATING INCOME AND RATE BASE

Scope of Investigation

The scope of the investigation was to determine if the Applicant's filed exhibits concerning test year operating income, rate base and other data are reasonable for ratemaking purposes, and if the financial and statistical records supporting the data can be relied upon. Staff interviewed the Applicant's key management personnel and reviewed both internal and published financial reports to assure understanding of the Applicant's operations and organization. Staff's investigation of test year operating income and date certain rate base included a review of the Applicant's budgeting and forecasting techniques, verification of the operating revenue computation, and an examination of the Applicant's continuing property records. In addition, Staff verified the existence and used and useful nature of the assets through physical inspections. Staff performed other independent analyses it considered necessary.

The Applicant proposed various adjustments to operating income and rate base, as summarized on the Applicant's Schedules. Staff reviewed and analyzed the Applicant's proposed adjustments to operating income and rate base and traced them to supporting workpapers and source data. As a result of its review and analysis, Staff accepted some of the proposed adjustments, changed some of the Applicant's proposed adjustments using alternative approaches, and/or proposed new adjustments. Staff's adjustments make the test year operating income and date certain rate base consistent with sound regulatory accounting practices, more representative of normal operations and appropriate for ratemaking purposes.

The purpose of Staff's investigation was to develop financial data for ratemaking purposes; it was not intended to provide a basis for expressing an opinion on the financial statements of the Company as a whole. The following sections of this report summarize the results of Staff investigation, which Staff believes are relevant to the determination of test year operating income and rate base. Staff presents these sections in the general order in which the schedules are presented at the end of this document.

Revenue Requirements

Schedule A-1 presents Staff's determination of the Applicant's revenue requirements. Staff's recommended revenue increase is shown on Staff's Schedule A-1. This determination is based on the examination of the accounts and records of the Applicant for the twelve months ending September 30, 2018, the test year in this proceeding. The results of Staff's examination are summarized in this report, and the schedules that incorporate Staff's recommended rate of return, rate base, and adjusted test year operating income.

Removal of Certain Rider Revenues

Included in the Company's adjusted test year revenues were all riders, including riders which were not being proposed to be rolled into the new base rates. The rider revenue was based on the most current rates in effect, then adjusted to reflect the volumes proposed by the Company in the test year. In order to ensure that these riders had no effect on the revenue requirement, the Company made an adjustment to synchronize rider revenues with expenses such that riders had no material effect on the test year net operating income. Based on Staff's discussions with the Company, the rationale behind including riders in

the test year operating revenues was that it more accurately reflected the impact on total customer bills, rather than just the increase to distribution rates.

Staff notes that the inclusion of riders which would typically be adjusted out of the test year caused delays in Staff's investigation. Staff believes that the test year amounts should not include any revenues and expenses associated with any riders that are not being rolled into new base distribution rates; therefore, Staff recommends that the Company remove such riders from its test revenue in its next base distribution rate case filing. The Company's methodology may allow for Schedule A-1 to better reflect the revenue increase on total customer bill basis; however, since this is a base distribution rate case, Staff believes Schedule A-1 should reflect only the increase to base distribution rates, not the relative increase of base distribution rates to total customer bills. Typically, Staff performs a separate analysis to determine the effect of the base distribution rate increase on a typical customer's total bill.

As part of the Staff Report, Staff removed revenues and expenses for purchased gas and riders which are not being rolled into base rates. The affected riders are: PIPP, UEX, EEFR, ETC¹, SB287, and Gross Receipts Tax. Removing the non-base rate portion of these riders represents a reduction of approximately \$18 million in adjusted test year revenue.

¹A portion of this rider—approximately \$1 million—is being rolled into base rates.

RATE BASE

The rate base represents the Applicant's net investment in plant and other assets as of the date certain, December 31, 2017, which were used and useful in providing gas utility service to its customers and upon which its investors are entitled to the opportunity to receive a fair and reasonable rate of return.

Staff's analysis of the rate base is divided into Plant In Service, Depreciation, Construction Work in Progress, Working Capital, Contributions in Aid of Construction, and Other Rate Base Items. A comparison of rate base submitted by the Applicant and Staff's recommendation is shown on Schedule B-1. Schedules B-2 through B-7, provide additional support for Staff's rate base findings.

Plant In Service

As a result of Staff's investigation and review of the application, the Staff recommends that adjustments be made to the Applicant's date certain plant investment for ratemaking purposes. These adjustments are identified below, summarized on Schedule B-2.2, and reflected in the calculation of jurisdiction plant in service figures on Schedule B-2.1.

Intangible Plant Adjustments

During its audit, Staff selected multiple items for invoice verification. Staff excluded \$7,548 for items which supporting detail was unavailable due to the Applicant's retention policy and an invoice for the use of the corporate plane which Staff believes should be expensed. Staff also adjusted the beginning balance by removing \$18,452 of costs the Commission deemed inappropriate for inclusion in plant in service from Case No. 04-0571-GA-AIR.² Staff's adjustments to Intangible Plant are shown on Schedule B-2.2a.

Transmission Plant Adjustments

As part of its audit and during field inspections, Staff learned the Applicant purchased a 48.2 acre parcel to obtain a 4.5 acre easement as part of a project to reroute transmission main around the Dayton airport. Staff determined the remaining 43.7 acres is not currently used and useful in providing utility service and therefore excluded \$1,230,635 related to the purchase. During field inspections, the Applicant also informed Staff a portion of a selected project was no longer being used, consequently Staff excluded \$16,198 related to that project. Staff's total adjustment of \$1,246,833 to Transmission Plant is shown on Schedule B-2.2b.

Distribution Plant Adjustments

Staff adjusted the beginning balance to reflect an adjustment from Case No. 04-0571-GA-AIR by removing \$16,210 for a land easement for the relocation of a regulator station which has not yet been moved. During its field investigation, Staff also discovered two occasions in which existing pipe had been repainted. The Applicant confirmed these items should have been expensed, therefore, Staff removed a total of \$31,431 from the appropriate FERC accounts. Staff's total adjustment of \$47,641 to Distribution Plant is shown on Schedule B-2.2c.

² *In the Matter of the Application of Vectren Energy Delivery of Ohio, Inc. for Authority to Amend its Filed Tariffs to Increase the Rates and Charges for Gas Service and Related Matters*, Case No. 04-571-GA-AIR, et al., Opinion and Order (April 13, 2005).

General Plant Adjustments

During its field inspections, Staff discovered the Compressed Natural Gas (CNG) station in Fairborn was not working and the Applicant stated it was going to be decommissioned. Staff also determined first and second generation laptops were no longer in use. Therefore, Staff removed \$77,798 associated with the CNG station and \$46,933 regarding the laptops. As part of its audit, Staff also discovered some vehicles in the Applicant's continuing property record (CPR) had been sold, retired or were not being used by employees in Ohio. Staff compared vehicles in the CPR to a current fleet list provided by the Applicant and excluded \$917,418 of automobiles, \$1,128,414 of light trucks, \$461,061 of trailers and \$1,002,207 of heavy trucks. Staff's General Plant adjustments are shown on Schedule B-2.2d.

Depreciation

Depreciation is the process which distributes the original cost of depreciation assets, adjusted for net salvage, over the normal life of the property in a systematic and rational manner. Staff's investigation of depreciation is segregated into two areas: (1) Depreciation Reserve, and (2) Depreciation Accrual Rates and Depreciation Expense. Each of these areas is discussed in detail in the following sections.

Depreciation Reserve

The Applicant maintains its depreciation reserve, by account, on a total company basis. In order to determine if the Applicant's booked reserve for depreciation is proper and adequate, Staff compared the Applicant's book reserve with a calculated theoretical reserve, as a guide to whether past accrual rate calculations have been appropriate. Staff compared the Applicant's book reserve level with a calculated theoretical reserve, based on the accrual rates discussed below, and the Applicant's December 31, 2017 plant balances. Staff determined that the level of the overall booked reserve is in close agreement with the theoretical reserve calculation.

Staff adjusted the reserve to exclude the reserve associated with adjustments in the Plant in Service section, as discussed above. These adjustments are shown on Schedule B-3.1.

Staff recommends that the jurisdictional reserve for depreciation, as adjusted by Staff and shown on Schedule B-3, is proper and adequate and should be used for the purposes of this proceeding.

Depreciation Accrual Rates and Depreciation Expense

The Applicant's current depreciation accrual rates were prescribed by this Commission in Case No. 04-571-GA-AIR.³ The Applicant's current accrual rates had been in use for approximately 14 years.

The Applicant filed a depreciation study for its gas transmission, distribution and general plant performed by its consultant, Gannett Fleming Valuation and Rate Consultants, Inc. The Applicant's accrual rates were developed using the straight line method, broad group procedure, whole life technique with the exception of certain General Plant accounts which were developed using amortization accounting.

Staff conducted an independent analysis of the depreciation study provided by the Applicant. Staff's recommended accrual rates are calculated using the straight line method, broad group procedure, whole life technique with the exception of certain General Plant accounts which were developed using

³ See *In the Matter of the Application of Vectren Energy Delivery of Ohio, Inc., for Authority to Amend its Filed Tariffs to Increase the Rates and Charges for Gas Service and Related Matters*, Case No. 04-571-GA-AIR, et al., Opinion and Order (April 13, 2005).

amortization accounting. Staff's recommended accrual rates are shown on Schedule B-3.2. Staff recommends that the Applicant be ordered to use the accrual rates shown on Schedule B-3.2 for book depreciation purposes, effective concurrently with the customer rates from this proceeding.

Staff has long maintained that accrual rates should be thoroughly reviewed every three to five years. Staff, therefore, recommends that within five years after the Commission Order in this proceeding, the Applicant submit a depreciation study for all its gas plant accounts.

Staff's calculation of depreciation expense is based on the adjusted jurisdictional plant in service balances at date certain and the accrual rates discussed above, is shown on Schedule B-3.2.

Construction Work In Progress (CWIP)

The Applicant did not request an allowance for CWIP in its filing and Staff, as shown on Schedule B-4, did not recommend an allowance.

Working Capital

The Applicant did not request an allowance for working capital in its filing and Staff, as shown on Schedule B-5, did not recommend an allowance.

Other Rate Base Items

Staff verified the date certain balances for customer advances for construction, Percentage of Income Payment Plan (PIPP) deferred asset, Distribution Replacement Rider (DRR) deferred asset, HB95 deferred asset, and accumulated deferred income taxes. Additionally, the Applicant failed to remove customer deposits from rate base, so Staff made an adjustment to remove the date certain balance of customer deposits from rate base. This adjustment of \$3,904,821 is reflected on Schedule B-6.⁴

Allocations

All rate base items and operations of VEDO, as of the date certain, are subject to the jurisdiction of the Public Utilities Commission of Ohio. As such, VEDO's jurisdictional allocation in this rate proceeding is 100 percent.

⁴ Staff Data Request #100.

OPERATING INCOME

The Applicant's test year operating income combined three months of actual data for the period of October 1, 2017 through December 31, 2017, with nine months of forecast data for the period of January 1, 2018 through September 30, 2018. As described in the subsequent section on Current Adjustments, Staff adjusted the Applicant's test year operating income as required to render it an appropriate basis for setting rates.

Staff's pro forma operating income is Staff's adjusted test year operating income modified to reflect the Applicant's proposed increase in revenues and the associated increases in uncollectible accounts expense, commercial activities taxes, state and municipal taxes, and federal income taxes. Staff's pro forma operating income also includes the Applicant's proposed increase in other revenues related to reconnection charges.

Schedules C-1 and C-2 present Staff's determination of operating income. The calculations, methodologies, and rationale used to develop Staff's adjusted pro forma operating income are detailed on Schedules A1.1, C-1, C-3.1 through C-3.24, and C-4.

Pro Forma Adjustments

Schedule C-1 sets forth the Applicant's proposed increase in operating revenues and affected expenses that include uncollectible accounts expense, commercial activities taxes, state and municipal taxes, and federal income taxes. The increase in revenues is the combined result of the increase in base revenues created by the Applicant's proposed tariffs, and an increase for reconnection charges.

Current Adjustments

Base Revenue

The Applicant adjusted revenues to include all base revenues and rider revenues in the rate case by adjusting expenses to off set the rider revenues, which were based on the test year billing determinants. Staff adjusted base revenues to eliminate all rider revenue that is not being proposed by Staff to be incorporated into base rates. Staff adjusted test year base revenues to the amounts calculated on Schedule E-4.

Annualized Revenue - Fixed Charge Revenue

Both Staff and the Applicant adjusted test year operating revenues to adjust monthly fixed charge revenues for actual and projected customer counts by rate schedule. Staff's adjustment increases revenue by \$81,056 and is shown on Schedule C-3.1.

Annualized Revenue - Days of Service

Both Staff and the Applicant adjusted test year operating revenues to adjust actual periods for calendar month days of service. Staff's adjustment decreases revenue by \$237,375 and is shown on Schedule C-3.2.

Annualized Revenue - Weather Normalization

Both Staff and the Applicant adjusted test year operating revenues to adjust volumes for normal weather. Staff's adjustment increases revenue by \$428,624 and is shown on Schedule C-3.3.

Annualized Revenue - PIPP Synchronization

The Applicant adjusted PIPP revenue to reflect the change in operating revenues and expenses for normalized PIPP rider recoveries at the current approved rate. The Staff adjusted PIPP rider revenues and expenses to eliminate the PIPP rider from the base distribution rate case. Staff's adjustment decreases revenue by \$14,261 and is shown on Schedule C-3.4.

Annualized Revenue - UEX Synchronization

The Applicant adjusted uncollectible expense rider (UEX) revenues to reflect the change in operating revenues and expenses for normalized UEX rider recoveries at the current approved rate. Staff adjusted UEX rider revenues and expenses to eliminate the UEX rider from the base distribution rate case. Staff's adjustment increases revenue by \$125,159 and is shown on Schedule C-3.5.

Annualized Revenue - EEFR Synchronization

The Applicant adjusted energy efficiency funding rider (EEFR) revenues to reflect the change in operating revenues and expenses for normalized EEFR rider recoveries at the current approved rate. Staff adjusted EEFR rider revenues and expenses to recognize a portion of the expenses will now be recovered through base rates and to eliminate the remaining EEFR rider from the base distribution rate case that are currently recovered through the rider. Staff's adjustment increases revenue by \$155,842 and is shown on Schedule C-3.6.

Annualized Revenue - DRR Synchronization

The Applicant adjusted DRR revenues to reflect the change in operating revenues and expenses for normalized DRR recoveries at the projected September 1, 2018 rate. Staff adjusted DRR rider revenues and expenses to roll the DRR rider into the base distribution rate case. Staff's adjustment increases revenue by \$5,239,459 and is shown on Schedule C-3.7.

Annualized Revenue - ETC Rider Synchronization

The Applicant adjusted Exit Transition Cost Rider (ETC rider) revenues to reflect the change in operating revenues and expenses for normalized ETC recoveries at the current approved rate. Staff adjusted ETC rider revenues and expenses to recognize a portion of the expenses will now be recovered through base rates and eliminate the remaining ETC rider revenues and expenses from the base distribution rate case that are currently recovered through the rider. Staff's adjustment is shown on Schedule C-3.8.

Annualized Revenue - Gas Cost Recovery Synchronization

Both Staff and the Applicant adjusted test year operating revenues and expenses for normalized gas cost revenues and gas cost at a rate of \$0.42923 per CCF. Staff's adjustment has no impact on revenue and is shown on Schedule C-3.9.

Annualized Revenue - SB287 Excise Tax Rider Synchronization

The Applicant adjusted Mcf Excise Tax Rider (SB287 Excise tax) revenues to reflect the change in operating revenues and expenses for normalized MCF Excise Tax Rider revenue. The Staff adjusted SB287 Excise Tax Rider revenues to eliminate the Excise Tax Rider from the base distribution rate case. Staff's adjustment has no impact on revenue and is shown on Schedule C-3.10.

Annualized Revenue – Miscellaneous Revenue

The Applicant and Staff adjusted Miscellaneous Revenue to reflect the various adjustments to operating revenues. This adjustment was made in order to synchronize the number of occurrences and remove non-recurring revenues. In addition, Staff adjusted Miscellaneous Revenue to remove revenue associated with the proposed increase to the Investigation Fee. Staff's adjustment is shown on Schedule C-3.11.

Annualized Revenue – Gross Receipts Tax Rider Synchronization

The Applicant adjusted Gross Receipts Tax Rider revenues to reflect the change in operating revenues and expenses for normalized Gross Receipts Tax Rider recoveries. Staff adjusted Gross Receipts Tax Rider revenues to eliminate the Gross Receipts Tax Rider from the base distribution rate case. Staff's adjustment increases revenue by \$334,775 and is shown on Schedule C-3.12.

Labor Adjustment

The Applicant adjusted operating income to decrease test year labor expense based on a pro forma annualized labor calculation using employment as of December 2017. Further, the Applicant adjusted incentive compensation and removed deferred compensation from the test year. The following adjustments were made by Staff:

- Adjusted operating income by annualizing direct labor expenses based on average hourly rates and employee levels as of May 2018. All non-union and most union pay raises were in effect as of this date.
- Adjusted its calculation to add union pay increases that took effect after May 2018, but within the test year.
- Used a three-year average to calculate percentages for both overtime pay and O&M labor.
- Applied the Applicant's loader rates to derive fringe benefits and payroll taxes.
- Adjusted the pension loader rate to remove the Supplemental Executive Retirement Plan (SERP).
- Adjusted test year bonus pay expense for programs applicable to operational goals, removing bonus pay tied to earnings per share (EPS) and restricted stock.

Staff's adjustment reduces test year expenses by \$3,484,258, as reflected on Schedule C-3.13.

Conservation

The Applicant proposes to include in base rates, \$5.6 million annually, to reflect program costs associated with their conservation (EE) initiatives for residential and general service customers. The Applicant also proposes to earn a performance incentive tied to both energy savings and net benefits as part of delivering its EE programs. Finally, when approving these programs, the Applicant proposes to continue using the Collaborative to review, evaluate and approve the EE program portfolio. The following adjustments and recommendations were made by Staff:

- Eliminated the proposed \$5.6 million from base rate funding; instead permit the Applicant to collect a maximum of \$5.6 million through their Energy Efficiency Funding Rider (EEFR) for recovery of program costs and expenses. See Schedule C-3.14.
- Denied approval of an annual performance incentive.

- Discontinued using the Collaborative process to approve the EE program portfolio; instead, the Applicant must file an application with the Commission for authority to amend or continue its EE program portfolio.

Rate Case Expense

Both Staff and the Applicant adjusted rate case expense to reflect a five year amortization period. Staff's adjustment increases test year expenses by \$305,000 and is shown on Schedule C-3.15.

Staff recommends that the Commission review the most recent updated information regarding the Applicant's rate case expense before issuing its final Order. The Applicant should submit this information as a late filed exhibit.

PUCO/OCC Maintenance Expense

Staff adjusted the PUCO/OCC maintenance expense to reflect the latest known rates. Staff's adjustment reduces test year expenses by \$28,007 and is shown on Schedule C-3.16.

DARR Adjustment

In schedule C-3.17, the Applicant proposes to recover deferred costs from the Distribution Accelerated Risk Reduction (DARR) program and increase operating expenses to reflect ongoing annual costs for DARR activities and other integrity management (IM) programs, including the Distribution Integrity Management Program (DIMP) and Transmission Integrity Management Program (TIMP).

The Applicant proposes a three-year amortization period to recover deferrals from the DARR program for actual amounts accumulated through December 2017 and for estimated amounts accumulated through December 2018. Staff adjusted the Applicant's proposed 2018 deferred DARR expenses to the latest known actual accumulated amount deferred. In addition, Staff recommends that the Commission direct the Applicant to file a late-filed exhibit with final updated actual DARR expenses deferred in 2018 in order to compute the final DARR-deferral amount. Once a final actual amount is determined, Staff proposes a five-year amortization period for recovery of the deferral. Lastly, since ongoing expenses for the DARR activities that were being deferred pursuant to the Commission's Order in Case Number 15-1741-GA-AAM will now be recovered in base rates, Staff recommends that the Commission terminate VEDO's authority to defer the expenses contemporaneous with the date new rates adopted in this case go into effect.

The Applicant also proposes an increase in operating expenses related to ongoing annual costs associated with DIMP, TIMP and DARR activities based on a five-year average of projected future costs. Staff believes that it is inappropriate to set rates based on projections of unknown future costs, therefore Staff adjusted the increase based on a five-year average of historical costs for DIMP and TIMP expenses. For ongoing costs for DARR activities that will now be recovered in rates, Staff used VEDO's actual 2017 costs as the most representative costs for these activities.

Staff's adjustments are shown on schedule C-3.17.

Miscellaneous Adjustments

Both Staff and the Applicant adjusted the test year operating expenses to account for items not contemplated during the Applicant's initial budgeting process. Staff further adjusted the test year to remove various expenses that were determined to be inappropriate to include for ratemaking purposes.

Items removed included expenses associated with employee parties and recognition, meals, dues to various professional organizations not related to the gas industry, and other miscellaneous items.

The Applicant did not include interest on customer service deposits as part of the revenue requirement, therefore Staff adjusted current operating expenses to include the interest owed on the date certain balance of customer deposits. This adjustment increases operating expenses and is reflected on Schedule C-3.18. Staff's adjustment increases test year expenses by \$234,073 and is shown on Schedule C-3.18.

Shared Services Expense

Both Staff and the Applicant adjusted test year operating expenses to account for costs associated with common assets held by VEDO's parent, Vectren Utility Holdings, Inc., and charged to VEDO. Staff's adjustment reduces test year expenses by \$1,272,125 and is shown on Schedule C-3.19.

Depreciation Expense

Staff adjusted the depreciation expense to reflect Staff's recommended depreciable plant in service as of the date certain and Staff's recommended accrual rates. This adjustment is presented on Schedule C-3.20, with the supporting calculations shown on Schedule B-3.2. Further discussion on depreciation can be found in the Rate Base section of this report.

HB95 Program Expense

In Schedule C-3.21, the Applicant proposes to recover increased operating expenses associated with the amortization of HB95 Capital Expenditure Program (CEP) programs. Also, the Applicant proposes creation of a CEP Rider to collect future post in-service carrying charges (PISCC), depreciation, and property tax expenses associated with CEP investments. The rider would initially be set at \$0.0. VEDO proposes to file on April 1, 2019, to adjust the rider to collect the deferred PISCC, property tax, and depreciation expenses from 2018 CEP investments. The proposed CEP Rider would not collect a return on the CEP assets added during the prior year. VEDO would begin to collect a return on the assets at its next base rate case. VEDO proposed a review process.

Lastly, VEDO proposes that, in years that the Shared Asset Charge (SAC) that is charged to VEDO as an expense (and recorded in its book as an expense) for capital investments made by VUHI exceeds the SAC expenses built into base rates, the CEP deferrals would be recorded as a deferral and eventually recovered in the CEP Rider. In other words, an interest component (at VEDO's long term debt rate), property tax and depreciation expenses on the amount incremental to the level in base rates would be deferred and later collected in the proposed CEP Rider.

Staff recommends approval of the CEP with certain modifications and contingent upon the Applicant filing a base rate application upon completion of its Distribution Replacement Rider (DRR) program, but in no event later than in 2024. Staff recommends that deferral of the PISCC, property tax, and depreciation expenses cease once the CEP assets begin to be recovered in rates. Staff recommends that VEDO work with Staff to identify reasonable and meaningful annual caps (spending, revenue requirement, rate, etc.) as well as other cost controls in order to ensure rate payers are not burdened with excessive investments. Staff recommends that the amortization of the deferral of HB95 CEP should be amortized over the average life of the plant (1.61%), which is consistent with the Applicant's DRR rider, and not the Applicant's average system depreciation rate of 3.10%.

Alternatively Staff recommends that the Company initiate discussion with Staff regarding the potential creation of a single rider that would include all capital investments. A single rider would streamline accounting, tracking and auditing for the Company and for Staff. Staff recommends that the rider would be filed annually and would conclude or sunset at the filing of the next rate case. Staff also recommends that the Distribution Replacement Rider (DRR) provisions would remain the same as decided in this case, and all other capital expenditures would be filed simultaneously.

Additionally, Staff has concerns with VEDO's proposed schedule as it is deemed too aggressive. Given that VEDO will be collecting on PISCC and deferred expenses on assets placed in service between rate cases, Staff is recommending to perform an audit of the assets, including a review of the used and useful nature of the assets and the necessity and prudence of the investments. Staff recommends a minimum of four months between when the Company files its application and Staff issues a report, rather than two months as suggested by VEDO. This assumes that the annual application includes detailed schedules.

Staff recommends that the Commission deny VEDO's proposal to defer and capitalize with the CEP Rider SAC expenses that exceed the amount in base rates. The CEP only allows for recovery of capital expenditures; whereas, the SAC charges are recorded as O&M expenses and are therefore inappropriate for inclusion in the CEP.

Staff recommends that the Company create an offset to reflect that tariffed rates being established in this rate case reflect the recovery of an amount of depreciation expense that will decline over time and therefore no longer reflect the rate base upon which that depreciation expense was established. Many of the assets which comprise the rate base at the data certain of this case will be retired and therefore the associated depreciation expense should also be declining. As the depreciation expense of the plant additions are either being recovered through the CEP rider rate or being deferred on a going forward basis for future recovery, there should be recognition that the depreciation expense embedded in current base rates will be recovering plant that is no longer in service. The offset will be calculated by taking the rate case plant in service, less non-DRR Retirements and apply the accrual rates to this net plant and derive an annual depreciation expense and this will accumulate each year and will be used to offset the CEP rider's provision for accumulated depreciation.

Distribution Replacement Rider (DRR) Deferral Amortization

In Schedule C-3.22, the Applicant purposes to recover the operating expense associated with the amortization of the deferral of DRR programs, minus amounts projected to be collected in DRR rates. Staff accepts the Applicant's DRR deferral amortization adjustment.

The Applicant proposes to renew the DRR program for a six-year period (covering investments made in 2018 through 2023 and in recovery years September 1, 2019 through August 31, 2020 through September 1, 2024 through August 3, 2025) which would complete replacement of current scope of priority pipe (bare steel, cast iron, ineffectively coated steel) at the end of 2023.

Staff recommends that the Commission authorize continuation of the DRR for a new five-year period, through 2023, contingent on the Company filing a base rate case in 2024. Staff recommends the following DRR rate caps:

- 9/1/19 - 8/31/20 (recovering 2018) = \$2.50/mo.
- 9/1/20 - 8/31/21 (recovering 2019) = \$5.00/mo.

- 9/1/21 - 8/31/22 (recovering 2020) = \$7.50/mo.
- 9/1/22 - 8/31/23 (recovering 2021) = \$10.00/mo.
- 9/1/23 - 8/31/24 (recovering 2023) = \$12.00/mo.

Staff recommends that the Commission require VEDO to continue to implement rigorous cost control mechanisms such as robust competitive bidding processes; effective system planning; rigorous negotiations with municipalities regarding permitting, restoration, fees, etc.; and other similar measures. Additionally, Staff recommends that the Commission direct Staff to report on VEDO's cost control measures in comments filed in annual recovery cases. Staff recommends that the amortization of the deferral of the DRR should be amortized over the average life of the plant (1.48%), which is consistent with the Applicant's DRR rider, and not the Applicant average system depreciation rate of 3.10%.

Staff recommends that VEDO be required to complete the current bare steel, cast iron, etc. replacement program on schedule by the end of 2023. Staff recognizes that VEDO is permitted to apply to the Commission to expand the scope of the program; however, Staff points out that while the Pipeline and Hazardous Materials Safety Administration may require an increased emphasis on particular infrastructure, it does not automatically mean that replacement of such infrastructure deserves accelerated cost recovery. The burden is on the Applicant to show that the benefits to customers of such accelerated replacement and recovery exceeds the costs.

Property Tax Expense

The Applicant calculated property tax expense, using forecasted plant in service dollars and projected property tax rates. For its property tax expense, Staff calculated property tax expense by applying the latest known property tax rate to the property valuation at date certain. Staff's adjustment increases the test year expense by \$1,826,128 and is detailed on C-3.23.

Federal Income Taxes at Statutory Rate

Both Staff and the Applicant adjusted federal income taxes based on calculations at Schedule C-4, Schedule C-4.1, and Schedule C-4.2. Staff further adjusted Federal income taxes to remove the amortization of excess deferred taxes – federal tax reform. This adjustment removes the projected excess deferred income taxes associated with the Tax Cuts and Jobs Act of 2017 (TCJA). The Staff recommends the excess deferred income taxes associated with the TCJA be recovered through a credit mechanism as opposed to being embedded in base rates. Staff's adjustment increases expenses by \$17,573,468 and is shown on Schedule C-3.24.

RATE OF RETURN

The Staff recommends a rate of return in the range of 6.97 percent to 7.49 percent. Staff developed the recommended rate of return using a cost of capital approach which reflects a market-derived cost of equity and VEDO's actual cost of debt.

Capital Structure

The Applicant is a wholly-owned subsidiary of Vectren Corporation, which is a publicly-traded public holding company. Staff adopted the capital structure requested by the Company in its filing. Staff believes it is an adequate representation of a capital structure of similarly situated companies. The capital structure is 48.94 percent debt and 51.06 percent equity.

Cost of Debt

Staff used VEDO's actual cost of long term debt, which is 5.07 percent.

Cost of Equity

Staff considered a group of utilities that are representative of the Applicant for the purpose of cost of equity estimation. Staff relied on Value Line to generate a list of potential comparable companies. Staff began by selecting all domestic electric utilities as VEDO is classified as an electric utility by Value Line. Staff then reduced the initial list by removing all companies with a Financial Strength ranking below B++⁵ and a Standard and Poor's bond rating below BBB+. Staff also removed companies if they had a market cap greater than \$15 billion⁶. Staff further paired down the list by removing companies that did not have significant gas distribution operations, which Staff determined to be at least 20 percent of total energy revenues directly attributable to gas distribution operations. Listed below are the comparable companies that met Staff's criteria:

1. Alliant Energy Corp
2. Ameren Corp.
3. CMS Energy Corp
4. MGE Energy Inc.
5. OGE Energy Corp

Staff employed a cost of equity estimate for the comparable group companies that used the capital asset pricing model (CAPM) and discounted cash flow (DCF) derived estimates. In calculating its CAPM cost of common equity estimate Staff used the CAPM formula:

⁵ Quite a few ingredients go into Value Line's Financial Strength ratings. Balance sheet leverage, business risk, the level and direction of profits, cash flow, earned returns, cash, corporate size, and stock price, all contribute to a company's relative position on the scale. The amount of cash on hand, net of debt, is an important consideration. Available at http://www.valueline.com/Tools/Educational_Articles.

⁶ Market capitalization refers to the total dollar market value of a company's outstanding shares. Commonly referred to as "market cap," it is calculated by multiplying a company's shares outstanding by the current market price of one share. The investment community uses this figure to determine a company's size, as opposed to using sales or total asset figures. Available at <http://www.investopedia.com>.

$$\text{CAPM} = \text{Risk Free Rate} + \text{Beta} * (\text{Market Risk Rate} - \text{Risk Free Rate})$$

Staff employed the average of the Value Line betas of the comparable group companies, which was 0.73.⁷ Staff used the Ibbotson arithmetic total return of large company stocks (12.1 percent) and Ibbotson's arithmetic mean of long-term government bonds rate (i.e., "risk free return"; 6.0 percent) to create the market risk premium portion of the CAPM calculation.⁸ Staff opted to use forecasted 30-year US Treasury Bills to establish a risk-free rate. In order to arrive at a forecasted 30-year Treasury Bills rate, Staff used forecasted yields of 10-year U.S. Treasury Bills that were published by the U.S. Bureau of Labor Statistics and the U.S. Energy Information Administration, which were 4.3 percent and 4.02 percent respectively. Staff then averaged these two forecasted rates and added 50 basis points to account for the historical difference between the 10-year and 30-year Treasury yields. The averaged 10-year yield is 4.16 percent, which results in a risk-free rate of 4.66 percent after 50 basis points are added to the 10-year yield average. Staff's methodology produces a CAPM calculation of:

$$9.11 = 4.66 + 0.73 * (12.1 - 6.0)$$

In calculating its DCF cost of common equity estimate, for each comparable company, Staff employed the annual average stock price, the sum of the last four quarterly dividends, and estimates of the expected rate of growth of earnings. The stock price employed is the average daily closing price for the period from June 22, 2017 through June 16, 2018. The DCF model assumes that earnings growth and dividends growth are the same. Staff averaged earnings per share estimates from Yahoo, Reuters and Value Line to get DCF growth estimates for each company. The Value Line average incorporates both the explicit long-range earnings estimate shown in the "box" and the implicit continuous growth rate calculated from the estimates of earnings per share.

For Staff's determination of DCF cost of equity, Staff assumed a non-constant DCF growth rate. For the first five years, Staff assumed dividends to grow at a rate derived from financial analysts' growth estimates (i.e., long term growth rate). Staff's DCF growth estimates were used for the first five years, as they are averages of estimates from various investor news services. From the twenty-fifth year on, Staff assumed the growth rate to equal the long-term growth rate in the U.S. Gross National Product (GNP). For the sixth through twenty-fourth years dividends vary between the two rates in a linear fashion. The long-term growth rate in GNP was the average annual change in GNP from the U.S. Department of Commerce for 1929 through 2017. Staff calculated a stream of annual dividends based on long-term GNP growth, the respective Company DCF growth estimate and dividend. Staff used the internal rate of return derived from the dividend stream and the stock price for Staff's non-constant growth DCF cost of equity estimate.

The comparable group non-constant DCF cost of equity estimates average 9.23. When averaged with the CAPM calculation and using a one hundred basis point range of uncertainty, the cost of equity estimate becomes 8.67 percent to 9.67 percent. To provide for this return, an allowance must be made for issuance

⁷ Beta is a measure of the volatility, or systematic risk, of a security or a portfolio in comparison to the market as a whole. Beta is used in the capital asset pricing model (CAPM), which calculates the expected return of an asset based on its beta and expected market returns. Beta is also known as the beta coefficient. Available at <http://www.investopedia.com>.

⁸ Market Risk premium is the difference between the expected return on a market portfolio and the risk-free rate. Available at <http://www.investopedia.com>.

and other costs, as shown on Schedule D-1.3. Therefore an adjustment factor of 1.01407 was applied resulting in a baseline cost of common equity recommendation of 8.80 percent to 9.81 percent.

RATES AND TARIFFS

By its application in Case 18-0298-GA-AIR, et al, the Applicant requests authority to modify its electric distribution rates and charges.

Staff has investigated the rate and tariff matters proposed by the Applicant. The results of the investigation by Staff are herein reported. It is the intent of Staff to provide analysis with regard to the acceptability and reasonableness of the revenue recovery mechanisms contained in the proposed tariffs. The proposals made by Staff may require adjustments in order to generate the revenue requirement authorized by the Commission. Typical bills are presented at the end of the Staff Report, in Schedule E-5.

Tariff Analysis

The Applicant is proposing various textual changes to its tariffs. Unless noted, Staff recommends approval of these changes as proposed by the Applicant.

General Terms and Conditions Applicable to Gas Service

Sheet No. 54 – Unaccounted for Gas Percentage – VEDO is proposing that the Unaccounted For Gas (UFG) Percentage, as set forth in the Company's Tariff Sheet No. 54, be subjected to automatic approval. VEDO will continue to update its UFG Percentage periodically, as necessary, via the filing of an application with the Commission. 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.

Staff recommends approval of the UFG proposal.

Sheet No. 60, Section 1.A – The Applicant's proposed requirement to be an owner or bona fide lessee should not be included as a requirement to apply for gas service. The added requirement would limit the availability of regulated services to only owners and bona fide lessees. There are multiple examples of customers who are customers of a public utility but do not own or lease the premise themselves including family members who may or may not live at the premise, but are the financially responsible party for the utility bill.

Staff recommends denial of this proposed change.

Sheet No. 62, Section 3.A – VEDO should modify the meter testing section to include a free meter test every three years. VEDO has had only ten meter test requests over the last two and one half years. With such a small number of requests, there is no financial reason not to provide a free test. Consumers should have the ability to test the accuracy of their meter without being financially discouraged from doing so.

Miscellaneous Charges

In its Application, VEDO requests approval to increase the following miscellaneous charges:

1. The Ordinary Investigation Fee - Increasing from \$125.00 per hour worked to \$175.00 per hour worked.
2. Extensive Investigation Fee – Increasing from \$35.00 per hour worked to \$50.00 per hour worked.

3. After hours charge for Connection, Reconnection or Disconnection – Increasing from \$22.00 to \$25.00.
4. Trip and Labor charges outside of business hours – Increasing from \$57.00 to \$75.00.

In the response to Staff Data Request #61, the Applicant withdrew the request to increase the Ordinary Investigation Fee and the Extensive Investigation Fee, consequently the fees for these two services will be the current charge.

Staff agrees with the After Hours charge for Connection, Reconnection or Disconnection increasing from \$22.00 to \$25.00 dollars, and recommends approval.

Staff does not agree with the proposed Trip and Labor charges outside of business hours increasing from \$57.00 to \$75.00. The response to Staff Data Request #61 supports a charge of \$71.77 for this service, and that is Staff's recommendation.

Multi-Family Housing Pilot Program

In conjunction with its application for an increase in base rates, VEDO filed an application for approval of an Alternative Rate Plan (ALT).⁹ As part of its ALT, VEDO proposed a Multi-Family Housing Pilot Program. Under this program, VEDO would provide financial contributions of up to \$2,000 per individually metered dwelling towards the installation of indoor gas piping and venting. These contributions would be paid to builders and developers of multi-family apartments and condominiums after verifying the actual cost of the installations. The annual cost of the program would be limited to \$1 million and these program costs would be included for recovery in VEDO's next rate case. In a future rate case, VEDO would seek to capitalize these program costs and include them as rate base, allowing for a return on and of these financial contributions.

In its review of the pilot program, Staff finds that the financial contributions as proposed by VEDO are not capital expenditures recoverable through rate base. These contributions are for piping and venting owned, operated, maintained and inspected by the builder/developer and therefore not within VEDO's ability to direct or dedicate in the service of its customers.

Staff also finds that these financial contributions are intended to off-set the higher up-front costs of installing natural gas facilities in apartments and condominiums. Traditionally these structures are built to utilize electric only appliances, due to the lower construction costs. For this reason, Staff does not want to endorse incentives that promote energy competition between utilities that in the end, are paid for by ratepayers.

For these reasons, Staff recommends that the Commission deny VEDO's request for the proposed Multi-Family Pilot Program.

⁹ *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, Application to Increase Rates and Charges (March 30, 2018).

Energy Conversion Factor

As part of its ALT, VEDO proposed an Energy Conversion Factor (ECF) adjustment to volumetric usage.¹⁰ The EFC would adjust the metered volumetric usage amount to reflect the heat content (Btu) consumed. The EFC would be applied to all volumetric rates, riders and commodities.

Staff supports the ECF as proposed in the ALT. Staff finds the ECF as proposed is an acceptable method to address the fluctuations in heat content while continuing to recognize volumetric usage as the basis for billing. Fluctuations in the heat content are outside of the Applicant's control and can impact the portion of a utility's costs which are recovered volumetrically. Staff would recommend that if the Commission adopts VEDO's proposed ECF that annual audits be conducted by Staff to verify the accuracy of the adjustments.

Excess Deferred Income Tax Credit Mechanism

On Schedule C-3.24, Staff removed the average annual amortization of \$2.6 million which the Applicant proposed to be built into base rates. Staff recommends that all Excess Accumulated Deferred Income Taxes (EDIT) associated with the TCJA be recovered through a credit mechanism. As stated in Company witness Swiz's testimony, a credit mechanism would allow the Company to return to customers the exact amount of the credit associated with the amortization of EDIT as recorded on VEDO's income statement each year.¹¹ Staff recommends that the Applicant update the credit mechanism on a yearly basis in order to capture the exact amount of the credit. Furthermore, Staff recommends the credit be passed back on a volumetric basis with any balances being reconciled on an annual basis. The yearly updates to the credit mechanism would be subject to an annual audit with new rates going automatically into effect 90 days after the filing.

The Company proposed to amortize the protected EDIT according to the Average Rate Assumption Method (ARAM), as prescribed by federal law. In regards to the unprotected EDIT, the Company proposed amortizing the balance related to capital repairs deductions in accordance to ARAM, with the remaining unprotected EDIT balance being amortized over 30 years using a straight-line approach. Staff agrees with the Company's approach to amortizing the protected EDIT since the rate at which protected EDIT is amortized is prescribed by federal law, and not at the discretion of the Company. Staff disagrees with the Company's proposal to amortize the unprotected EDIT, and Staff recommends that the entire balance of unprotected EDIT be amortized over a period no greater than 10 years.

Gross Receipts Tax Rider

Staff recommends that the Applicant update the Gross Receipts Tax Rider rate based upon the final outcome of this proceeding, which will be reviewed by Staff as part of the Applicant's compliance filing.

¹⁰ *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, Application to Increase Rates and Charges (March 30, 2018).

¹¹ *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, et al., Direct Testimony of J. Cas Swiz on Behalf of Vectren Energy Delivery of Ohio, Inc. (April 13, 2018).

Rate Design and Revenue Analysis

Rate and Revenue Guidelines

The following general guidelines and objectives are followed in Staff's review of rate schedules and design. Schedules should provide the utility the opportunity of recovering an authorized revenue. Schedules should represent a reasonable distribution of revenue between and among the various customer groups. Schedules should be equitable and reasonable, provide for customer understanding and continuity of rates, and cause minimal customer impact.

Rate design criteria are to be viewed as a package, in that they are interrelated. Although each ratemaking principle can be separately identified and applied to rate schedule determinations, no single standard is overriding in the determination of a proper rate design. The rate schedules which comprise a particular utility's tariff should provide for recovery of expenses found proper in the course of a regulatory proceeding. Normally, and to the extent sufficient information is available, cost of service studies and related expense analyses are necessary to determine the appropriate level of revenue to be generated and the appropriate recovery of such revenue.

From a practical rate design standpoint, absolute equality between costs and revenues may be difficult to achieve in the short term. While it may be viewed as equitable to set rates at costs, if there is a substantial divergence in the current rates, the resulting impact on individual customers may be viewed as unreasonable. While Staff supports cost-based charges, Staff considers such items as resulting in typical customer bill impacts and resulting in revenue increases which would necessarily occur. While it is Staff's position that rates reflect costs, Staff also considers continuity associated with the current and proposed pricing structures. This may result in movement toward aligning revenues with costs, rather than an absolute match at a particular time period.

In summary, gas rates should:

- Be fair, equitable and reasonable;
- Cause minimal impact (sometimes called "gradualism") when changed;
- Provide continuity in pricing structures; and
- Provide the utility the opportunity to recover an authorized revenue by providing for the recovery of costs found proper in a regulatory proceeding.

The preceding standards are important and each has value. They are, however, subjective, and it is generally impossible to fully accomplish them all. Sometimes one standard supersedes the others to a degree. For instance, rates must provide the utility with the opportunity to recover its authorized revenue requirement. Sometimes the standards are in conflict and to accomplish one, another might be set aside. For instance, the need for rates to be predicated on costs may cause changes in pricing structures resulting in greater than minimal impacts on some customers.

Cost of Service Analysis

Generally, there are three capacity allocations that are commonly used – coincident demand, non-coincident demand, and average and excess demand. The standard filing requirements allow the selection of any of these approaches, or alternatives, when in the utility’s opinion, the procedure best represents the utility’s system characteristics. The Cost of Service Study (COSS) filed by the Applicant is an embedded and fully-allocated cost of service study by rate class for the test period ending September 30, 2018. The COSS classifies gas distribution-related cost items such as plant investment, operating expenses and taxes as either demand or customer-related, and then allocates the same items to the various customer classes while calculating the revenue responsibility of each class. Finally, the COSS calculates the revenue responsibility of each class required to generate the recommended rate of return.

The Applicant based its allocations on the cost causation guidelines established in the NARUC “Gas Distribution Rate Design Manual.” The Applicant used a coincident peak demand (based on a design day basis) to allocate demand related costs to its rate classes. The remaining distribution costs were allocated based upon prescribed and accepted methodologies in allocating distribution costs. Staff accepts the modified COSS, as adjusted in the Applicant’s Data Request #95 for class allocation purposes. The Applicant submitted a revised COSS based on several allocation factor corrections/adjustments, and the removal of the PIPP Rider, Uncollectible Expense Rider and Distribution Replacement Rider revenues, and partial removal of the Energy Efficiency Funding Rider, Exit Transition Cost Rider revenue.

COSS results are presented in Tables 1 and 2. Table 1 provides the Current, Applicant-proposed distribution related Rates of Return and Indexes for the customer classes. Table 2 provides the Current, Applicant-proposed allocation of total distribution related revenue based on the current total distribution revenue and the Applicant’s proposed increase in total distribution revenue.

Table 1

Cost of Service Results Rates of Return

	Current		Applicant Proposed	
	%	Index	%	Index
Rate - 310,311,315	.90	.23	5.62	0.71
Rate - 320,321,325	7.61	1.93	10.90	1.37
Rate - 345	17.23	4.38	18.76	2.35
Rate - 360	24.98	6.35	23.66	2.97
Total Distribution	3.94	1.00	7.97	1.00

Table 2

Cost of Service Results Revenue Distribution Percentage

	Current Revenue	Applicant Proposed Revenue
	%	%
Rate - 310,311,315	69.53	70.95
Rate - 320,321,325	17.06	16.81
Rate - 345	4.47	4.25
Rate - 360	8.94	7.99
Total Distribution	100.00	100.00

Distribution of Proposed Revenue Increase

Based upon modifications made in the Applicant's response to Data Request #95, the Applicant is proposing a total increase in distribution base revenues of approximately \$33.6 million. Staff has analyzed the COSS utilized by the Applicant in this filing and finds it to be a reasonable indicator of costs and cost responsibility between classes. Staff recommends approval of the Applicant's recommended revenue class allocation based upon adjustments in the response Staff Data Request #95.

Tables 3 and 3a represent the Applicant's and Staff's proposed Revenue Distribution excluding gas costs and Tables 4 and 4a represent the Applicant's and Staff's proposed Revenue Distribution with gas costs.

Table 3
Revenue Distribution and Increase Excluding Gas Costs
Applicant Proposed

	Applicant Current		Applicant Proposed		Increase	
	\$	% of Total	\$	% of Total	\$	%
Rate - 310,311,315	108,588,304	68.06	135,198,246	69.97	26,609,942	78.99
Rate - 320,321,325	27,299,399	17.11	32,229,627	16.68	4,930,228	14.64
Rate - 345	7,069,301	4.43	8,098,682	4.19	1,029,381	3.06
Rate - 360	16,485,587	10.33	18,057,430	9.35	1,571,843	4.67
Subtotal	159,442,591	99.94	193,583,985	100.18	34,141,394	101.35
Miscellaneous Revenue	2,529,813	1.59	2,529,813	1.31	0	0
Other Revenue	(2,431,665)	(1.52)	(2,886,724)	(1.49)	(455,059)	(1.35)
Total	159,540,739	100.00	193,227,074	100.00	33,686,335	100.00

Table includes SB287 and Gross Receipts Tax rate of 4.9892%

Table 3a
Revenue Distribution and Increase Excluding Gas Costs
Staff Proposed

	Staff Current		Staff Proposed		Increase	
	\$	% of Total	\$	% of Total	\$	%
Rate - 310,311,315	98,499,808	68.28	109,607,046	69.2	11,107,238	78.55
Rate - 320,321,325	24,234,272	16.80	26,418,977	16.68	2,184,705	15.45
Rate - 345	6,368,082	4.41	6,779,142	4.28	411,060	2.91
Rate - 360	14,958,383	10.37	15,586,427	9.84	628,044	4.44
Subtotal	144,060,545	99.87	158,391,593	100	14,331,048	101.35
Miscellaneous Revenue	2,356,216	1.63	2,356,216	1.49	0	0
Other Revenue	(2,168,215)	(1.50)	(2,358,573)	(1.49)	(190,358)	(1.35)
Total	144,248,546	100.00	158,389,236	100.00	14,140,690	100.00

Table excludes SB287 and Gross Receipts Tax

Table 4
Revenue Distribution and Increase Including Gas Costs
Applicant Proposed

	Applicant Current		Applicant Proposed		Increase	
	\$	% of Total	\$	% of Total	\$	%
Rate - 310,311,315	114,423,226	69.11	141,033,169	70.78	26,609,942	78.99
Rate - 320,321,325	27,491,217	16.60	32,421,446	16.27	4,930,228	14.64
Rate - 345	7,069,301	4.27	8,098,682	4.06	1,029,381	3.06
Rate - 360	16,485,587	9.96	18,057,430	9.06	1,571,843	4.67
Subtotal	165,469,331	99.94	199,610,727	100.18	34,141,394	101.35
Miscellaneous Revenue	2,529,813	1.53	2,529,813	1.27	0	0
Other Revenue	(2,431,665)	(1.47)	(2,886,724)	(1.45)	(455,059)	(1.35)
Total	165,567,479	100.00	199,253,816	100.00	33,686,335	100.00

Table includes SB287 and Gross Receipts Tax rate of 4.9892%

Table 4a
Revenue Distribution and Increase Including Gas Costs
Staff Proposed

	Staff Current		Staff Proposed		Increase	
	\$	% of Total	\$	% of Total	\$	%
Rate - 310,311,315	104,334,730	69.43	115,441,969	70.21	11,107,239	78.55
Rate - 320,321,325	24,426,090	16.25	26,610,795	16.19	2,184,705	15.45
Rate - 345	6,368,082	4.24	6,779,142	4.12	411,060	2.91
Rate - 360	14,958,383	9.95	15,586,427	9.48	628,044	4.44
Subtotal	150,087,285	99.87	164,418,333	100	14,331,048	101.35
Miscellaneous Revenue	2,356,216	1.57	2,356,216	1.43	0	0
Other Revenue	(2,168,215)	(1.44)	(2,358,573)	(1.43)	(190,358)	(1.35)
Total	150,275,286	100.00	164,415,976	100.00	14,140,690	100.00

Table excludes SB287 and Gross Receipts Tax

Staff Customer Charge Analysis

In the Applicant's last distribution rate case, the Commission approved a straight fixed variable (SFV) rate design for residential customers. The Applicant is proposing a straight fixed variable rate design for Group 1, small commercial customers with a rate capacity of 450 cubic feet per hour (Cfh) or less. The proposed monthly charge for Group 1 customers was based on the unit demand and customer costs in the COSS derived for the VEDO's residential class, adjusted for the increased daily demand requirements and higher meter investment costs associated with Group 1 commercial customers. In response to Staff Data Request #71, VEDO provided worksheets supporting how the proposed \$46.00 was derived. The proposed charge for small commercial customers would be approximately 130 percent of the \$35.16 SFV charge proposed for residential customers in this case. Except for year 2014, sales data between years 2013 – 2017 have declined approximately 30.52 percent. Sales per customer per degree day are more or less constant for years 2013 – 2017 with no significant change. Between years 2013 – 2017, average sales per customer have declined approximately 14 percent.

The Commission has approved several applications for the adoption of modified SFV or fully SFV rate design for gas utilities. In Columbia Gas of Ohio's Case No. 08-0072-GA-AIR, the Commission approved a SFV rate for all small general service customers that consume less than 300 Mcf per year.¹² In Eastern Natural Gas and Pike Natural Gas Company Case Nos. 08-940-GA-ALT and 08-941-GA-ALT, the Commission approved a modified straight-fixed variable rate design for residential and non-residential customers.¹³ The modified straight-fixed variable rate design allows for a smaller portion of the fixed costs to be recovered through a volumetric charge. In Suburban's Case No. 17-594-GA-ALT, the Commission approved a two year phase-in of a full SFV rate design for commercial customers with consumptions less than 300 Mcf per year.¹⁴

The Applicant did not propose the annual 3000 CCF sales threshold as established in other gas distribution small commercial SFV rate designs. Staff recommends that the Applicant remove Group 1 customers with annual consumption equal to or greater than 300 Mcf/3000 Ccf from the SFV group and incorporate these customers into the rate design proposed for larger general service customers. The customer charge for this group should follow the same recommendation proposed for larger general service customer as explained in the larger general service customer charges section below. Staff recommends that in this case, the proposed SFV concept be fully adopted, with the exception of excluding customers with an annual consumption of 3000 Ccf or greater. Additionally, the SFV charge should be adjusted to reflect the outcome of the approved residential SFV charge, and should not exceed 130% of the final approved residential SFV charge.

¹² *In the Matter of the Application of Columbia Gas of Ohio, Inc., for Authority to Amend Filed Tariffs to Increase the Rates and Charges for Gas Distribution Service*, Case No. 08-72-GA-AIR, et al., Opinion and Order at 20 (Dec. 3, 2008).

¹³ *In the Matter of the Application of Eastern Natural Gas Company for Approval of an Alternative Rate Plan Proposing a Revenue Decoupling Mechanism*, Case No. 08-940-GA-ALT, et al., Opinion and Order at 14-16 (June 16, 2010).

¹⁴ *In the Matter of the Application of Suburban Natural Gas Company for Approval of an Alternative Form of Regulation to Initiate a Revenue Decoupling Mechanism*, Case No. 17-594-GA-ALT, Finding and Order at 10 (Nov. 1, 2017).

The remaining customer charges were calculated utilizing the traditional methodology. Staff's general approach to calculating customer related costs was established in 1978. Certain generally unvarying costs occur as a result of customer connections to the utility's system, regardless of usage. Staff has found it appropriate to separately recognize these costs and to continue this recognition in the form of customer charges in the design of rates. Staff has periodically reviewed the costs included in setting the customer charge, yet has made few changes to the formula. Staff's customer charge calculations for Group 2 and 3 commercial customers and customers served on tariff 345 and 360 do not support increasing the customer charges as proposed by the Applicant for these groups. Staff recommends that the current customer charge only be increased by the overall percentage allowed for each applicable rate class. For example, if the overall increase for a certain class is 10%, that percentage should be assigned to the customer charge for that class. Even though Staff's customer charge calculations do not support increasing these customer charges, assigning the increase some portion of the class increase, should temper revenue shifting between fixed and variable revenue recovery. Staff's customer charge calculations are presented below.

Table 5
Staff Calculated Customer Charge

Account No.	Account Title	General Service (Rate Schedules 320/321/325)	Large General Transport (Rate Schedule 345)	Large Volume Transport (Rate Schedule 360)
Distribution Expenses				
878	Meter and House Regulators	\$ 628,000	\$ 15,000	\$ 8,000
879	Customer Installations	\$ 555,000	\$ 13,000	\$ 7,000
	Total Distribution Expenses	\$ 1,183,000	\$ 28,000	\$ 15,000
Customer Accounting and Expenses				
901	Supervision	\$ 72,000	\$ 1,000	\$ -
902	Meter Reading	\$ 77,000	\$ 1,000	\$ -
903	Customer Records and Collection	\$ 491,000	\$ 6,000	\$ 2,000
905	Customer Assistance Information	\$ 226,000	\$ 2,000	\$ -
	Total Customer Expenses	\$ 866,000	\$ 10,000	\$ 2,000
	Total Distribution and Customer Expenses	2,049,000	38,000	17,000
Net Plant Expenses				
380	Services	\$ 20,845,000	\$ 590,000	\$ 153,000
381	Meters	\$ 11,776,000	\$ 272,000	\$ 155,000
383	House Regulators	\$ 1,823,000	\$ 42,000	\$ 24,000
	Total Plant Accounts	\$ 34,444,000	\$ 904,000	\$ 332,000
	Return on Total Plant Accounts	\$ 2,745,027	\$ 72,049	\$ 26,460
	Property Taxes	\$ 766,907	\$ 18,262	\$ 6,621
	Depreciation Expenses	\$ 1,657,000	\$ 44,000	\$ 16,000
	Total	\$ 5,168,934	\$ 134,311	\$ 49,082
	Total Customer Charge Revenue	<u>7,217,934</u>	<u>172,311</u>	<u>66,082</u>
	Customer Bills	287,668	3,606	936
	Average Monthly Customer Charge	\$25.09	\$47.47	\$70.60

Rate Schedule Comparison

Residential Sales/Transportation Service (Rate 310, 311,315)

These rate schedules consist of residential default sales, residential standard choice, and residential transportation service and are applicable to any residential customer. Table 6 compares the Staff recommended rate schedule changes with the Applicant's Current and Proposed.

Table 6 – Fixed Charge

	Current	Applicant		Staff	
		Proposed	Increase	Proposed	Increase
	\$	\$	%	\$	%
Fixed Charge	18.37	35.31	92.22	30.95	68.48

General Sales/Transportation Service (Rate 320, 321,325)

These rate schedules consist of general default sales, general standard choice, and general transportation service and are applicable to any non-residential customer electing service hereunder whose annual usage is less than 150,000 Ccf. Table 7 compares the Staff recommended rate schedule changes with the Applicant's Current and Proposed.

Table 7 – Customer and Ccf Charge

	Current	Applicant		Staff	
		Proposed	Increase	Proposed	Increase
	\$	\$	%	\$	%
Group 1- Customer Charge	20.00	46.00	130.00	40.24	101.20
Group 2 – Customer Charge	40.00	75.00	87.50	43.60	9.00
Group 3 – Customer Charge	80.00	155.00	93.75	87.21	9.01
Group 2 & 3 - Ccf Charge	.07873	.14262	81.15	.1730	119.74

Large General Transportation Service (Rate 345)

This Rate schedule is available to any non-residential customer electing service hereunder whose annual usage is greater than 50,000 CCF and less than 500,000 Ccf, and whose maximum daily usage is less than 10,000 Ccf. Table 8 compares the Staff recommended rate schedule changes with the Applicant's Current and Proposed.

Table 8 – Fixed and Ccf Charge

	Current	Applicant		Staff	
		Proposed	Increase	Proposed	Increase
	\$	\$	%	\$	%
Fixed Charge	150.00	180.00	20.00	159.69	6.46
First 15,000 Ccf	.10004	.13784	37.78	.12714	27.1
Over 15,000 Ccf	.08814	.12356	40.19	.11502	30.50

Large General Transportation Service (Rate 360)

This rate schedule shall be applicable to any non-residential customer that has an annual usage of 500,000 Ccf or greater, or has a maximum daily usage of 10,000 Ccf or greater. Table 9 compares the Staff Recommended rate schedule changes with the Applicant's Current and Proposed.

Table 9 – Customer and CCF Charge

	Current	Applicant		Staff	
		Proposed	Increase	Proposed	Increase
	\$	\$	%	\$	%
Customer Charge	500.00	550.00	10.00	521	4.20
First 50,000 Ccf	.08525	.10762	26.24	.10188	19.50
Next 150,000 Ccf	.07436	.09564	13.15	.09054	21.76
Over 200,000 Ccf	.05668	.07619	34.42	.07213	27.26

Typical Customer Bill Tables

See Schedule E-5 at the end of this report for typical bills, which include riders, for various customer classes and customer usages. Typical bills include Riders and the Gross Receipts Tax rate of 4.9892%

SERVICE MONITORING AND ENFORCEMENT

Any rates requested by an applicant public utility cannot be approved unless the Commission determines those rates are just and reasonable. As part of the Staff review of an application for an increase in rates, the Service Monitoring and Enforcement Department (SMED) conducts reviews of the facilities, operations, management and services provided by the applicant for the purposes of determining the adequacy, efficiency, and effectiveness of those public utility services. Pursuant to R.C. 4909.153 and 4909.154, the Commission may rely on the recommendations of SMED for the purposes of ordering improvements to the facilities or services of the Applicant.

Facilities & Operations Field Division

SMED's Facilities & Operations Field Division (FOFD) is charged with inspecting gas pipeline facilities to ensure regulated utility service providers can deliver safe, reliable and quality service. Staff routinely conducts various investigations of the applicant's pipeline system and other physical facilities, plans, procedures, and administrative records to assess compliance with the Pipeline Safety Regulations (49 C.F.R. 192), adopted by the Commission through rule 4901:1-16-03 of the Ohio Administrative Code. The following reflects Staff's activities and findings relative to the applicant for calendar year 2017.

Staff conducted a comprehensive inspection of the VEDO at all three of its operating centers in Ohio. The scope of Staff's inspection included the following:

- Review of operation and maintenance records to verify compliance with the requirements of the Gas Pipeline Safety Regulations.
- Physical site visits to verify compliance with safety inspection standards.
- Review of operation plans, emergency plans and associated standards and procedures to verify compliance with emergency response, construction, operations and maintenance requirements.
- Review of the VEDO Gas Drug and Alcohol programs for employees and contractors.
- Review of the VEDO Operator Qualification program.
- Review of the VEDO Public Awareness program and associated records.
- Review of the VEDO Damage Prevention program and its participation in the Ohio Utilities Protection Service.

Staff reviewed company records and conducted field inspections out of the Applicant's operating centers located at 6500 Clyo Road in Centerville, 1335 East Dayton-Yellow Springs Road in Fairborn, and 1300 Experiment Farm Road in Troy. Inspections of physical infrastructure included inspections of pressure regulator stations, critical valves, corrosion control systems, leakage survey areas, pipeline patrolling, drug and alcohol test records, public awareness, operator qualification, pressure testing, odorization and emergency response. Staff reviewed all records to determine if the company had performed inspections and maintenance of its gas pipeline system in compliance with required schedules.

Findings: Scheduled Annual Audit Inspections

During the records review portion of the GPS audits, Staff reviewed a number of areas such as valve maintenance, pressure regulation, corrosion control, leakage surveys, pipeline patrolling, drug and

alcohol records, public awareness, operator qualification, odorization, and emergency response. Staff also reviewed all records to determine compliance with the appropriate timeline for inspection and maintenance of the gas pipeline system. The inspection determined that VEDO is generally in compliance with the Pipeline Safety Regulations and did not identify any violations.

Pipeline Safety Incidents and Outages

VEDO reported two Incidents resulting from a release of natural gas in 2017. One incident involved a car hitting and damaging a VEDO pressure regulating station causing a fire, and the other involved excavators hitting and damaging a VEDO natural gas main, resulting in a fire and explosion at a nearby building. Staff determined that VEDO did not commit a violation of the Pipeline Safety Regulations that caused or contributed to either of these incidents, and that VEDO's emergency response actions taken were timely and appropriate.

VEDO reported one service outage for 203 customers for a period of approximately 10 hours in 2017. This outage was caused by excavation damage. Staff determined that VEDO did not commit a violation of the Pipeline Safety Regulations that caused or contributed to this outage.

Incident and outage definitions and reporting requirements are summarized in Ohio Adm.Code 4901:1-16-05.

Miles of Mainline and Services Installed / Mainlines Removed from Service

According to the annual reports filed with the United States Department of Transportation (USDOT), Pipeline and Hazardous Material Safety Administration (PHMSA), VEDO operates a total of 5,453 miles of distribution main and 317,698 customer services broken down as follows:

Miles of Pipeline and Number of Services

2017	Unprotected Steel		Protected Steel		Plastic	Cast Iron
	Bare	Coated	Bare	Coated		
Miles of Main	187	327	136	2,407	2,347	50
No. of Services	12,822	24,887	6,339	94,204	172,937	-

The terms "Unprotected" and "Protected" refer to cathodic protection meeting the requirements of the Pipeline Safety Regulations, 49 C.F.R. 192, Subpart I. The terms "Bare" and "Coated" refer to an external protective coating applied to prevent corrosion. Piping installed prior to August 1, 1971 is not required to be coated or to be protected under some conditions.

VEDO reported completing 50 Important Additions to the Gas Pipeline Safety section in 2017. An "Important Addition" is defined in Ohio Adm.Code 4901:1-16-06(A)(1) as construction or alteration of an operator's gas pipeline facility in a single project which involves an expenditure of more than \$500,000. A comparison between the VEDO 2016 and 2017 annual reports is below. Staff suspects a large number of steel services were reclassified from coated protected steel to coated unprotected steel, otherwise these numbers show progress VEDO is making on its Pipeline Infrastructure Replacement (PIR) program.

Change in Miles of Main and Number of Services over 2017

	Unprotected Steel		Protected Steel		Plastic	Cast Iron
	Bare	Coated	Bare	Coated		
Miles of Main	-21	-16	-2	-9	+148	-15
No. of Services	-4,038	+13,208	-4,961	-36,335	+15,256	-

The VEDO annual report also shows that VEDO eliminated or repaired a total of 1,332 hazardous leaks and 4,847 total leaks during 2017, and that it had 552 open known system leaks at the end of 2017 scheduled for repair.

Staff Recommendations

The Gas Pipeline Safety section supports continuation of the VEDO PIR program in order to replace aging infrastructure and reduce the number of gas leaks in the system. Otherwise Staff has not identified any significant compliance issues with VEDO, and has no other recommendations to offer.

Customer Service Division

CUSTOMER SERVICE AUDIT

SMED's Customer Service Division (CSD) is charged with providing assistance to Ohio utility consumers by educating citizens, mediating disputes, auditing regulated companies, and influencing public policy to assure equitable treatment and access to regulated services. In order to ensure the Applicant is in compliance with applicable rules and regulations set forth by the Commission, Staff completed a customer service audit in March 2017 of the customer service performance, practices and procedures of the company. As a result of the audit, Staff determined that the overall customer service practices and policies of the Applicant, as reviewed and observed by the team, comply with the applicable rules and regulations set forth by the Commission.

Customer Service Assessment

Staff reviewed the customer contacts to the PUCO's call center for the period January 1, 2014 through December 31, 2016. The PUCO reviewed 1,954 contacts during this period. Instances where consumers called the PUCO before calling the company comprised the largest number of contacts, with 475 for the period. Most of these consumers were seeking account information and were directed back to the company to give the company the first opportunity to respond to its customers.

The next largest category was 468 customers inquiring about gas choice, which included questions to learn more about choice, as well as obtaining "Apples-to-Apples" charts. Billing concerns was the third largest category with 262 contacts. This included contacts regarding high balances, back billing, or final/initial

billing questions. Concerns regarding disconnection issues or payment arrangements prompted 216 consumer contacts. Most of these customers wanted to obtain information about how to prevent disconnection, or inquire about various payment arrangements and/or the winter reconnect order.

One hundred sixty-eight consumers had questions regarding service issues, including availability of service, new service, and repair service, including 23 customers who voiced concerns about the quality of the company's customer service. Contacts regarding PIPP Plus and other assistance programs were the sixth largest category with 150 contacts. The PIPP Plus rules were modified in November 2015, which may have contributed to the quantity of contacts.

Questions regarding meter access or meter readings was the seventh largest category with 58 contacts, followed by rates and tariffs with 53 contacts. Forty-five customers contacted the PUCO regarding leakage or pressure concerns.

The remaining contacts included miscellaneous items, such as questions or concerns regarding company policies, damages, deposits, or non-jurisdictional matters.

MANAGEMENT AND OPERATIONS REVIEW

Ohio Revised Code 4909.154 provides that the Commission shall consider the management policies, practices, and organization of public utilities in fixing the just, reasonable, and compensatory rates, joint rates, tolls, classification, charges or rentals to be observed and charged for service by any public utility.

Ohio Adm.Code 4901-7-01, Appendix A requires medium and large utilities to include in their rate filings a concisely written summary of their management policies, practices, and organization. Among other things, the summary is to include a discussion of policy and goal setting, strategic and long range planning, organization structures, decision making and controlling, and communications for the company's executive management process (Schedule S-4.1) as well as for numerous functional areas common to most large utility companies (Schedule S-4.2).

Staff routinely reviews the S-4.1 and S-4.2 schedules, applicant performance, and various events relating to an applicant's management. As a result of these review activities, Staff selects certain management topics for rate case reporting. In the current rate case, Staff reports on the processes used by the Company regarding the Company's Budgeting/Forecasting Process and Salvage and Cost of Removal associated with plant retirements.

Budgeting/Forecasting

Vectren Corporation and its subsidiaries prepare budgets in order to analyze the business and to make financial decisions. The annual budget includes information used to measure financial and operating performance versus plan. The budget permits the Company to create Business Unit Scorecards and status reports on key initiatives. The annual budget is used by a variety of constituents, both outside and inside the Company. For example, portions of the budget are communicated to external investors to establish earnings guidance. The same budget is also used in regulatory proceedings including rate cases. Internally, the budget is used to set performance based compensation. The Company uses the budget each month to compare actual results versus budget, the prior year, and future projections. It is viewed as critical information to guide key decisions made by management. Underscoring its importance in communicating to key stakeholders, Vectren's Board of Directors approves a corporate budget on an annual basis.

Budgeting/Forecasting Process

Vectren's senior executives, supported by the Controller's Management Reporting and Budgets Team, are responsible for the Company's Strategic Plan. In turn, the Strategic Plan relies upon a short term, detailed budget and long term, strategic forecasts. The detailed budget is built in stages beginning with the cost center owners and progressing upward to higher levels in the Company. Some inputs, such as the recovery of future identified costs associated with VEDO's accelerated program of equipment replacement, rely upon specialists in the Regulatory Department or another internal source of subject matter expertise.

The Company uses a two year period in creating its detailed budget. Last year, for example, was devoted to updating the 2018 budget that was initially established in 2016 as well as creating a budget for 2019. The roll forward of the budgeting period is undertaken to allow for changes in resource plans or business drivers as well as giving effect to continuous improvement initiatives. Strategic forecasts are similarly

subject to roll forward and have time horizons of three to ten years. The two year budget and strategic forecasts allow Vectren to measure actual financial and operational performance against the Strategic Plan.

Each year, the Controller's Management Reporting and Budgets team initiates the process for creating the budget and forecasts. The process generally begins in June. In July, officer level review occurs. Executive management approves the budget and forecasts in August. In November, the first year of the detailed two year budget is approved by Vectren's Board of Directors.

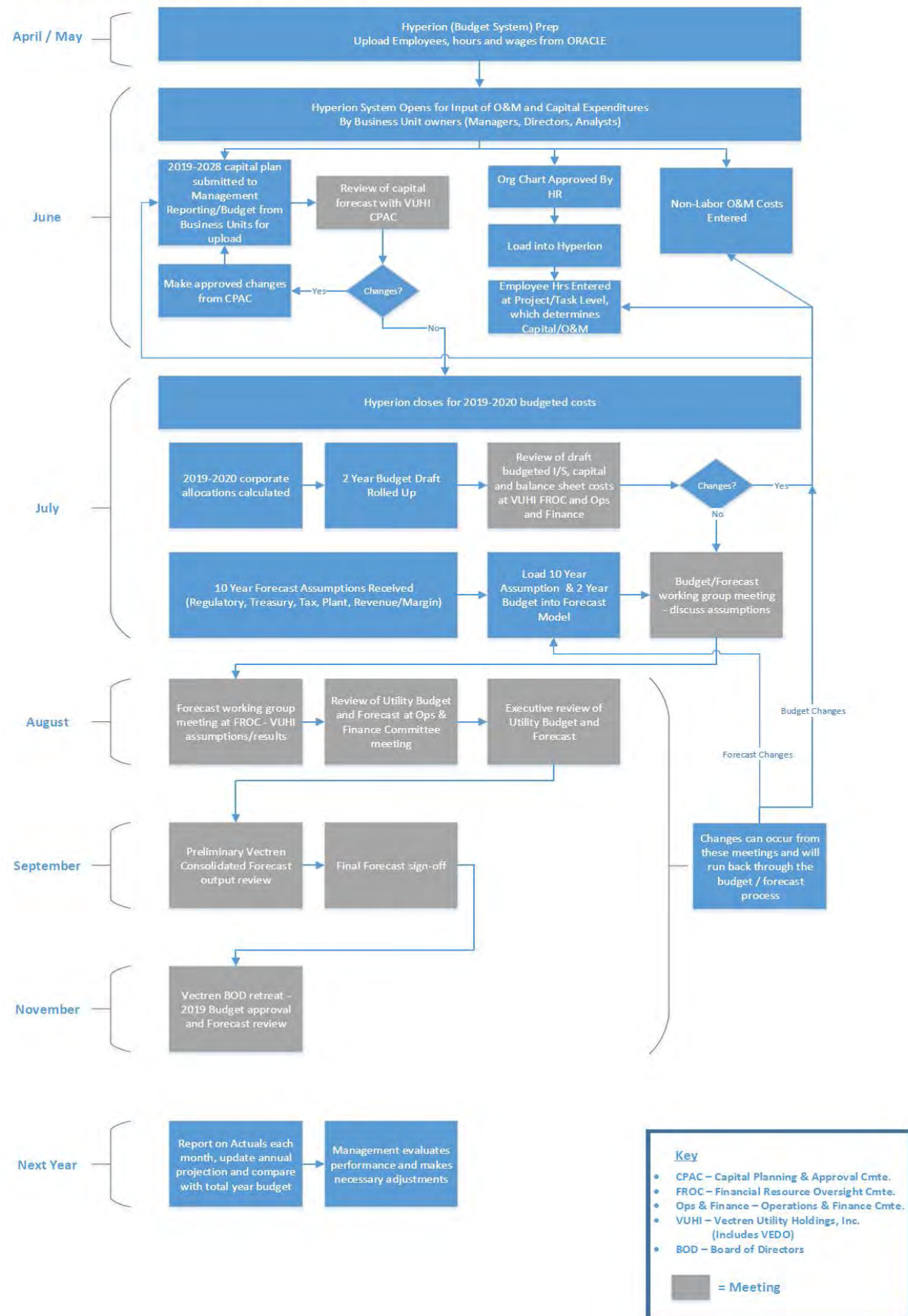
The Management Reporting and Budgets team is an important constituent in the Company's process as this group is responsible for preparing three key components of the detailed budget. The first component of the budget is the operating plan. The operating plan is comprised of the detail and support for each of the Company's income statement line items. It is developed with input from persons throughout the organization. Second, the capital component of the budget includes activity based and project level detail for distribution and transmission infrastructure and new business. Management Reporting and Budgets is responsible for its preparation with input from Capital Program Management, Operations, and Accounting. Finally, labor hours by cost center and other staffing resources are recorded in the workforce plan with the cooperation of Human Resources.

Vectren relies upon a variety of software systems including Microsoft Office, Hyperion Planning, Hyperion Essbase, and Oracle to manage and maintain its budgeting process.

The following is a schematic showing Company's Two Year Budget/Forecast Process Flow, complete with touch points made by committees.

2 Year Budget / Forecast Process Flow

Page 1 of 1



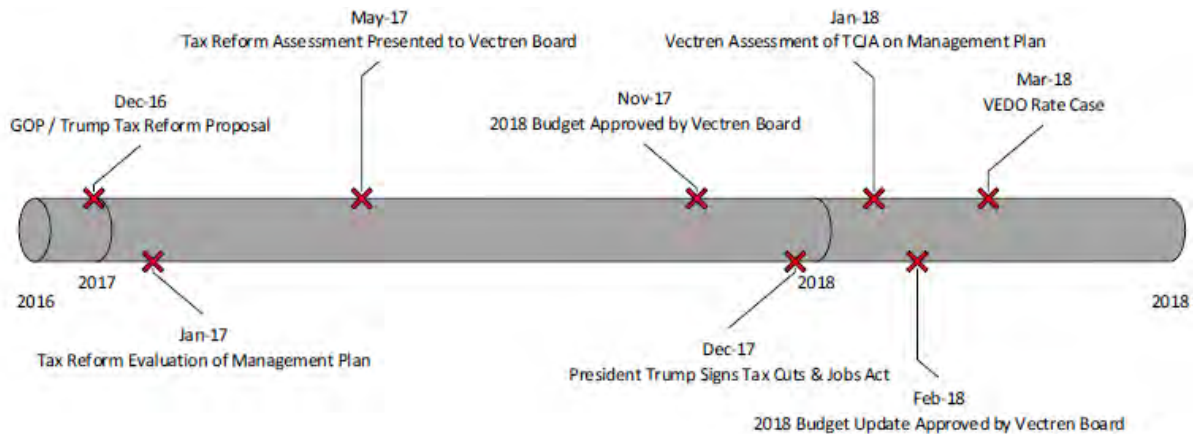
Budgeting/Forecasting Governance

Throughout the budgeting process, prior to its acceptance at the Board level, senior management and oversight committees verify that the assumptions used, and the results attained, are appropriate in view of Vectren's goals. Monthly, three committees meet to perform this function.

The Financial and Resource Oversight Committee reviews current year performance compared to the prior year and to budget, major capital plans, and strategy. The Financial and Resource Oversight Committee is governed by the Company's Chief Operating Officer and its Chief Financial Officer. Another level of oversight is provided by the Operations and Financial Committee. The Operations and Financial Committee is tasked with supporting the achievement of the VUHI and VEDO operating plans. To provide guidance for decisions across the Company, the Operations and Financial Committee reviews business unit performance relative to target, progress on key projects, and the status of regulatory developments. The committee relies upon a number of reports to gain insight into financial performance versus budget, prior year, and projection. The third committee, the Capital Planning and Approval Committee is responsible for capital expenditure projects. It is chaired by the President of VUHI with nine voting members (Company officers).

A process is in place to address events that may result in a material impact to the approved budget. Monthly, after actual results are finalized, business unit analysts and internal teams evaluate whether a projection change should be recommended and submitted to the Management Reporting and Budgets department. These evaluations typically start on the ninth business day following the previous month's end. The process concludes with a review by Vectren's CEO on business day 14 or 15. An outcome from the process is that it allows management to either affirm or communicate modifications to public guidance prior to quarterly earnings releases.

As part of its budgeting process, Vectren management assessed the impacts of the Tax Cuts and Jobs Act of 2017 (TCJA). The initial analysis of the TCJA began in January, 2017. In May 2017, senior management had shared its initial analysis with Vectren's Board of Directors. The 2018 budget was approved by Vectren's Board in November 2017. On December 22, 2017, President Trump signed the TCJA into law. During December 2017 and into January 2018, management determined that no modifications were needed for long term earnings targets, but there were implications for short term financing owing to the loss of the cash benefit arising from bonus depreciation; bonus depreciation was eliminated by the TCJA. During the February 7 Vectren Board meeting, management proposed an update to the approved budget. The Vectren Board approved the budget update. On February 21, 2018, Vectren's public earnings guidance was communicated. The process followed the timeline that appears below.



Findings

In order to examine the Company's Budget/Forecasting process, Staff reviewed the summaries of management policies and practices as well as the specific responses provided in testimony. In addition, Staff also made data requests regarding the software systems, time lines, controls, and policy memos used within the Company in regards to these processes.

For Budgeting/Forecasting, Staff concludes that the process is entrenched and communicated deeply inside the Company. Although centralized in the Management Reporting and Budgets Group, it is clear that a level of engagement extends from cost center business analysts to the Board of Directors. Staff has determined that the Company relies on defined procedures codified by written policy memoranda. Roles are clearly assigned. The budget planning schedule incorporates a measure of accountability. The use of roll forward forecasts adds an element of oversight and control. The use of technology appears appropriate in light of the depth, breadth, and importance placed upon the budgeting process. Staff's review is inherently limited in that findings in this case cannot be numerically quantified. However, the fact that the Company has had unqualified opinions expressed by its external auditors lends credence to the process that gives rise to its financial disclosures. Therefore, Staff believes the process appears adequate and found no evidence to suggest that any alterations are necessary at this time.

Recommendation

Vectren's Board of Directors has approved a plan to merge with CenterPoint Energy, Inc. The merger introduces a degree of uncertainty in the manner in which the Company conducts its business. Internal processes, like Budgeting/Forecasting, can be important tools to ensure that the Company meets its strategic goals. Therefore, in the event that the proposed merger is finalized, and the result materially alters the processes reviewed by Staff, Staff recommends that the Commission be notified prior to the implementation of the next two year budget.

Salvage and Cost of Removal

The Company treats the salvage associated with retirements of plant in service as cost of removal. Cost of removal results in reductions to accumulated depreciation while salvage is treated as increases to accumulated depreciation. This is consistent with the "net" salvage techniques used during a depreciation study when determining depreciation accrual rates. Within the fixed asset system,

Powerplant, salvage value is reflected as “Cost of Removal” but with opposite signs (i.e. negative for positive).

The Company records cost of removal using allocation and estimates on an individual job basis. The work order estimate includes estimating the addition and removal costs and quantities installed/removed for the work order. These costs and quantities are estimated for each charge type (labor, materials, stores loadings, etc.), utility account (FERC plant account), asset location, property group, and retirement unit. Estimated removal quantities will serve as the basis for the retirements recorded by Plant Accounting. Cost of removal is accounted for by debiting Accumulated Depreciation and crediting Accounts Payable or Cash.

The Company engineering team develops cost estimates using geographical information and work management systems to design the components of each project, including the portions of existing system, mains, services, etc. that will be removed or retired. The systems utilize compatible unit estimates (CUE(s)) for each object installed or removed. These CUEs contain the labor, material, and equipment/tooling components required to accomplish the task. The project designers select the appropriate CUEs for each project, which are then included in the project total cost. CUE costs are updated approximately every two years based on changes to material costs and labor blanket unit pricing updates. The estimated percentages in Powerplant are derived from the engineering estimates and these percentages are updated to Powerplant as new estimates or revisions to capital projects occur. Plant Accounting requires an “as-built” estimate in Powerplant that provides the final allocations/pricing of the assets built as well as the final assets removed from service

Findings

In order to examine the company’s salvage and cost of removal processes, Staff reviewed the various summaries of management policies, practices, and organization as well as the specific response to this functional area included within the application. In addition, Staff reviewed the Company’s Plant accounting policies and procedures for retirements and cost of removal. Accounting entries were also examined for consistency to FERC accounting practices in recording to the accumulated depreciation reserve account.

Staff has found that the Company’s process bases the allocation of cost of removal on engineering estimates. Staff review examined the expenditure types that went into the cost of removal such as contract labor, materials, payroll taxes, vehicles, and store loadings.

Staff found that salvage was reflected as miscellaneous cash receipts that are obtained and credited against a capital work order. The cash receipts, being salvage, would be reflected as negative cost of removal. In 2007 some of the salvage was reported as actual salvage as opposed to being included as a reduction in the total of cost of removal. Therefore, Staff was able to separately track actual salvage and Cost of Removal for 2007 but not any other years.

Recommendations

Staff believes that the Company should begin to more clearly record the separation out of the salvage values from the cost of removal totals to more properly define the net salvage for depreciation study analysis.

Staff considers the cost of removal, with the exception of the one non-regulatory item included in the sample, to reflect actual expenses associated with the removal of asset per FERC guidelines.

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Overall Financial Summary
For The Twelve Months Ended September 30, 2018

Schedule A-1
Page 1 of 1

Work Paper Reference No(s): See Below

Line No.	Description	Supporting Schedule Reference	Company Proposed Test Year	Staff Proposed	
				Lower Bound	Upper Bound
1	Rate Base as of Date Certain	B-1	\$ 627,591,444	\$ 621,788,925	\$ 621,788,925
2	Current Operating Income	C-1	\$ 24,495,855	\$ 33,784,194	\$ 33,784,194
3	Earned Rate of Return (Line 2 / Line 1)		3.90%	5.43%	5.43%
4	Requested Rate of Return	D-1	7.97%	6.97%	7.49%
5	Required Operating Income (Line 1 x Line 4)		\$ 50,190,380	\$ 43,338,688	\$ 46,571,990
6	Operating Income Deficiency (Line 5 - Line 2)		\$ 25,523,183	\$ 9,554,494	\$ 12,787,796
7	Gross Revenue Conversion Factor	A-2	1.3329539	1.2658228	1.2658228
8	Revenue Deficiency (Line 6 x Line 7)		\$ 34,021,227	\$ 12,094,296	\$ 16,187,084
9	Revenue Increase Requested (Derived from Noticed Rates)	E-4	\$ 34,021,227	\$ 12,094,296	\$ 16,187,084
10	Adjusted Operating Revenues	C-1	\$ 168,206,479	\$ 150,259,887	\$ 150,259,887
11	Revenue Requirement (Line 9 + Line 10)		\$ 202,227,707	\$ 162,354,183	\$ 166,446,971
12	Percent Increase (Line 9 / Line 10)		20.23%	8.05%	10.77%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Revenue Conversion Factor
For The Twelve Months Ended September 30, 2018

Schedule A-2

Page 1 of 1

Work Paper Reference No(s):

Line No.	Description				% of Incremental Gross Revenues
1	Operating Revenues				100.000%
2					
3	PUCO Maintenance Assessment	WPA-2a		0.000%	
4	Consumers' Counsel Assessment	WPA-2b		0.000%	
5					
6	Statutory Ohio Excise Rate	(A)		0.0000%	
7	Percent Exempt Revenue	WPA-2c	0.000%		
8	Statutory Ohio Excise Rate (Line 6)		<u>0.000%</u>		
9	Remove Ohio Excise from Exempt Revenue			<u>0.000%</u>	
10					
11	Effective Ohio Excise Rate			<u>0.0000%</u>	
12	Revenue Related Expense and Taxes				0.000%
13					
14	Income before Federal Income Tax (Line 1 - Line 12)				100.000%
15					
16	Federal Income Tax (Line 14 x 21%)				<u>21.000%</u>
17					
18	Operating Income Percentage (Line 14 - Line 16)				<u><u>79.000%</u></u>
19					
20	Gross Revenue Conversion Factor (100% / 79.%)				<u><u>1.2658228</u></u>

(A) Company's Proposed Ohio Excise Rate Conversion Factor

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Calculation of Mirrored CWIP Revenue SUR-Credit Rider
For The Twelve Months Ended September 30, 2018

Schedule A-3
Page 1 of 1

Work Paper Reference No(s).:

Line No.	Description	% of Incremental Gross Revenues
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Not Applicable

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
JURISDICTIONAL RATE BASE SUMMARY
AS OF DECEMBER 31, 2017

SCHEDULE B-1
PAGE 1 OF 1

LINE NO.	RATE BASE COMPONENT	SUPPORTING SCHEDULE REFERENCE	COMPANY PROPOSED AMOUNT	STAFF PROPOSED AMOUNT
1	Plant In Service	B-2	\$ 1,128,330,555	\$ 1,123,376,251
2	Reserve for Accumulated Depreciation	B-3	<u>\$ (402,676,159)</u>	<u>\$ (399,619,553)</u>
3	Net Plant In Service (Line 1+ Line 2)		725,654,396	\$ 723,756,698
4	Construction Work in Progress	B-4	\$ -	\$ -
5	Working Capital Allowance	B-5	\$ -	\$ -
6	Contributions in Aid of Construction	B-6	\$ -	\$ -
7	Other Items:			
8	Customer Advances for Construction	B-6	\$ (2,541,852)	\$ (2,541,852)
9	PIPP Deferred Asset	B-6	\$ (2,776,317)	\$ (2,776,317)
10	DRR Deferred Asset	B-6	\$ 31,237,732	\$ 31,237,732
11	HB95 Deferred Asset	B-6	\$ 66,137,567	\$ 66,137,567
12	Customer Service Deposits	B-6	\$ -	\$ (3,904,821)
13	Deferred Income Taxes (Net of Goodwill Amort)	B-6	<u>\$ (190,120,084)</u>	<u>\$ (190,120,084)</u>
14	Jurisdictional Rate Base (Line 3 thru Line 12)		<u><u>\$ 627,591,442</u></u>	<u><u>\$ 621,788,925</u></u>

NOTE: CIAC are already netted against gross plant.

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
PLANT IN SERVICE SUMMARY BY MAJOR PROPERTY GROUPINGS
AS OF DECEMBER 31, 2017

Work Paper Reference No(s): Staff's Schedule B-2.1

SCHEDULE B-2
PAGE 1 OF 1

LINE NO.	MAJOR PROPERTY GROUPINGS	TOTAL COMPANY	ALLOCATION %	ALLOCATED TOTAL	ADJUSTMENTS	ADJUSTED JURISDICTION
1	Intangible	\$ 21,213,428	100.00	\$ 21,213,428	\$ (26,000)	\$ 21,187,428
2	Manufactured Gas Production	-	100.00	-	-	-
3	Transmission	99,131,784	100.00	99,131,784	(1,246,833)	97,884,951
4	Distribution	967,830,662	100.00	967,830,662	(47,641)	967,783,021
5	General	40,154,681	100.00	40,154,681	(3,633,831)	36,520,850
6	TOTAL	<u>\$ 1,128,330,555</u>	100.00	<u>\$ 1,128,330,555</u>	<u>\$ (4,954,305)</u>	<u>\$ 1,123,376,251</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
PLANT IN SERVICE BY ACCOUNTS AND SUBACCOUNTS
AS OF DECEMBER 31, 2017

INTANGIBLE PLANT

SCHEDULE B-2.1
PAGE 1 OF 5

Work Paper Reference No(s): Applicant's Schedule B-2.1, Staff's Schedule B-2.2

LINE NO.	F.E.R.C. ACCT. NO.	COMPANY ACCT. NO.	ACCOUNT TITLE	TOTAL COMPANY	ALLOCATION %	ALLOCATED TOTAL	STAFF ADJUSTMENTS	ADJUSTED JURISDICTION
1	301	601	Organization	\$ 496,458	100.00	\$ 496,458		\$ 496,458
2	303	603	Miscellaneous Intangible Plant	20,716,970	100.00	20,716,970	(26,000)	20,690,970
3			Total Intangible Plant	<u>\$ 21,213,428</u>		<u>\$ 21,213,428</u>	<u>\$ (26,000)</u>	<u>\$ 21,187,428</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
PLANT IN SERVICE BY ACCOUNTS AND SUBACCOUNTS
AS OF DECEMBER 31, 2017

MANUFACTURED GAS PRODUCTION PLANT

Work Paper Reference No(s).: Applicant's Schedule B-2.1, Staff's Schedule B-2.2

SCHEDULE B-2.1
PAGE 2 OF 5

LINE NO.	F.E.R.C. ACCT. NO.	COMPANY ACCT. NO.	ACCOUNT TITLE	TOTAL COMPANY	ALLOCATION %	ALLOCATED TOTAL	STAFF ADJUSTMENTS	ADJUSTED JURISDICTION
1	304	604.1	Land and Land Rights	\$ -	100.00	\$ -		\$ -
2	305	605.1	Structures and Improvements - Production	-	100.00	-		-
3	305	605.2	Structures and Improvements - Storage	-	100.00	-		-
4	311	611.1	Liquefied Petroleum Gas Equip. - Production	-	100.00	-		-
5	311	611.3	Liquefied Petroleum Gas Equip. - Lines	-	100.00	-		-
6			Total Manufactured Gas Production Plant	<u>\$ -</u>		<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
PLANT IN SERVICE BY ACCOUNTS AND SUBACCOUNTS
AS OF DECEMBER 31, 2017

TRANSMISSION PLANT

SCHEDULE B-2.1
PAGE 3 OF 5

Work Paper Reference No(s).: Applicant's Schedule B-2.1, Staff's Schedule B-2.2

LINE NO.	F.E.R.C. ACCT. NO.	COMPANY ACCT. NO.	ACCOUNT TITLE	TOTAL COMPANY	ALLOCATION %	ALLOCATED TOTAL	STAFF ADJUSTMENTS	ADJUSTED JURISDICTION
1	365.1	665.1	Land and Land Rights	\$ 458,698	100.00	\$ 458,698	\$ (66,187)	\$ 392,511
2	365.2	665.2	Rights-of-Way	77,423	100.00	77,423		77,423
3	366	666.2	Measuring and Regulating Station Structures	63,326	100.00	63,326		63,326
4	367	667	Mains	79,484,101	100.00	79,484,101	(1,177,411)	78,306,690
5	369	669	Measuring and Regulating Station Equipment	19,029,609	100.00	19,029,609	(3,235)	19,026,374
6	371	671	Other Equipment	18,627	100.00	18,627		18,627
7			Total Transmission Plant	<u>\$ 99,131,784</u>		<u>\$ 99,131,784</u>	<u>\$ (1,246,833)</u>	<u>\$ 97,884,951</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
PLANT IN SERVICE BY ACCOUNTS AND SUBACCOUNTS
AS OF DECEMBER 31, 2017

DISTRIBUTION PLANT

SCHEDULE B-2.1

PAGE 4 OF 5

Work Paper Reference No(s).: Applicant's Schedule B-2.1, Staff's Schedule B-2.2

LINE NO.	F.E.R.C. ACCT. NO.	COMPANY ACCT. NO.	ACCOUNT TITLE	TOTAL COMPANY	ALLOCATION %	ALLOCATED TOTAL	STAFF ADJUSTMENTS	ADJUSTED JURISDICTION
1	374	674.1	Land	\$ 232,592	100.00	\$ 232,592	\$ (16,210)	\$ 216,382
2	374	674.2	Land Rights	6,790,918	100.00	6,790,918		6,790,918
3	374	674.4	Land Rights	34,370	100.00	34,370		34,370
4	374	674.5	Land Rights	79,362	100.00	79,362		79,362
5	375	675	Structures and Improvements	892,284	100.00	892,284		892,284
6	376	676	Mains	303,098,109	100.00	303,098,109		303,098,109
7	376	676.1	Mains BS/CI	99,268,957	100.00	99,268,957		99,268,957
8	378	678	Meas. & Reg. Station Equipment - General	11,736,913	100.00	11,736,913		11,736,913
9	379	679	Meas. & Reg. Station Equipment - City Gate	1,459,142	100.00	1,459,142		1,459,142
10	380	680	Services	284,310,642	100.00	284,310,642	(28,163)	284,282,479
11	380	680.1	Services BS/CI	125,044,447	100.00	125,044,447		125,044,447
12	381	681	Meters	65,617,246	100.00	65,617,246		65,617,246
13	382	682	Meter Installations	32,851,208	100.00	32,851,208	(1,634)	32,849,574
14	382	682.1	Meter Installations BS/CI	25,062,814	100.00	25,062,814		25,062,814
15	383	683	House Regulators	10,001,927	100.00	10,001,927	(1,634)	10,000,293
16	384	684	House Regulator Installations	911,201	100.00	911,201		911,201
17	385	685	Industrial Meas. & Reg. Station Equipment	391,960	100.00	391,960		391,960
18	387	687	Other Equipment	46,570	100.00	46,570		46,570
19			Total Distribution Plant	<u>\$ 967,830,662</u>		<u>\$ 967,830,662</u>	<u>\$ (47,641)</u>	<u>\$ 967,783,021</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
PLANT IN SERVICE BY ACCOUNTS AND SUBACCOUNTS
AS OF DECEMBER 31, 2017

GENERAL PLANT

SCHEDULE B-2.1

PAGE 5 OF 5

Work Paper Reference No(s).: Applicant's Schedule B-2.1, Staff's Schedule B-2.2

LINE NO.	F.E.R.C. ACCT. NO.	COMPANY ACCT. NO.	ACCOUNT TITLE	TOTAL COMPANY	ALLOCATION %	ALLOCATED TOTAL	STAFF ADJUSTMENTS	ADJUSTED JURISDICTION
1	389	689.1	Land and Land Rights	\$ 1,482,742	100.00	\$ 1,482,742		\$ 1,482,742
2	390	690	Structures and Improvements	10,650,775	100.00	10,650,775	(77,798)	10,572,977
3	391	691.1	Electronic Equipment	522,020	100.00	522,020	(46,933)	475,087
4	391	691.11	Electronic Equipment (Fully Depreciated)	70,750	100.00	70,750		70,750
5	391	691.2	Office Furniture & Fixtures	868,439	100.00	868,439		868,439
6	391	691.21	Office Furniture & Fixtures (Fully Depreciated)	1,577,610	100.00	1,577,610		1,577,610
7	392	692.1	Transportation Equip - Class 1 - Autos	1,904,161	100.00	1,904,161	(917,418)	986,743
8	392	692.2	Transportation Equip - Class 2 - Light Trucks	4,299,542	100.00	4,299,542	(1,128,414)	3,171,128
9	392	692.3	Transportation Equip - Class 3 - Trailers	689,280	100.00	689,280	(461,061)	228,219
10	392	692.4	Transportation Equip - Class 4 - Heavy Trucks	3,388,260	100.00	3,388,260	(1,002,207)	2,386,053
11	394	694	Tools, Shop and Garage Equipment	2,432,530	100.00	2,432,530		2,432,530
12	394	694.1	Tools, Shop and Garage Equipment (Fully Depreciated)	388,660	100.00	388,660		388,660
13	396	696	Power Operated Equipment	1,330,525	100.00	1,330,525		1,330,525
14	397	697	Communication Equipment	8,831,407	100.00	8,831,407		8,831,407
15	397	697.1	Communication Equipment (Fully Depreciated)	146,419	100.00	146,419		146,419
16	398	698	Miscellaneous Equipment	1,571,562	100.00	1,571,562		1,571,562
17			Total General Plant	<u>\$ 40,154,681</u>		<u>\$ 40,154,681</u>	<u>\$ (3,633,831)</u>	<u>\$ 36,520,850</u>
18			Total Gas Plant	<u>\$ 1,128,330,555</u>	100.00	<u>\$ 1,128,330,555</u>	<u>\$ (4,954,305)</u>	<u>\$ 1,123,376,251</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
ADJUSTMENTS TO PLANT IN SERVICE
AS OF DECEMBER 31, 2017

TOTAL PLANT

SCHEDULE B-2.2
Page 1 of 1

Work Paper Reference No (s): B-2.2a Through B-2.2d

F.E.R.C. COMPANY				STAFF
LINE	ACCT.	ACCT.	ACCOUNT TITLE	ADJUSTMENT
NO.	NO.	NO.		
1	303	603	Miscellaneous Intangible Plant	\$ (26,000)
2	365.1	665.1	Land and Land Rights	(66,187)
3	367	667	Mains	(1,177,411)
4	369	669	Measuring and Regulating Station Equipment	(3,235)
5	374	674.1	Land	(16,210)
6	380	680	Services	(28,163)
7	382	682	Meter Installations	(1,634)
8	383	683	House Regulators	(1,634)
9	390	690	Structures and Improvements	(77,798)
10	391	691.1	Electronic Equipment	(46,933)
11	392	692.1	Transportation Equip - Class 1 - Autos	(917,418)
12	392	692.2	Transportation Equip - Class 2 - Light Trucks	(1,128,414)
13	392	692.3	Transportation Equip - Class 3 - Trailers	(461,061)
14	392	692.4	Transportation Equip - Class 4 - Heavy Trucks	(1,002,207)
15				
Total Plant Adjustment				<u>\$ (4,954,305)</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
ADJUSTMENTS TO PLANT IN SERVICE
AS OF DECEMBER 31, 2017

INTANGIBLE PLANT

SCHEDULE B-2.2a
Page 1 of 1

Work Paper Reference No (s): WPB-2.2a Through WPB-2.2f

F.E.R.C. COMPANY			ACCOUNT TITLE	DESCRIPTION	STAFF ADJUSTMENT
LINE NO.	ACCT. NO.	ACCT. NO.			
1	303	603	Miscellaneous Intangible Plant	Expense item and supporting detail is unavailable due to the Company's retention policy.	\$ (7,548)
2	303	603	Miscellaneous Intangible Plant	Beginning balance adjustment to remove costs deemed inappropriate for inclusion in PIS in Case No. 04-0571-GA-AIR.	(18,452)
3				Total Intangible Plant Adjustment	<u>\$ (26,000)</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
ADJUSTMENTS TO PLANT IN SERVICE
AS OF DECEMBER 31, 2017

TRANSMISSION PLANT

SCHEDULE B-2.2b

Work Paper Reference No (s): WPB-2.2a Through WPB-2.2f

Page 1 of 1

F.E.R.C. COMPANY					STAFF ADJUSTMENT
LINE NO.	ACCT. NO.	ACCT. NO.	ACCOUNT TITLE	DESCRIPTION	
1	365.1	665.1	Land and Land Rights	Remove excess land.	(66,187)
2	367	667	Mains	Remove excess land.	(1,164,448)
3	367	667	Mains	Remove stopple on main.	(12,963)
4	369	669	Measuring and Regulating Station Equipment	Remove stopple on main.	(3,235)
5					
Total Transmission Plant Adjustment					<u>\$ (1,246,833)</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
ADJUSTMENTS TO PLANT IN SERVICE
AS OF DECEMBER 31, 2017

DISTRIBUTION PLANT

SCHEDULE B-2.2c

Page 1 of 1

Work Paper Reference No (s): WPB-2.2a Through WPB-2.2f

F.E.R.C. COMPANY						
LINE	ACCT.	ACCT.				STAFF
NO.	NO.	NO.	ACCOUNT TITLE	DESCRIPTION		ADJUSTMENT
1	374	674.1	Land	Beginning balance adjustment of land easement for relocation of regulator station not yet moved.		(16,210)
2	380	680	Services	Painting of existing pipe which should have been expensed.		(15,720)
3	380	680	Services	Painting of existing pipe which should have been expensed.		(12,443)
4	382	682	Meter Installations	Painting of existing pipe which should have been expensed.		(912)
5	382	682	Meter Installations	Painting of existing pipe which should have been expensed.		(722)
6	383	683	House Regulators	Painting of existing pipe which should have been expensed.		(912)
7	383	683	House Regulators			(722)
8					Total Distribution Plant Adjustment	<u>\$ (47,641)</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
ADJUSTMENTS TO PLANT IN SERVICE
AS OF DECEMBER 31, 2017

GENERAL PLANT

SCHEDULE B-2.2d

Work Paper Reference No (s): WPB-2.2a Through WPB-2.2f

Page 1 of 1

F.E.R.C. COMPANY						
LINE NO.	ACCT. NO.	ACCT. NO.	ACCOUNT TITLE	DESCRIPTION		STAFF ADJUSTMENT
1	390	690	Structures and Improvements	Non-working CNG Station in Fairborn.		(77,798)
2	391	691.1	Electronic Equipment	First generation laptops no longer in service.		(46,933)
3	392	692.1	Transportation Equip - Class 1 - Autos	To remove automobiles.		(917,418)
4	392	692.2	Transportation Equip - Class 2 - Light Trucks	To remove light trucks.		(1,128,414)
5	392	692.3	Transportation Equip - Class 3 - Trailers	To remove trailers.		(461,061)
6	392	692.4	Transportation Equip - Class 4 - Heavy Trucks	To remove heavy trucks.		(1,002,207)
7					Total General Plant Adjustment	<u>\$ (3,633,831)</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
LEASED PROPERTY
(TOTAL COMPANY)
AS OF DECEMBER 31, 2017

SCHEDULE B-2.4
PAGE 1 OF 1

IDENTIFICATION OR REFERENCE NUMBER	DESCRIPTION OF TYPE AND USE OF PROPERTY	NAME OF LESSOR	FREQUENCY OF PAYMENT	AMOUNT OF LEASE PAYMENT	DOLLAR VALUE OF PROPERTY INVOLVED	EXPLAIN METHOD OF CAPITALIZATION	INCLUDED IN RATE BASE (YES/NO)
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NONE

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
ACCUMULATED DEPRECIATION AND AMORTIZATION
AS OF DECEMBER 31, 2017

INTANGIBLE PLANT

SCHEDULE B-3
PAGE 1 OF 5

LINE NO.	F.E.R.C. ACCT. NO.	COMPANY ACCT. NO.	ACCOUNT TITLE	TOTAL COMPANY PLANT INVESTMENT	RESERVE BALANCES				
					TOTAL COMPANY	ALLOCATION %	ALLOCATED TOTAL	ADJUSTMENTS	ADJUSTED JURISDICTION
1	301	601	Organization	\$ 496,458	\$ 278,942	100.00	\$ 278,942		\$ 278,942
2	303	603	Miscellaneous Intangible Plant	20,690,970	26,068,166	100.00	26,068,166	(25,305)	26,042,861
3			Total Intangible Plant	<u>\$ 21,187,428</u>	<u>\$ 26,347,108</u>		<u>\$ 26,347,108</u>	<u>\$ (25,305)</u>	<u>\$ 26,321,803</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
ACCUMULATED DEPRECIATION AND AMORTIZATION
AS OF DECEMBER 31, 2017

MANUFACTURED GAS PRODUCTION PLANT

SCHEDULE B-3
PAGE 2 OF 5

LINE NO.	F.E.R.C. ACCT. NO.	COMPANY ACCT. NO.	ACCOUNT TITLE	TOTAL COMPANY PLANT INVESTMENT	RESERVE BALANCES				
					TOTAL COMPANY	ALLOCATION %	ALLOCATED TOTAL	ADJUSTMENTS	ADJUSTED JURISDICTION
1	304	604.1	Land and Land Rights	\$ -	\$ -	100.00	\$ -	\$ -	\$ -
2	305	605.1	Structures and Improvements - Production	-	-	100.00	-	-	-
3	305	605.2	Structures and Improvements - Storage	-	-	100.00	-	-	-
4	311	611.1	Liquefied Petroleum Gas Equip. - Production	-	-	100.00	-	-	-
5	311	611.3	Liquefied Petroleum Gas Equip. - Lines	-	-	100.00	-	-	-
6			Total Manufactured Gas Production Plant	<u>\$ -</u>	<u>\$ -</u>		<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
ACCUMULATED DEPRECIATION AND AMORTIZATION
AS OF DECEMBER 31, 2017

TRANSMISSION PLANT

SCHEDULE B-3
PAGE 3 OF 5

LINE NO.	F.E.R.C. ACCT. NO.	COMPANY ACCT. NO.	ACCOUNT TITLE	TOTAL COMPANY PLANT INVESTMENT	RESERVE BALANCES				
					TOTAL COMPANY	ALLOCATION %	ALLOCATED TOTAL	ADJUSTMENTS	ADJUSTED JURISDICTION
1	365.1	665.1	Land and Land Rights	\$ 392,511	\$ -	100.00	\$ -		\$ -
2	365.2	665.2	Rights-of-Way	77,423	-	100.00	-		-
3	366	666.2	Measuring and Regulating Station Structures	63,326	3,824	100.00	3,824		3,824
4	367	667	Mains	78,306,690	2,000,863	100.00	2,000,863	(55,516)	1,945,347
5	369	669	Measuring and Regulating Station Equipment	19,026,374	672,260	100.00	672,260	(214)	672,046
6	371	671	Other Equipment	18,627	5,155	100.00	5,155		5,155
7			Total Transmission Plant	<u>\$ 97,884,951</u>	<u>\$ 2,682,103</u>		<u>\$ 2,682,103</u>	<u>\$ (55,730)</u>	<u>\$ 2,626,373</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
ACCUMULATED DEPRECIATION AND AMORTIZATION
AS OF DECEMBER 31, 2017

DISTRIBUTION PLANT

SCHEDULE B-3
PAGE 4 OF 5

LINE NO.	F.E.R.C. ACCT. NO.	COMPANY ACCT. NO.	ACCOUNT TITLE	TOTAL COMPANY PLANT INVESTMENT	RESERVE BALANCES				
					TOTAL COMPANY	ALLOCATION %	ALLOCATED TOTAL	ADJUSTMENTS	ADJUSTED JURISDICTION
1	374	674.1	Land	\$ 216,382	\$ -	100.00	\$ -		\$ -
2	374	674.2	Land Rights	6,790,918	-	100.00	-		-
3	374	674.4	Land Rights	34,370	12,660	100.00	12,660		12,660
4	374	674.5	Land Rights	79,362	3,141	100.00	3,141		3,141
5	375	675	Structures and Improvements	892,284	537,268	100.00	537,268		537,268
6	376	676	Mains	303,098,109	110,745,622	100.00	110,745,622		110,745,622
7	376	676.1	Mains BS/CI	99,268,957	6,288,275	100.00	6,288,275		6,288,275
8	378	678	Meas. & Reg. Station Equipment - General	11,736,913	7,834,251	100.00	7,834,251		7,834,251
9	379	679	Meas. & Reg. Station Equipment - City Gate	1,459,142	866,874	100.00	866,874		866,874
10	380	680	Services	284,282,479	179,848,516	100.00	179,848,516	(12,098)	179,836,418
11	380	680.1	Services BS/CI	125,044,447	19,220,188	100.00	19,220,188		19,220,188
12	381	681	Meters	65,617,246	15,989,263	100.00	15,989,263		15,989,263
13	382	682	Meter Installations	32,849,574	2,231,109	100.00	2,231,109	(243)	2,230,866
14	382	682	Meter Installations BS/CI	25,062,814	1,391,216	100.00	1,391,216		1,391,216
15	383	683	House Regulators	10,000,293	2,320,110	100.00	2,320,110	(243)	2,319,867
16	384	684	House Regulator Installations	911,201	697,997	100.00	697,997		697,997
17	385	685	Industrial Meas. & Reg. Station Equipment	391,960	188,563	100.00	188,563		188,563
18	387	687	Other Equipment	46,570	14,825	100.00	14,825		14,825
19			Total Distribution Plant	<u>\$ 967,783,021</u>	<u>\$ 348,189,877</u>		<u>\$ 348,189,877</u>	<u>\$ (12,584)</u>	<u>\$ 348,177,293</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
ACCUMULATED DEPRECIATION AND AMORTIZATION
AS OF DECEMBER 31, 2017

GENERAL PLANT

SCHEDULE B-3
PAGE 5 OF 5

LINE NO.	F.E.R.C. ACCT. NO.	COMPANY ACCT. NO.	ACCOUNT TITLE	TOTAL COMPANY PLANT INVESTMENT	RESERVE BALANCES				
					TOTAL COMPANY	ALLOCATION %	ALLOCATED TOTAL	ADJUSTMENTS	ADJUSTED JURISDICTION
1	389	689.1	Land	\$ 1,482,742	\$ -	100.00	\$ -		\$ -
2	390	690	Structures and Improvements	10,572,977	4,790,696	100.00	4,790,696	(11,183)	4,779,513
3	391	691.1	Electronic Equipment	475,087	954,571	100.00	954,571	(46,290)	908,281
4	391	691.11	Electronic Equipment (Fully Depreciated)	70,750	70,750	100.00	70,750		70,750
5	391	691.2	Office Furniture & Fixtures	868,439	437,034	100.00	437,034		437,034
6	391	691.21	Office Furniture & Fixtures (Fully Depreciated)	1,577,610	1,577,610	100.00	1,577,610		1,577,610
7	392	692.1	Transportation Equip - Class 1 - Autos	986,743	3,248,166	100.00	3,248,166	(433,655)	2,814,511
8	392	692.2	Transportation Equip - Class 2 - Light Trucks	3,171,128	3,637,185	100.00	3,637,185	(1,047,380)	2,589,805
9	392	692.3	Transportation Equip - Class 3 - Trailers	228,219	535,064	100.00	535,064	(450,369)	84,695
10	392	692.4	Transportation Equip - Class 4 - Heavy Trucks	2,386,053	2,292,419	100.00	2,292,419	(974,110)	1,318,309
11	394	694	Tools, Shop & Garage Equipment	2,432,530	712,882	100.00	712,882		712,882
12	394	694.1	Tools, Shop & Garage Equipment (Fully Depreciated)	388,660	388,660	100.00	388,660		388,660
13	396	696	Power Operated Equipment	1,330,525	1,019,801	100.00	1,019,801		1,019,801
14	397	697	Communication Equipment	8,831,407	5,049,160	100.00	5,049,160		5,049,160
15	397	697.1	Communication Equipment (Fully Depreciated)	146,419	146,419	100.00	146,419		146,419
16	398	698	Miscellaneous Equipment	1,571,562	596,653	100.00	596,653		596,653
17			Total General Plant	<u>\$ 36,520,850</u>	<u>\$ 25,457,071</u>		<u>\$ 25,457,071</u>	<u>\$ (2,962,987)</u>	<u>\$ 22,494,083</u>
18			Total Gas Plant	<u>\$ 1,123,376,251</u>	<u>\$ 402,676,159</u>		<u>\$ 402,676,159</u>	<u>\$ (3,056,606)</u>	<u>\$ 399,619,553</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
ADJUSTMENTS TO ACCUMULATED DEPRECIATION RESERVE
AS OF DECEMBER 31, 2017

SCHEDULE B-3.1
Page 1 of 1

F.E.R.C. COMPANY				STAFF ADJUSTMENT
LINE NO.	ACCT. NO.	ACCT. NO.	ACCOUNT TITLE	
1	303	603	Miscellaneous Intangible Plant	\$ (25,305)
2	365.1	665.1	Land and Land Rights	0
3	367	667	Mains	(55,516)
4	369	669	Measuring and Regulating Station Equipment	(214)
5	374	674.1	Land	0
6	380	680	Services	(12,098)
7	382	682	Meter Installations	(243)
8	383	683	House Regulators	(243)
9	390	690	Structures and Improvements	(11,183)
10	391	691.1	Electronic Equipment	(46,290)
11	392	692.1	Transportation Equip - Class 1 - Autos	(433,655)
12	392	692.2	Transportation Equip - Class 2 - Light Trucks	(1,047,380)
13	392	692.3	Transportation Equip - Class 3 - Trailers	(450,369)
14	392	692.4	Transportation Equip - Class 4 - Heavy Trucks	(974,110)
15	Total Reserve Adjustment			<u>\$ (3,056,606)</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
ADJUSTMENTS TO ACCUMULATED DEPRECIATION RESERVE
AS OF DECEMBER 31, 2017

INTANGIBLE PLANT

SCHEDULE B-3.1a
Page 1 of 1

F.E.R.C. COMPANY			ACCOUNT TITLE	DESCRIPTION	STAFF ADJUSTMENT
LINE NO.	ACCT. NO.	ACCT. NO.			
1	303	603	Miscellaneous Intangible Plant	Expense item and supporting detail is unavailable due to the Company's retention policy.	\$ (6,853)
2	303	603	Miscellaneous Intangible Plant	Beginning balance adjustment to remove costs deemed inappropriate for inclusion in PIS in Case No. 04-0571-GA-AIR.	(18,452)
3	Total Intangible Reserve Adjustment				<u>\$ (25,305)</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
ADJUSTMENTS TO ACCUMULATED DEPRECIATION RESERVE
AS OF DECEMBER 31, 2017

TRANSMISSION PLANT

SCHEDULE B-3.1b
Page 1 of 1

F.E.R.C. COMPANY					STAFF ADJUSTMENT
LINE NO.	ACCT. NO.	ACCT. NO.	ACCOUNT TITLE	DESCRIPTION	
1	365.1	665.1	Land and Land Rights	Remove excess land.	0
2	367	667	Mains	Remove excess land.	(54,962)
3	367	667	Mains	Remove stopple on main.	(554)
4	369	669	Measuring and Regulating Station Equipment	Remove stopple on main.	(214)
5	Total Transmission Reserve Adjustment				<u>\$ (55,730)</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
ADJUSTMENTS TO ACCUMULATED DEPRECIATION RESERVE
AS OF DECEMBER 31, 2017

DISTRIBUTION PLANT

SCHEDULE B-3.1c
Page 1 of 1

F.E.R.C. COMPANY			ACCOUNT TITLE	DESCRIPTION	STAFF ADJUSTMENT
LINE NO.	ACCT. NO.	ACCT. NO.			
1	374	674.1	Land	Beginning balance adjustment of land easement for relocation of regulator station not yet moved.	0
2	380	680	Services	Painting of existing pipe which should have been expensed.	(12,098)
3	382	682	Meter Installations	Painting of existing pipe which should have been expensed.	(243)
4	383	683	House Regulators	Painting of existing pipe which should have been expensed.	(243)
5	Total Distribution Reserve Adjustment				<u>\$ (12,584)</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
ADJUSTMENTS TO ACCUMULATED DEPRECIATION RESERVE
AS OF DECEMBER 31, 2017

GENERAL PLANT

SCHEDULE B-3.1d
Page 1 of 1

F.E.R.C. COMPANY					
LINE	ACCT.	ACCT.			STAFF
NO.	NO.	NO.	ACCOUNT TITLE	DESCRIPTION	ADJUSTMENT
1	390	690	Structures and Improvements	Non-working CNG Station in Fairborn.	(11,183)
2	391	691.1	Electronic Equipment	First generation laptops no longer in service.	(46,290)
3	392	692.1	Transportation Equip - Class 1 - Autos	To remove automobiles.	(433,655)
4	392	692.2	Transportation Equip - Class 2 - Light Trucks	To remove light trucks.	(1,047,380)
5	392	692.3	Transportation Equip - Class 3 - Trailers	To remove trailers.	(450,369)
6	392	692.4	Transportation Equip - Class 4 - Heavy Trucks	To remove heavy trucks.	(974,110)
7	Total General Plant Reserve Adjustment				<u>\$ (2,962,987)</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
DEPRECIATION EXPENSE AND ACCRUAL RATES
AS OF DECEMBER 31, 2017

INTANGIBLE PLANT

SCHEDULE B-3.2
PAGE 1 OF 5

LINE NO. (a)	F.E.R.C. ACCT. NO. (a)	COMPANY ACCT. NO. (a)	ACCOUNT TITLE (a)	TOTAL COMPANY PLANT INVESTMENT (a)	ACCUMULATED RESERVE (b)	STAFF PROPOSED ACCRUAL RATE (c)=(100-e)/(f)	CALCULATED DEPR. EXPENSE (d)=(a)*(c)	% NET SALVAGE (e)	AVERAGE SERVICE LIFE (f)	CURVE FORM (g)
1	301	601	Organization	\$ 496,458	\$ 278,942		(h)			
2	303	603	Miscellaneous Intangible Plant	20,690,970	26,042,861		(i)			
3			Total Intangible Plant	<u>\$ 21,187,428</u>	<u>\$ 26,321,803</u>		<u>\$ -</u>			

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
DEPRECIATION EXPENSE AND ACCRUAL RATES
AS OF DECEMBER 31, 2017

MANUFACTURED GAS PRODUCTION PLANT

SCHEDULE B-3.2
PAGE 2 OF 5

LINE NO. (a)	F.E.R.C. ACCT. NO. (a)	COMPANY ACCT. NO. (a)	ACCOUNT TITLE (a)	TOTAL COMPANY PLANT INVESTMENT (a)	ACCUMULATED RESERVE (b)	STAFF PROPOSED ACCRUAL RATE (c)=(100-e)/(f)	CALCULATED DEPR. EXPENSE (d)=(a)*(c)	% NET SALVAGE (e)	AVERAGE SERVICE LIFE (f)	CURVE FORM (g)
1	304	604.1	Land and Land Rights	-	-		\$ -			
2	305	605.1	Structures and Improvements - Production	-	-					
3	305	605.2	Structures and Improvements - Storage	-	-					
4	311	611.1	Liquefied Petroleum Gas Equip. - Production	-	-					
5	311	611.3	Liquefied Petroleum Gas Equip. - Lines	-	-					
6			Total Manufactured Gas Production Plant	<u>\$ -</u>	<u>\$ -</u>		<u>\$ -</u>			

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
DEPRECIATION EXPENSE AND ACCRUAL RATES
AS OF DECEMBER 31, 2017

TRANSMISSION PLANT

SCHEDULE B-3.2
PAGE 3 OF 5

LINE NO. (a)	F.E.R.C. ACCT. NO. (a)	COMPANY ACCT. NO. (a)	ACCOUNT TITLE (a)	TOTAL COMPANY PLANT INVESTMENT (a)	ACCUMULATED RESERVE (b)	STAFF PROPOSED ACCRUAL RATE (c)=(100-e)/(f)	CALCULATED DEPR. EXPENSE (d)=(a)*(c)	% NET SALVAGE (e)	AVERAGE SERVICE LIFE (f)	CURVE FORM (g)
1	365.1	665.1	Land and Land Rights	\$ 392,510.68	\$ -		(h)			
2	365.2	665.2	Rights-of-Way	77,423	-	1.43%	1,106	0%	70	R4.0
3	366	666.2	Measuring and Regulating Station Structures	63,326	3,824	1.91%	(i)	-5%	55	S2.0
4	367	667	Mains	78,306,690	1,945,347	2.57%	2,013,601	-80%	70	R4.0
5	369	669	Measuring and Regulating Station Equipment	19,026,374	672,046	2.00%	380,527	-20%	60	R2.5
6	371	671	Other Equipment	18,627	5,155	3.33%	(i)	0%	30	S2.5
7			Total Transmission Plant	<u>\$ 97,884,951</u>	<u>\$ 2,626,373</u>		<u>\$ 2,395,234</u>			

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
DEPRECIATION EXPENSE AND ACCRUAL RATES
AS OF DECEMBER 31, 2017

DISTRIBUTION PLANT

SCHEDULE B-3.2
PAGE 4 OF 5

LINE NO. (a)	F.E.R.C. ACCT. NO. (a)	COMPANY ACCT. NO. (a)	ACCOUNT TITLE (a)	TOTAL COMPANY PLANT INVESTMENT (a)	ACCUMULATED RESERVE (b)	STAFF PROPOSED ACCRUAL RATE (c)=(100-e)/(f)	CALCULATED DEPR. EXPENSE (d)=(a)*(c)	% NET SALVAGE (e)	AVERAGE SERVICE LIFE (f)	CURVE FORM (g)
1	374	674.1	Land	\$ 216,382	\$ -		(h)			
2	374	674.2	Land Rights	6,790,918	-	1.43%	97,013	0%	70	R4.0
3	374	674.4	Land Rights	34,370	12,660	4.00%	1,375	0%	25	SQ
4	374	674.5	Land Rights	79,362	3,141	5.00%	3,968	0%	20	SQ
5	375	675	Structures and Improvements	892,284	537,268	1.91%	17,035	-5%	55	S2.0
6	376	676	Mains	303,098,109	110,745,622	2.57%	7,793,951	-80%	70	R4.0
7	376	676.1	Mains BS/CI	99,268,957	6,288,275	2.57%	2,552,630	-80%	70	R4.1
8	378	678	Meas. & Reg. Station Equipment - General	11,736,913	7,834,251	2.00%	234,738	-20%	60	R2.5
9	379	679	Meas. & Reg. Station Equipment - City Gate	1,459,142	866,874	2.00%	29,183	-20%	60	R2.6
10	380	680	Services	284,282,479	179,836,418	3.85%	10,933,941	-150%	65	R4.0
11	380	680.1	Services BS/CI	125,044,447	19,220,188	3.85%	4,809,402	-150%	65	R4.1
12	381	681	Meters	65,617,246	15,989,263	3.25%	2,132,560	-30%	40	R3.0
13	382	682	Meter Installations	32,849,574	2,230,866	3.00%	985,487	-50%	50	S2.5
14	382	682	Meter Installations BS/CI	25,062,814	1,391,216	3.00%	751,884	-50%	50	S2.5
15	383	683	House Regulators	10,000,293	2,319,867	2.78%	277,786	-25%	45	R3.0
16	384	684	House Regulator Installations	911,201	697,997	2.78%	25,311	-25%	45	R3.0
17	385	685	Industrial Meas. & Reg. Station Equipment	391,960	188,563	2.20%	8,623	-10%	50	R2.5
18	387	687	Other Equipment	46,570	14,825	3.33%	1,552	0%	30	S2.5
19			Total Distribution Plant	<u>\$ 967,783,021</u>	<u>\$ 348,177,293</u>		<u>\$ 30,656,441</u>			

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
DEPRECIATION EXPENSE AND ACCRUAL RATES
AS OF DECEMBER 31, 2017

GENERAL PLANT

SCHEDULE B-3.2
PAGE 5 OF 5

LINE NO. (a)	F.E.R.C. ACCT. NO. (a)	COMPANY ACCT. NO. (a)	ACCOUNT TITLE (a)	TOTAL COMPANY PLANT INVESTMENT (a)	ACCUMULATED RESERVE (b)	STAFF PROPOSED ACCRUAL RATE (c)=(100-e)/(f)	CALCULATED DEPR. EXPENSE (d)=(a)*(c)	% NET SALVAGE (e)	AVERAGE SERVICE LIFE (f)	CURVE FORM (g)
1	389	689.1	Land	\$ 1,482,742.39	\$ -		(h)			
2	390	690	Structures and Improvements	10,572,977	4,779,513	2.10%	222,033	-5%	50	R2.5
3	391	691.1	Electronic Equipment	475,087	908,281	6.67%	(i)	0%	15	SQ
4	391	691.11	Electronic Equipment (Fully Depreciated)	70,750	70,750	6.67%	(i)	0%	15	SQ
5	391	691.2	Office Furniture & Fixtures	868,439	437,034	5.00%	43,422	0%	20	SQ
6	391	691.21	Office Furniture & Fixtures (Fully Depreciated)	1,577,610	1,577,610	5.00%	(i)	0%	20	SQ
7	392	692.1	Transportation Equip - Class 1 - Autos	986,743	2,814,511	7.73%	(i), (j)	15%	11	L3.0
8	392	692.2	Transportation Equip - Class 2 - Light Trucks	3,171,128	2,589,805	6.54%	(j)	15%	13	S2.0
9	392	692.3	Transportation Equip - Class 3 - Trailers	228,219	84,695	4.32%	(j)	5%	22	S2.0
10	392	692.4	Transportation Equip - Class 4 - Heavy Trucks	2,386,053	1,318,309	5.63%	(j)	10%	16	S2.5
11	394	694	Tools, Shop & Garage Equipment	2,432,530	712,882	4.00%	97,301	0%	25	S0.0
12	394	694.1	Tools, Shop & Garage Equipment (Fully Depreciated)	388,660	388,660	4.00%	(i)	0%	25	S0.0
13	396	696	Power Operated Equipment	1,330,525	1,019,801	3.91%	52,064	10%	23	R3.0
14	397	697	Communication Equipment	8,831,407	5,049,160	6.67%	588,760	0%	15	SQ
15	397	697.1	Communication Equipment (Fully Depreciated)	146,419	146,419	6.67%	(i)	0%	15	SQ
16	398	698	Miscellaneous Equipment	1,571,562	596,653	5.00%	78,578	0%	20	SQ
17			Total General Plant	<u>\$ 36,520,850</u>	<u>\$ 22,494,083</u>		<u>\$ 1,082,158</u>			
18			Total Gas Plant	<u>\$ 1,123,376,251</u>	<u>\$ 399,619,552</u>		<u>\$ 34,133,834</u>			

(a) Staff's Schedule B-2.1

(b) Staff's Schedule B-3

(c) Staff's WPB-3.2

(d) Columns (a) * (c)

(e) Staff's WPB-3.2

(f) Staff's WPB-3.2

(g) Staff's WPB-3.2

(h) Non depreciable

(i) Fully depreciated

(j) 100% of Transportation Equipment (392) depreciation is debited to Clearing Accounts (184) and distributed to O&M and Capital based on an hourly rate.

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
CONSTRUCTION WORK IN PROGRESS
AS OF DECEMBER 31, 2017

SCHEDULE B-4
PAGE 1 OF 1

Line No.	Project No.	Description of Project (C)	Accumulated Costs			Allocation %	Total Jurisdictional Cost at Date Certain (H)	Estimated Physical Percent Completion (I)
			Construction Dollars (D)	AFUDC Capitalized (E)	Total Cost (F=D+E)			
(A)	(B)	(C)	(D)	(E)	(F=D+E)	(G)	(H)	(I)

Not Applicable. CWIP is not included in Rate Base.

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
CONSTRUCTION WORK IN PROGRESS - PERCENT COMPLETE (TIME)
For The Twelve Months Ended September 30, 2018

SCHEDULE B-4.1
PAGE 1 OF 1

Line No.	Project No.	Date Construction Work Began	Estimated Project Completion Date	Elapsed Days: Beginning to Date Certain	Elapsed Days: Beginning to Estimated Completion	Date Certain % Completion	Date Certain % of Total Expenditures
(A)	(B)	(C)	(D)	(E)	(F)	(G)=(E)/(F)	(H)

Not Applicable. CWIP is not included in Rate Base.

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
CONSTRUCTION WORK IN PROGRESS - PERCENT COMPLETE (DOLLARS)
For The Twelve Months Ended September 30, 2018

SCHEDULE B-4.2
PAGE 1 OF 1

Line No. (A)	Project No. (B)	Most Recent Budget Estimate				Project Expenditures As of Date Certain		Date Certain % Completion	
		Construction Dollars (C)	AFUDC (D)	Total (E)=(C)+(D)	Construction Dollars Trended (F)	Construction Dollars (G)	Construction Dollars Trended (H)	Construction Dollars (I)=(G)/(C)	Construction Dollars Trended (J)=(H)/(F)

Not Applicable. CWIP is not included in Rate Base.

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
ALLOWANCE FOR WORKING CAPITAL
AS OF DECEMBER 31, 2017

SCHEDULE B-5
PAGE 1 OF 1

LINE NO.	WORKING CAPITAL COMPONENT	DESCRIPTION of METHODOLOGY USED to DETERMINE JURISDICTIONAL REQUIREMENT	WORK PAPER REFERENCE NUMBER	JURISDICTION
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NONE

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
OTHER RATE BASE ITEMS SUMMARY
AS OF DECEMBER 31, 2017

SCHEDULE B-6
PAGE 1 OF 1

LINE NO.	ACCOUNT NO.	WORKING CAPITAL COMPONENT	DESCRIPTION OF METHODOLOGY USED TO DETERMINE JURISDICTIONAL REQUIREMENT	CASE NO. FOR DEFERRAL AUTHORIZATION	JURISDICTION
1	252	Customer Advances for Construction	General Ledger Balance		\$ (2,541,852)
2	182.3	PIPP Deferred Asset	General Ledger Balance	88-1115-GE-PIP	\$ (2,776,317)
3	182.3	DRR Deferred Asset	General Ledger Balance	07-1080-GA-AIR	\$ 31,237,732
4	182.3	HB95 Deferred Asset	General Ledger Balance	13-1890-GA-UNC	\$ 66,137,567
5		Customer Deposits	Staff DR #100		\$ (3,904,821)
6		<u>Deferred Income Taxes</u>			
7	190	Accumulated Deferred Income Taxes	General Ledger Balance		\$ 32,616,835
8	282	ADIT - Other Property	General Ledger Balance		(111,283,835)
9	283	ADIT - Other	General Ledger Balance		(48,726,324)
10	254	ADIT - Other Regulatory Liabilities	General Ledger Balance		(103,729,466)
11		Removal of Goodwill Amortization			41,002,707
12		Total Deferred Income Taxes			\$ (190,120,084)

NOTE: CIAC are already netted against gross plant.

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
ADJUSTMENTS TO OTHER RATE BASE ITEMS
AS OF DECEMBER 31, 2017

SCHEDULE B-6.1
PAGE 1 OF 1

LINE NO.	ACCOUNT NUMBER	ACCOUNT TITLE	WORK PAPER REFERENCE	JURISDICTIONAL ADJUSTMENT
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NONE

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
JURISDICTIONAL ALLOCATION FACTORS
RATE BASE AND OPERATING INCOME

SCHEDULE B-7
PAGE 1 OF 1

LINE NO.	ACCOUNT NUMBER	ACCOUNT TITLE	ALLOCATION FACTOR	DESCRIPTION OF FACTORS AND/OR METHOD OF ALLOCATION
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Vectren Energy Delivery of Ohio Inc.'s operations are 100% PUCO jurisdictional.

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Jurisdictional Proforma Income Statement
For The Twelve Months Ended September 30, 2018

Schedule C-1
Page 1 of 1

Work Paper Reference No(s).:

Line No.	Description	Staff Adjusted Revenue & Expenses (A)	Proposed Increase (B)	Proforma Revenue & Expenses (C)
1	Operating Revenues	\$ 150,259,887	\$ 34,021,227	\$ 184,281,114
2				
3	Operating Expenses			
4	Operation & Maintenance	\$ 63,571,596	\$ -	\$ 63,571,596
5	Depreciation	35,222,974	-	35,222,974
6	Taxes - Other	12,737,432	-	12,737,432
7	Operating Expenses before Income Taxes	<u>\$ 111,532,002</u>	<u>\$ -</u>	<u>\$ 111,532,002</u>
8				
9	Federal Income Taxes	<u>\$ 4,943,691</u>	<u>\$ 7,144,458</u>	<u>\$ 12,088,148</u>
10				
11	Total Operating Expenses	<u>\$ 116,475,693</u>	<u>\$ 7,144,458</u>	<u>\$ 123,620,150</u>
12				
13	Net Operating Income	<u><u>\$ 33,784,194</u></u>	<u><u>\$ 26,876,769</u></u>	<u><u>\$ 60,660,963</u></u>
14				
15	Rate Base	<u><u>\$ 621,788,925</u></u>		<u><u>\$ 621,788,925</u></u>
16				
17	Rate of Return	<u><u>5.43%</u></u>		<u><u>9.76%</u></u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Adjusted Test Year Operating Income
For The Twelve Months Ended September 30, 2018

Schedule C-2
Page 1 of 1

Work Paper Reference No(s).:

Line No.	Description	Unadjusted Revenue & Expenses	Adjustments	Adjusted Revenue & Expenses
		(A)	(B)	(C) = (A) + (B)
1	OPERATING REVENUES			
2	Base Revenue and Riders	\$ 159,808,338	\$ (15,575,192)	\$ 144,233,146
3	Gas Costs Revenue	\$ 5,919,451	\$ 107,289	\$ 6,026,741
4	Total Operating Revenues	<u>\$ 165,727,790</u>	<u>\$ (15,467,903)</u>	<u>\$ 150,259,887</u>
5				
6	OPERATING EXPENSES			
7	Operation and Maintenance Expenses			
8				
9	Gas Supply Expenses			
10	Purchased Gas	\$ 5,919,451	\$ 107,289	\$ 6,026,740
11	Other	\$ -	\$ -	\$ -
12	Total Other Gas Supply Expense	<u>\$ 5,919,451</u>	<u>\$ 107,289</u>	<u>\$ 6,026,740</u>
13				
14	Transmission Expense	\$ 6,663,314	\$ -	\$ 6,663,314
15	Distribution Expense	17,024,169	(425,576)	16,598,594
16	Customer Accounts Expense	11,447,161	(2,357,545)	9,089,616
17	Customer Service & Information Expense	6,337,254	(5,600,000)	737,253
18	Sales Expense	35,805	-	35,805
19	Administrative & General Expense	25,181,332	(761,059)	24,420,273
20	Total Operation & Maintenance Expense	<u>\$ 72,608,486</u>	<u>\$ (9,036,890)</u>	<u>\$ 63,571,596</u>
21				
22	Depreciation Expense	<u>\$ 27,976,625</u>	<u>\$ 7,246,350</u>	<u>\$ 35,222,974</u>
23				
24	Taxes Other Than Income Taxes			
25	Property Taxes	\$ 10,586,977	\$ 1,826,128	\$ 12,413,105
26	State and Other Taxes	13,612,655	(13,288,328)	324,327
27	Total Taxes Other Than Income Taxes	<u>\$ 24,199,632</u>	<u>\$ (11,462,199)</u>	<u>\$ 12,737,432</u>
28				
29	Federal Income Taxes			
30	Current Tax Expense	\$ (13,340,762)	\$ 13,625,917	\$ 285,155
31	Provision for Deferred Income Taxes	1,486,292	3,172,245	4,658,536
32	Total Federal Income Tax Expense	<u>\$ (11,854,470)</u>	<u>\$ 16,798,161</u>	<u>\$ 4,943,691</u>
33				
34	Total Operating Expenses and Taxes	<u>\$ 112,930,271</u>	<u>\$ 3,545,421</u>	<u>\$ 116,475,693</u>
35				
36	Net Operating Income	<u>\$ 52,797,518</u>	<u>\$ (19,013,324)</u>	<u>\$ 33,784,194</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Summary of Jurisdictional Adjustments
To Operating Income
For The Twelve Months Ended September 30, 2018

Schedule C-3
Page 1 of 5

Work Paper Reference No(s): See Below

Line No.	Element of Operating Income	Annualized Revenue - Fixed Charge Revenue	Annualized Revenue - Days of Service	Annualized Revenue - Weather Normalization	Annualized Revenue - PIPP Rider Synchronization	Annualized Revenue - UEX Rider Synchronization
	Schedule Reference	C-3.1	C-3.2	C-3.3	C-3.4	C-3.5
1	OPERATING REVENUE					
2	Base and Riders	\$ 81,056	\$ (237,375)	\$ 428,624	\$ 6,480	\$ (640,287)
3	Gas Costs					
4	Total Revenue	\$ 81,056	\$ (237,375)	\$ 428,624	\$ 6,480	\$ (640,287)
5						
6	OPERATING EXPENSES					
7	Operation and Maintenance Expenses					
8	Production Expenses					
9	Liquefied Petroleum Gas					
10	Other					
11	Total Production Expense	\$ -	\$ -	\$ -	\$ -	\$ -
12						
13	Other Gas Supply Expenses					
14	Purchased Gas					
15	Other					
16	Total Other Gas Supply Expense	\$ -	\$ -	\$ -	\$ -	\$ -
17						
18	Transmission Expense					
19	Distribution Expense					
20	Customer Accounts Expense				\$ 20,741	\$ (765,446)
21	Customer Serv & Info Expense					
22	Sales Expense					
23	Administrative & General Expense					
24	Total Operation and Maintenance Expenses	\$ -	\$ -	\$ -	\$ 20,741	\$ (765,446)
25						
26	Depreciation Expense	\$ -	\$ -	\$ -	\$ -	\$ -
27						
28	Taxes Other Than Income Taxes					
29	Property					
30	State and Other Taxes					
31	Total Taxes Other Than Income Tax	\$ -	\$ -	\$ -	\$ -	\$ -
32						
33	Federal Income Taxes					
34	Current Tax Expense	\$ 28,370	\$ (83,081)	\$ 150,018	\$ (4,991)	\$ 43,806
35	Prov Deferred Inc Tax					
36	Total Federal Inc Tax Expense	\$ 28,370	\$ (83,081)	\$ 150,018	\$ (4,991)	\$ 43,806
37						
38	Total Oper. Expenses and Tax	\$ 28,370	\$ (83,081)	\$ 150,018	\$ 15,750	\$ (721,640)
39						
40	Net Operating Income	\$ 52,686	\$ (154,294)	\$ 278,605	\$ (9,270)	\$ 81,353

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Summary of Jurisdictional Adjustments
To Operating Income
For The Twelve Months Ended September 30, 2018

Schedule C-3
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Work Paper Reference No(s): See Below

Line No.	Element of Operating Income	Annualized Revenue - EEFR Synchronization C-3.6	Annualized Revenue - DRR Synchronization C-3.7	Annualized Revenue - ETC Rider Synchronization C-3.8	Annualized Revenue - Gas Cost Recovery Synchronization C-3.9	Annualized Revenue - SB287 Excise Tax Rider Synchronization C-3.10
1	OPERATING REVENUE					
2	Base and Riders	\$ (1,549,479)	\$ 5,239,459	\$ (1,418,215)	\$ -	\$ (5,543,202)
3	Gas Costs				812,381	
4	Total Revenue	\$ (1,549,479)	\$ 5,239,459	\$ (1,418,215)	\$ 812,381	\$ (5,543,202)
5						
6	OPERATING EXPENSES					
7	Operation and Maintenance Expenses					
8	Production Expenses					
9	Liquefied Petroleum Gas					
10	Other					
11	Total Production Expense	\$ -	\$ -	\$ -	\$ -	\$ -
12						
13	Other Gas Supply Expenses					
14	Purchased Gas				\$ 812,381	
15	Other					
16	Total Other Gas Supply Expense	\$ -	\$ -	\$ -	\$ 812,381	\$ -
17						
18	Transmission Expense					
19	Distribution Expense					
20	Customer Accounts Expense			(1,612,840)		
21	Customer Serv & Info Expense	(1,705,321)				
22	Sales Expense					
23	Administrative & General Expense					
24	Total Operation and Maintenance Expenses	\$ (1,705,321)	\$ -	\$ (1,612,840)	\$ 812,381	\$ -
25						
26	Depreciation Expense	\$ -	\$ -	\$ -	\$ -	\$ -
27						
28	Taxes Other Than Income Taxes					
29	Property					
30	State and Other Taxes					(5,543,202)
31	Total Taxes Other Than Income Tax	\$ -	\$ -	\$ -	\$ -	\$ (5,543,202)
32						
33	Federal Income Taxes					
34	Current Tax Expense	\$ 54,545	\$ 1,833,811	\$ 68,119	\$ -	\$ -
35	Prov Deferred Inc Tax					
36	Total Federal Inc Tax Expense	\$ 54,545	\$ 1,833,811	\$ 68,119	\$ -	\$ -
37						
38	Total Oper. Expenses and Tax	\$ (1,650,776)	\$ 1,833,811	\$ (1,544,721)	\$ 812,381	\$ (5,543,202)
39						
40	Net Operating Income	\$ 101,298	\$ 3,405,648	\$ 126,506	\$ -	\$ -

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Summary of Jurisdictional Adjustments
To Operating Income
For The Twelve Months Ended September 30, 2018

Schedule C-3
Page 3 of 5

Work Paper Reference No(s): See Below

Line No.	Element of Operating Income	Annualized Revenue - Miscellaneous Revenue	Annualized Revenue - Gross Receipts Tax Rider Synchronization	Labor Adjustment	Conservation Program Expense	Rate Case Expenses
	Schedule Reference	C-3.11	C-3.12	C-3.13	C-3.14	C-3.15
1	OPERATING REVENUE					
2	Base and Riders	\$ (4,531,903)	\$ (7,410,350)			
3	Gas Costs	(705,091)				
4	Total Revenue	\$ (5,236,994)	\$ (7,410,350)	\$ -	\$ -	\$ -
5						
6	OPERATING EXPENSES					
7	Operation and Maintenance Expenses					
8	Production Expenses					
9	Liquefied Petroleum Gas					
10	Other					
11	Total Production Expense	\$ -	\$ -	\$ -	\$ -	\$ -
12						
13	Other Gas Supply Expenses					
14	Purchased Gas	(705,091)				
15	Other					
16	Total Other Gas Supply Expense	\$ (705,091)	\$ -	\$ -	\$ -	\$ -
17						
18	Transmission Expense					
19	Distribution Expense			(3,484,258)		
20	Customer Accounts Expense					
21	Customer Serv & Info Expense				(3,894,679)	
22	Sales Expense					
23	Administrative & General Expense					305,000
24	Total Operation and Maintenance Expenses	\$ (705,091)	\$ -	\$ (3,484,258)	\$ (3,894,679)	\$ 305,000
25						
26	Depreciation Expense	\$ -	\$ -	\$ -	\$ -	\$ -
27						
28	Taxes Other Than Income Taxes					
29	Property					
30	State and Other Taxes		(7,745,126)			
31	Total Taxes Other Than Income Tax	\$ -	\$ (7,745,126)	\$ -	\$ -	\$ -
32						
33	Federal Income Taxes					
34	Current Tax Expense	\$ (1,586,166)	\$ 117,171	\$ 1,219,490	\$ 1,363,138	
35	Prov Deferred Inc Tax					\$ (106,750)
36	Total Federal Inc Tax Expense	\$ (1,586,166)	\$ 117,171	\$ 1,219,490	\$ 1,363,138	\$ (106,750)
37						
38	Total Oper. Expenses and Tax	\$ (2,291,257)	\$ (7,627,954)	\$ (2,264,768)	\$ (2,531,541)	\$ 198,250
39						
40	Net Operating Income	\$ (2,945,737)	\$ 217,604	\$ 2,264,768	\$ 2,531,541	\$ (198,250)

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Summary of Jurisdictional Adjustments
To Operating Income
For The Twelve Months Ended September 30, 2018

Schedule C-3
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Work Paper Reference No(s): See Below

Line No.	Element of Operating Income	PUCO & OCC Assessment Fee	DARR & IM Program Expenses	Miscellaneous Adjustments	Annualize Shared Services Expense	Annualized Depreciation Expense
	Schedule Reference	C-3.16	C-3.17	C-3.18	C-3.19	C-3.20
1	OPERATING REVENUE					
2	Base and Riders					
3	Gas Costs					
4	Total Revenue	\$ -	\$ -	\$ -	\$ -	\$ -
5						
6	OPERATING EXPENSES					
7	Operation and Maintenance Expenses					
8	Production Expenses					
9	Liquefied Petroleum Gas					
10	Other					
11	Total Production Expense	\$ -	\$ -	\$ -	\$ -	\$ -
12						
13	Other Gas Supply Expenses					
14	Purchased Gas					
15	Other					
16	Total Other Gas Supply Expense	\$ -	\$ -	\$ -	\$ -	\$ -
17						
18	Transmission Expense					
19	Distribution Expense		3,058,682			
20	Customer Accounts Expense					
21	Customer Serv & Info Expense					
22	Sales Expense					
23	Administrative & General Expense	(28,007)		234,073	(1,272,125)	-
24	Total Operation and Maintenance Expenses	\$ (28,007)	\$ 3,058,682	\$ 234,073	\$ (1,272,125)	\$ -
25						
26	Depreciation Expense	\$ -	\$ -	\$ -	\$ -	\$ 6,157,209
27						
28	Taxes Other Than Income Taxes					
29	Property					
30	State and Other Taxes					-
31	Total Taxes Other Than Income Tax	\$ -	\$ -	\$ -	\$ -	\$ -
32						
33	Federal Income Taxes					
34	Current Tax Expense	\$ 9,802	\$ (1,070,539)	\$ (81,926)	\$ 445,244	\$ (2,155,023)
35	Prov Deferred Inc Tax					
36	Total Federal Inc Tax Expense	\$ 9,802	\$ (1,070,539)	\$ (81,926)	\$ 445,244	\$ (2,155,023)
37						
38	Total Oper. Expenses and Tax	\$ (18,205)	\$ 1,988,143	\$ 152,148	\$ (826,881)	\$ 4,002,186
39						
40	Net Operating Income	\$ 18,205	\$ (1,988,143)	\$ (152,148)	\$ 826,881	\$ (4,002,186)

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Summary of Jurisdictional Adjustments
To Operating Income
For The Twelve Months Ended September 30, 2018

Schedule C-3
Page 4 of 5

Work Paper Reference No(s): See Below

Line No.	Element of Operating Income	HB95 Program Expenses C-3.21	DRR Expenses C-3.22	Property Tax Expense C-3.23	Federal Income Taxes at Statutory Rate C-3.24	Total Schedule C-3
1	OPERATING REVENUE					
2	Base and Riders				\$	(15,575,192)
3	Gas Costs					107,289
4	Total Revenue	\$ -	\$ -	\$ -	\$ -	\$ (15,467,903)
5						
6	OPERATING EXPENSES					
7	Operation and Maintenance Expenses					
8	Production Expenses				\$	-
9	Liquefied Petroleum Gas					-
10	Other					0
11	Total Production Expense	\$ -	\$ -	\$ -	\$ -	\$ -
12						
13	Other Gas Supply Expenses					
14	Purchased Gas				\$	107,289
15	Other					-
16	Total Other Gas Supply Expense	\$ -	\$ -	\$ -	\$ -	\$ 107,289
17						
18	Transmission Expense				\$	-
19	Distribution Expense					(425,576)
20	Customer Accounts Expense					(2,357,545)
21	Customer Serv & Info Expense					(5,600,000)
22	Sales Expense					-
23	Administrative & General Expense				\$ -	(761,059)
24	Total Operation and Maintenance Expenses	\$ -	\$ -	\$ -	\$ -	\$ (9,036,890)
25						
26	Depreciation Expense	\$ 1,059,535	\$ 29,606	\$ -	\$ -	\$ 7,246,350
27						
28	Taxes Other Than Income Taxes					
29	Property			\$ 1,826,128	\$	1,826,128
30	State and Other Taxes					(13,288,328)
31	Total Taxes Other Than Income Tax	\$ -	\$ -	\$ 1,826,128	\$ -	\$ (11,462,199)
32						
33	Federal Income Taxes					
34	Current Tax Expense	\$ (370,837)	(10,362)	(639,145)	\$ 14,294,474	\$ 13,625,917
35	Prov Deferred Inc Tax				\$ 3,278,995	\$ 3,172,245
36	Total Federal Inc Tax Expense	\$ (370,837)	\$ (10,362)	\$ (639,145)	\$ 17,573,468	\$ 16,798,161
37						
38	Total Oper. Expenses and Tax	\$ 688,697	\$ 19,244	\$ 1,186,983	\$ 17,573,468	\$ 3,545,421
39						
40	Net Operating Income	\$ (688,697)	\$ (19,244)	\$ (1,186,983)	\$ (17,573,468)	\$ (19,013,324)

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Annualized Revenue -Adjust Test Year Customers and Fixed Charge Revenue
For The Twelve Months Ended September 30, 2018

Schedule C-3.1
Page 1 of 1

Purpose and Description	Work Paper Reference No(s)	Amount
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PURPOSE and DESCRIPTION: To reflect adjustments to operating
 revenues to adjust Monthly Fixed Charge revenues for actual and projected
 Customer Count by Rate Schedule.


Total	Increase/(Decrease) in Monthly Fixed Charge Revenue	WPC-3.1a	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">\$</div> <div style="border-bottom: 1px solid black; padding-bottom: 2px;">81,056</div> </div>
			<div style="display: flex; align-items: center; justify-content: center;"> <div style="margin-bottom: 5px;">↓</div> <div>To Sch C3 Summary</div> </div>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Annualized Revenue-Days of Service Adjustment
For The Twelve Months Ended September 30, 2018

Schedule C-3.2
Page 1 of 1

Purpose and Description	Work Paper Reference No(s)	Amount
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PURPOSE and DESCRIPTION: To reflect adjustments to operating revenues to adjust actual periods for calendar month days of service.

Total	Increase/(Decrease) to Volumetric Base Revenues for Days of Service	WPC-3.1a	\$ (237,375)
			 To Sch C3 Summary

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Annualized Revenue -Weather Normalization Adjustment
For The Twelve Months Ended September 30, 2018

Schedule C-3.3
Page 1 of 1

Purpose and Description	Work Paper Reference No(s)	Amount
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PURPOSE and DESCRIPTION: To reflect adjustments to operating revenues to adjust volumes for Normal Weather based on NOAA Normal for 1981-2010.

Total	Increase/(Decrease) to Volumetric Base Revenues for Normal Weather	WPC-3.1a
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\$	428,624
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↓
To Sch C3 Summary

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Annualized Revenue - PIPP Rider Synchronization
For The Twelve Months Ended September 30, 2018

Schedule C-3.4
Page 1 of 1

Line No.	Purpose and Description	Work Paper Reference No(s)	Amount	
PURPOSE and DESCRIPTION: To reflect the change in operating revenues and operating expense for normalized Percentage of Income Payment Plan (PIPP) Rider recoveries at the current approved rate of \$(0.00066) per CCF.				
1	PIPP Revenue Adjustment	WPC-3.1a	\$ 6,480	To Sch C3 Summary
2	Increase/(Decrease) in Uncollectible Expense - PIPP	WPC-3.1a	<u>\$ 20,741</u>	To Sch C3 Summary

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Annualized Revenue - UEX Rider Synchronization
For The Twelve Months Ended September 30, 2018

Schedule C-3.5
Page 1 of 1

Purpose and Description		Work Paper Reference No(s)	Amount
PURPOSE and DESCRIPTION: To reflect the change in operating revenues and operating expense for normalized Uncollectible Expense (UEX) Rider recoveries at the current approved rate of \$0.00397 per CCF.			
Total	UEX Revenue Adjustment	WPC-3.1a	\$ <u>(640,287)</u> To Sch C3 Summary

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Annualized Revenue - EEFr Synchronization
For The Twelve Months Ended September 30, 2018

Schedule C-3.6
Page 1 of 1

Line No.	Purpose and Description	Work Paper Reference No(s)	Amount
PURPOSE and DESCRIPTION: To reflect the change in operating revenues and operating expense for normalized Energy Efficiency Funding Rider (EEFR) recoveries at the current approved rate of \$0.00558 per CCF.			
1	EEFR Revenue Adjustment	WPC-3.1a	\$ (1,549,479) To Sch C3 Summary
2	Increase/(Decrease) in Conservation Expense - EEFR	WPC-3.1a	\$ <u>(1,705,321)</u> To Sch C3 Summary

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Annualized Revenue - DRR Synchronization
For The Twelve Months Ended September 30, 2018

Schedule C-3.7
Page 1 of 1

Purpose and Description	Work Paper Reference No(s)	Amount
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PURPOSE and DESCRIPTION: To reflect the change in operating revenues and operating expense for normalized Distribution Replacement Rider (DRR) recoveries at the projected 9/1/2018 rate.

Total	DRR Revenue Adjustment	WPC-3.1a	<u>\$ 5,239,459</u>	To Sch C3 Summary
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Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Annualized Revenue - ETC Rider Synchronization
For The Twelve Months Ended September 30, 2018

Schedule C-3.8
Page 1 OF 1

Line No.	Purpose and Description	Work Paper Reference No(s)	Amount
PURPOSE and DESCRIPTION: To reflect the change in operating revenues and operating expense for normalized Exit Transition Cost Rider (ETC) recoveries at the current approved rate of \$0.00829 per CCF.			
1	ETC Revenue Adjustment	WPC-3.1a	\$ (1,418,215) To Sch C3 Summary
2	Increase/(Decrease) in Expense - ETC	WPC-3.1a	<u>\$ (1,612,840) To Sch C3 Summary</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Annualized Revenue - Gas Cost Synchronization
For The Twelve Months Ended September 30, 2018

Schedule C-3.9

Page 1 of 1

Line No.	Purpose and Description	Work Paper Reference No(s)	Amount
PURPOSE and DESCRIPTION: To reflect the change in operating revenues and operating expense for normalized Gas Cost Revenues and gas cost at a rate of \$0.42923 per CCF.			
7	Gas Cost Revenue Adjustment	WPC-3.1a	\$ 812,381 To Sch C3 Summary
8	Gas Cost Expense Adjustment	WPC-3.1a	<u>\$ 812,381</u> To Sch C3 Summary

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Annualized Revenue - SB287 Excise Tax Rider Synchronization
For The Twelve Months Ended September 30, 2018

Schedule C-3.10
Page 1 of 1

Line No.	Purpose and Description	Work Paper Reference No(s)	Amount
PURPOSE and DESCRIPTION: To reflect the change in operating revenues and operating expense for normalized MCF Excise Tax (SB287 Excise Tax) Rider revenue.			
1	SB287 Excise Tax Revenue Adjustment	WPC-3.1a	\$ (5,543,202) To Sch C3 Summary
2	Increase/(Decrease) in SB287 Excise Tax Expense	WPC-3.1a	<u>\$ (5,543,202)</u> To Sch C3 Summary

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Annualized Revenue - Miscellaneous Revenue
For The Twelve Months Ended September 30, 2018

SCHEDULE C-3.11

PAGE 1 OF 1

Line No.	Purpose and Description	Work Paper Reference No(s)	Amount
PURPOSE and DESCRIPTION: To reflect the change in operating revenues for various adjustments to Miscellaneous Revenue to synchronize to the number of occurrences and remove non-recurring revenues.			
1	Increase/(Decrease) in Miscellaneous Revenue	WPC-3.1a	\$ (902,107) To Sch C3 Summary
2	Removal of Unbilled Base Revenue	WPC-3.1a	\$ (3,629,796) To Sch C3 Summary
3	Removal of Unbilled Gas Cost Recovery Revenue	WPC-3.1a	<u>\$ (705,091) To Sch C3 Summary</u>
4	Revenue Adjustment (Line 1 + Line 2 + Line 3))		\$ (5,236,994)
5	Removal of Unbilled Gas Cost Expense (Line 3)		<u>\$ (705,091) To Sch C3 Summary</u>
6	Total Adjustment Amount (line 4 - Line 5)		<u><u>\$ (4,531,903)</u></u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Annualized Revenue - Gross Receipts Tax Rider Revenue Synchronization
For The Twelve Months Ended September 30, 2018

Schedule C-3.12
Page 1 of 1

Line No.	Purpose and Description	Work Paper Reference No(s)	Amount
PURPOSE and DESCRIPTION: To reflect the change in operating revenues and operating expense for normalized Gross Receipts Tax Rider recoveries.			
1	Pro Forma Gross Receipts Tax Revenue	WPC-3.1a	\$ -
2	Test Year Gross Receipts Tax Revenue	WPC-3.1a	<u>\$ 7,410,350</u>
3	Gross Adjustment (Line 1 - Line 2)		\$ (7,410,350)
Less: Adjustments Captures in Schedule C-3			
4	C-3.1 - Adjust Test Year Customer and Fixed Charge Revenue	C-3.1	\$ -
5	C-3.2 - Days of Service Adjustment	C-3.2	\$ -
6	C-3.3 - Weather Normalization Adjustment	C-3.3	\$ -
7	C-3.4 - PIPP Rider Synchronization	C-3.4	\$ -
8	C-3.5 - UEX Rider Synchronization	C-3.5	\$ -
9	C-3.6 - EEFR Synchronization	C-3.6	\$ -
10	C-3.7 - DRR Synchronization	C-3.7	\$ -
11	C-3.8 - ETC Rider Synchronization	C-3.8	\$ -
12	C-3.9 - Gas Cost Synchronization	C-3.9	\$ -
13	C-3.10 - SB287 Excise Tax Synchronization	C-3.10	\$ -
14	C-3.11 - Miscellaneous Revenue Adjustment	C-3.11	<u>\$ -</u>
15	Total Adjustments Captured in other Schedules (Sum of Lines 4 through 14)		<u>\$ -</u>
16	Revenue Adjustment (Line 3 - Line 15)		\$ (7,410,350) To Sch C3 Summary
17	Gross Receipts Tax Expense	WPC-3.12a	<u>\$ (7,745,126)</u> To Sch C3 Summary
18	Total Adjustment Amount (Line 16 - Line 17)		<u><u>\$ 334,775</u></u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Labor Adjustment
For The Twelve Months Ended September 30, 2018

Schedule C-3.13
Page 1 of 1

Purpose and Description	Work Paper Reference	Amount
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PURPOSE and DESCRIPTION: To reflect the level of labor expense that will be in effect during the test year in accordance with company practice and union contract terms.

Adjustment amount	To Sch C-3 Summary <---	<u>\$ (3,484,258)</u>
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Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Conservation
For The Twelve Months Ended September 30, 2018

Schedule C-3.14
Page 1 of 1

Line No.	Purpose and Description	Work Paper Reference	Amount
PURPOSE and DESCRIPTION: To reflect annual program costs associated with conservation initiatives focused on residential and general service customers. This adjustment brings the annual level of program costs to \$5.6 million, wich is recommended to be fully recovered through the EEFR.			
1	Removal of EEFR Embedded in Rates		\$ (3,761,728)
2	Removal of Proposed Incremental Request		(132,951)
3	Total Adjustment Amount	To Sch C-3 Summary <---	<u>\$ (3,894,679)</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate Case Expense
For The Twelve Months Ended September 30, 2018

Schedule C-3.15
Page 1 of 1

Line No.	Purpose and Description	Work Paper Reference	Amount
PURPOSE and DESCRIPTION: To reflect the estimated costs related to this proceeding amortized over a five year period.			
1	Deferred Rate Case Expense (Prior Case) Balance at September 30, 2018		\$ -
2	Add: Expected Rate Case Expense for Current Case	Sch C-8	1,525,000
3	Total Deferred Rate Case Expense Balance at September 30, 2018		<u>\$ 1,525,000</u>
4	Amortization Period (Years)		<u>5</u>
5	Pro Forma Rate Case Amortization Expense (Line 3/Line 4)		\$ 305,000
6	Less: Test Year Rate Case Amortization Expense	Sch C-8	-
7	Pro Forma Increase in Rate Case Amortization Expense (Line 5 - Line 6)	To Sch C-3 Summary <---	<u><u>\$ 305,000</u></u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
PUCO and OCC Assessment Fees
For The Twelve Months Ended September 30, 2018

SCHEDULE C-3.16
PAGE 1 OF 1

Line No.	Purpose and Description	Work Paper Reference	Amount
	PURPOSE and DESCRIPTION: To annualize the level of PUCO and OCC assessments to the latest known level.		
1	Latest Known PUCO Assessment		\$ 198,990
2	Latest Known OCC Assessment		31,736
3	Total Latest Known PUCO & OCC Assessment		<u>\$ 230,726</u>
4	Unadjusted Test Year PUCO and OCC Assessment (a)		<u>258,733</u>
5	Adjustment (Line 3 - Line 4)	To Sch C-3 Summary <---	<u><u>\$ (28,007)</u></u>

Vectren Energy Delivery of Ohio, Inc.
CASE NO. 18-0298-GA-AIR
DARR and IM Program Expenses
VECTREN ENERGY DELIVERY OF OHIO, INC.

SCHEDULE C-3.17
PAGE 1 OF 1

Line No.	Purpose and Description	Work Paper Reference	Amount
PURPOSE and DESCRIPTION: To annualize expense associated with the Distribution Accelerated Risk Reduction (DARR) Program and Integrity Management (IM) Program, and include amortization of DARR Deferral.			
	DARR Program Deferral		
1	DARR Deferred Balance - Actual 07/31/2018	WPC-3.17a	\$ 8,975,387
2	Amortization Period - Years		5
3	Annual Amortization Expense		<u>\$ 1,795,077</u>
	Total Ongoing Annual Expenses: DARR, DIMP, TIMP		
4	Average Annual Historical Costs		\$ 7,844,365
5	Less: Test Year Expense - Integrity Management Program	WPC-3.17b	6,580,760
6	Adjustment Amount - DARR and IM Programs		<u>\$ 1,263,605</u>
7	Total Adjustment Amount	To Sch C-3 Summary <---	<u><u>\$ 3,058,682</u></u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Miscellaneous Adjustments
For The Twelve Months Ended September 30, 2018

Schedule C-3.18
Page 1 of 1

Line No.	Purpose and Description	Work Paper Reference	Amount
	PURPOSE and DESCRIPTION: To adjust test year for miscellaneous items.		
1	<u>Company Adjustments</u>		
2	FERC 925 Budget adjustment		\$ 48,000
3	FERC 921 Budget adjustment		\$ 78,000
4			
5			
6	<u>Staff Adjustments</u>		
7	FERC 850 adjustment	WPC-3.18a	\$ (151)
8	FERC 856 adjustment	WPC-3.18a	\$ (2,260)
9	FERC 874 adjustment	WPC-3.18a	\$ (360)
10	FERC 903 adjustment	WPC-3.18a	\$ (186)
11	FERC 908 adjustment	WPC-3.18a	\$ (23)
12	FERC 912 adjustment	WPC-3.18a	\$ (2,236)
13	FERC 921 adjustment	WPC-3.18a	\$ (3,815)
14	FERC 930.2 adjustment	WPC-3.18a	\$ (41)
15			
16	Interest on Customer Service Deposits	WPC-3.18c	\$ 117,145
17			
18			
19	Total Adjustments	To Sch C-3 Summary <---	<u>\$ 234,073</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Shared Service Expense
For The Twelve Months Ended September 30, 2018

Schedule C-3.19
Page 1 of 1

Line No.	Purpose and Description	Work Paper Reference	Amount
PURPOSE and DESCRIPTION: To reflect annual costs associated with common assets held by VEDO parent, Vectren Utility Holdings, Inc., and charged to VEDO.			
1	Asset Charge - Annualize at 2018 Budget Level	WPC-3.19a	<u>(1,272,125)</u>
2	Adjustment amount	To Sch C-3 Summary <---	<u>\$ (1,272,125)</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Annualized Depreciation Expense
For The Twelve Months Ended September 30, 2018

SCHEDULE C-3.20
PAGE 1 OF 1

Line No.	Purpose and Description	Work Paper Reference	Amount
PURPOSE and DESCRIPTION: To reflect an adjustment to annualize depreciation expense as calculated on Schedule B-3.2 based on plant in service December 31, 2017 at proposed depreciation rates.			
1	Adjustment Amount	To Sch C-3 Summary <---	<u>\$ 6,157,209</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
HB95 Deferral Amortization and Annualization
For The Twelve Months Ended September 30, 2018

Schedule C-3.21
Page 1 of 1

Line No.	Purpose and Description	Work Paper Reference No(s).	Amount
PURPOSE and DESCRIPTION: To reflect the increase to operating expense associated with the amortization of the deferral of HB95 CEP programs.			
1	HB95 Deferred Balance - December 31, 2017		\$ 65,937,567
2	Average System Depreciation Rate	Sch. B-3.2	<u>1.61%</u>
3	Total Adjustment Amount (Line 1 + Line 2)	To Sch C-3 Summary <---	<u><u>\$ 1,059,535</u></u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
DRR Deferral Amortization
For The Twelve Months Ended September 30, 2018

Schedule C-3.22
Page 1 of 1

Line No.	Purpose and Description	Work Paper Reference No(s).	Amount
PURPOSE and DESCRIPTION: To reflect the operating expense associated with the amortization of the deferral of DRR programs minus amounts projected to be collected in DRR Rider rates.			
1	DRR Deferred Balance - December 31, 2017		\$ 31,278,096
2	Average System Depreciation Rate	WPC-3.23	<u>1.4820%</u>
3	Annual Amortization Expense - DRR Deferral (Line 1 x Line 2)		\$ 463,526
4	Test Year Amortization Expense		<u>\$ (433,921)</u>
5	Total Adjustment Amount (Line 3 + Line 4)	To Sch C-3 Summary <---	<u><u>\$ 29,606</u></u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Property Tax
For The Twelve Months Ended September 30, 2018

Schedule C-3.23
Page 1 of 1

Line No.	Purpose and Description	Work Paper Reference	Amount
PURPOSE and DESCRIPTION: To annualize property tax expense at current tax rates.			
1	Adjustment Amount	To Sch C-3 Summary <---	<u>\$ 1,826,128</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Federal Income Tax at Statutory Rate
For The Twelve Months Ended September 30, 2018

Schedule C-3.24
Page 1 of 1

Line No.	Purpose and Description	Work Paper Reference	Amount
	PURPOSE and DESCRIPTION: To adjust federal income taxes based on calculation at Schedule C-4, C-4.1, C-4.2		
1	Adjustment Amount - Current Taxes		
2	Pro Forma Adjustments at 35% Federal Tax Rate	WPC_3.24a	\$ 7,551,652
3	Pro Forma Adjustment - Reduce to 21% Federal Tax Rate	Sch C-4, Column (D)	\$ 6,742,822
4	Amortization of Excess Deferred Taxes - Federal Tax Reform	WPC_3.24b	
5	Total Current Tax Adjustment		<u>\$ 14,294,474</u>
6	Adjustment Amount - Deferred Taxes		
7	Pro Forma Adjustments at 35% Federal Tax Rate	WPC_3.24	\$ 17,714,522
8	Pro Forma Adjustment - Reduce to 21% Federal Tax Rate	Sch C-4, Column (D)	<u>\$ (14,435,527)</u>
9	Total Deferred Tax Adjustment		<u>\$ 3,278,995</u>
10	Total Adjustment Amount	To Sch C-3 Summary <---	<u><u>\$ 17,573,468</u></u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Adjusted Jurisdictional Federal Income Taxes
For The Twelve Months Ended September 30, 2018

SCHEDULE C-4

PAGE 1 OF 2

Work Paper Reference No(s):

Line No.	Description	At Current Rates					At Proposed Rates	
		Unadjusted (A)	Adjustments (B)	Adjusted (C)	Tax Reform Adjustments (D)	Adjusted (E)	Proforma Adjustments (F)	Proforma (G)
				(\$)	(\$)	(\$)	(\$)	(\$)
1	Operating Income before Federal Income Tax	\$ 40,943,048	\$ (2,215,163)	\$ 38,727,885	\$ -	\$ 38,727,885	\$ 20,550,436	\$ 59,278,320
2								
3	Reconciling Items:							
4	Net Interest Charges	\$ 18,906,108	\$ (3,485,743)	\$ 15,420,365	\$ -	\$ 15,420,365	\$ -	\$ 15,420,365
5								
6	Tax Depreciation	\$ 65,506,559	\$ -	\$ 65,506,559	\$ (32,370,960)	\$ 33,135,599	\$ -	\$ 33,135,599
7	Book Depreciation	27,976,625	6,157,209	34,133,834	-	34,133,834	-	34,133,834
8	Excess of Tax over Book Depreciation	\$ 37,529,934	\$ (6,157,209)	\$ 31,372,725	\$ (32,370,960)	\$ (998,235)	\$ -	\$ (998,235)
9								
10	Non-Deductible Expenses	\$ 285,532	\$ -	\$ 285,532	\$ (714,639)	\$ (429,107)	\$ -	\$ (429,107)
11	Test Year Below the Line Expense/(Revenue)	(22,596,216)	22,596,216	-	-	-	-	-
12	Total Permanent Differences - Expense/(Revenue)	\$ (22,310,685)	\$ 22,596,216	\$ 285,532	\$ (714,639)	\$ (429,107)	\$ -	\$ (429,107)
13								
14	Other Reconciling Items:							
15	Bad Debts	\$ (510,195)		\$ (510,195)		\$ (510,195)		\$ (510,195)
16	Prepaid Insurance	(7,046)		(7,046)		(7,046)		(7,046)
17	Construction Deposits	672,843		672,843		672,843		672,843
18	FAS 106	(626,871)		(626,871)		(626,871)		(626,871)
19	Reverse Exec Restricted Stock Accr	404,926		404,926		404,926		404,926
20	Deferred Compensation	1,753,979	(1,753,979)	-		-		-
21	Deferred Debits/Reg Assets	(6,740,474)		(6,740,474)		(6,740,474)		(6,740,474)
22	Allowance for Funds Used During Construction	(21,577,518)	21,577,518	-		-		-
23	Property Taxes	(2,885,480)	2,885,480	-		-		-
24	Amortization of Rate Case Expense	(275,041)	(1,249,959)	(1,525,000)		(1,525,000)		(1,525,000)
25	Pension Expense in Excess of Tax	(544,250)		(544,250)		(544,250)		(544,250)
26	AFUDC Debt	(176,206)	176,206	-		-		-
27	Capitalized Interest	342,684		342,684		342,684		342,684
28	Contributions in Aid of Construction	531,601		531,601		531,601		531,601
29	Restricted Stock	(184,476)		(184,476)		(184,476)		(184,476)
30	Repairs Deduction	(14,995,484)		(14,995,484)		(14,995,484)		(14,995,484)
31	Total Other Reconciling Items	\$ (44,817,008)	\$ 21,635,266	\$ (23,181,742)	\$ -	\$ (23,181,742)	\$ -	\$ (23,181,742)
32	Total Reconciling Items	78,942,366	(8,682,002)	70,260,364	(33,085,599)	37,174,765	-	37,174,765
33	Federal Taxable Income/(Loss)	\$ (37,999,318)	\$ 6,466,839	\$ (31,532,479)	\$ 33,085,599	\$ 1,553,120	\$ 20,550,436	\$ 22,103,556

* - From WPC-4.

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Adjusted Jurisdictional Federal Income Taxes
For The Twelve Months Ended September 30, 2018

Schedule C-4

Page 2 of 2

Work Paper Reference No(s):

Line No.	Description	At Current Rates					At Proposed Rates	
		Unadjusted (A)	Adjustments (B)	Adjusted (C)	Tax Reform Adjustments (D)	Adjusted (E)	Proforma Adjustments (F)	Proforma (G)
				(\$)	(\$)	(\$)	(\$)	(\$)
1	Federal Taxable Income/(Loss)							
2	from Page 1	\$ (37,999,318)	\$ 6,466,839	\$ (31,532,479)	\$ 33,085,599	\$ 1,553,120	\$ 20,550,436	\$ 22,103,556
3								
4	Federal Income Taxes:							
5	First \$ 50,000 \$ 1,553,120 @ 15%	\$ (7,500)	\$ -	\$ (7,500)	\$ 7,500	\$ -	\$ -	\$ -
6	Next \$ 25,000 \$ - @ 25%	\$ (6,250)	\$ -	\$ (6,250)	\$ 6,250	\$ -	\$ -	\$ -
7	Next \$ 25,000 \$ - @ 34%	\$ (8,500)	\$ -	\$ (8,500)	\$ 8,500	\$ -	\$ -	\$ -
8	Next \$ 235,000 \$ - @ 39%	\$ (91,650)	\$ -	\$ (91,650)	\$ 91,650	\$ -	\$ -	\$ -
9	Next \$ 9,665,000 \$ - @ 34%	\$ (3,286,100)	\$ -	\$ (3,286,100)	\$ 3,286,100	\$ -	\$ -	\$ -
10	Next \$ 5,000,000 \$ - @ 35%	\$ (1,750,000)	\$ -	\$ (1,750,000)	\$ 1,750,000	\$ -	\$ -	\$ -
11	Next \$ 3,333,333 \$ - @ 38%	\$ (1,266,667)	\$ -	\$ (1,266,667)	\$ 1,266,667	\$ -	\$ -	\$ -
12	Over \$ 18,333,333 \$ - @ 35%	\$ (6,883,095)	\$ 6,883,095	\$ -	\$ -	\$ -	\$ -	\$ -
13		\$ -	\$ -	\$ -	\$ 326,155	\$ 326,155	\$ 4,315,591	\$ 4,641,746
14	Federal Income Taxes	\$ 1,553,120	\$ 6,883,095	\$ (6,416,667)	\$ 6,742,822	\$ 326,155	\$ 4,315,591	\$ 4,641,746
15								
16	Provision Deferred Inc Taxes (Net):							
17	Method Life	\$ 13,135,477	\$ (2,155,023)	\$ 10,980,454	\$ (11,190,083)	\$ (209,629)	\$ (0)	\$ (209,629)
18	Bad Debts	178,568	-	178,568	(71,427)	107,141	-	107,141
19	Prepaid Insurance	2,466	-	2,466	(986)	1,480	-	1,480
20	Construction Deposits	(235,495)	-	(235,495)	94,198	(141,297)	-	(141,297)
21	FAS 106	219,405	-	219,405	(87,762)	131,643	-	131,643
22	Reverse Exec Restricted Stock Accr	(141,724)	-	(141,724)	56,690	(85,034)	-	(85,034)
23	Deferred Compensation	(613,893)	613,893	-	-	-	-	-
24	Deferred Debits/Reg Assets	2,359,166	-	2,359,166	(943,666)	1,415,500	-	1,415,500
25	Allowance for Funds Used During Construction	7,552,131	(7,552,131)	-	-	-	-	-
26	Property Taxes	1,009,918	(1,009,918)	-	-	-	-	-
27	Amortization of Rate Case Expense	96,264	437,486	533,750	(213,500)	320,250	-	320,250
28	Pension Expense in Excess of Tax	190,488	-	190,488	(76,195)	114,293	-	114,293
29	Goodwill	(27,335,138)	27,335,138	-	-	-	-	-
30	AFUDC Debt	61,672	(61,672)	-	-	-	-	-
31	Capitalized Interest	(119,939)	-	(119,939)	47,976	(71,964)	-	(71,964)
32	Contributions in Aid of Construction	(186,060)	-	(186,060)	74,424	(111,636)	-	(111,636)
33	Restricted Stock	64,567	-	64,567	(25,827)	38,740	-	38,740
34	Repairs Deduction	5,248,419	-	5,248,419	(2,099,368)	3,149,052	-	3,149,052
35	Total Prov Def. Inc Tax	\$ 1,486,292	\$ 17,607,772	\$ 19,094,063	\$ (14,435,527)	\$ 4,658,536	\$ (0)	\$ 4,658,536
36	Total Federal Income Taxes	\$ (11,813,469)	\$ 24,490,866	\$ 12,677,396	\$ (7,692,705)	\$ 4,984,692	\$ 4,315,591	\$ 9,300,283

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Development of Jurisdictional Federal Income Taxes before Adjustments
For The Twelve Months Ended September 30, 2018

Schedule C-4.1
Page 1 of 2

Work Paper Reference No(s).:

Line No.	Description	Unadjusted Jurisdiction
		(\$)
1	Operating Income Before Federal Income Taxes	\$ 40,943,048
2		
3	Reconciling Items:	
4	Interest Charges	\$ 18,906,108
5		
6	Test Year Below the Line Expense/(Revenue)	\$ (22,596,216)
7		
8	Tax Depreciation	\$ 65,506,559
9	Book Depreciation	27,976,625
10	Excess of Tax over Book Depreciation (Line 7 - Line 8)	\$ 37,529,934
11		
12	Other Non-Deductible Expenses (Permanent Tax Differences)	\$ 285,532
13		\$ 44,347,624
14		
15	Other Reconciling Items	
16	Bad Debts	\$ (510,195)
17	Prepaid Insurance	\$ (7,046)
18	Construction Deposits	\$ 672,843
19	FAS 106	\$ (626,871)
20	Reverse Exec Restricted Stock Accr	\$ 404,926
21	Deferred Compensation	\$ 1,753,979
22	Deferred Debits/Reg Assets	\$ (6,740,474)
23	Allowance for Funds Used During Construction	\$ (21,577,518)
24	Property Taxes	\$ (2,885,480)
25	Amortization of Rate Case Expense	\$ (275,041)
26	Pension Expense in Excess of Tax	\$ (544,250)
27	AFUDC Debt	\$ (176,206)
28	Capitalized Interest	\$ 342,684
29	Contributions in Aid of Construction	\$ 531,601
30	Restricted Stock	\$ (184,476)
31	Repairs Deduction	\$ (14,995,484)
32	Total Other Reconciling Items (sum of Lines 16 - 31)	\$ (44,817,008)
33	Total Reconciling Items (Line 4 + Line 6 + Line 10 + Line 12 - Line 32)	78,942,366
34	Federal Taxable Income/(Loss) - Current (Line 1 - Line 33)	\$ (37,999,318)

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Development of Jurisdictional Federal Income Taxes before Adjustments
For The Twelve Months Ended September 30, 2018

Schedule C-4.1
Page 2 of 2

Work Paper Reference No(s).:

Line No.	Description	Unadjusted Jurisdiction
		(\$)
1	Federal Taxable Income/(Loss)	<u>\$ (37,999,318)</u>
2	from Page 1	
3		
4	Federal Income Taxes	
5	First \$ 50,000 \$ (50,000) @ 15% \$ (7,500)	
6	Next \$ 25,000 \$ (25,000) @ 25% \$ (6,250)	
7	Next \$ 25,000 \$ (25,000) @ 34% \$ (8,500)	
8	Next \$ 235,000 \$ (235,000) @ 39% \$ (91,650)	
9	Next \$ 9,665,000 \$ (9,665,000) @ 34% \$ (3,286,100)	
10	Next \$ 5,000,000 \$ (5,000,000) @ 35% \$ (1,750,000)	
11	Next \$ 3,333,333 \$ (3,333,333) @ 38% \$ (1,266,667)	
12	Over \$ 18,333,333 \$ (19,665,985) @ 35% \$ (6,883,095)	
13	Federal Income Taxes - Current <u>\$ (37,999,318)</u>	<u>\$ (13,299,761)</u>
14		
15	Provision for Deferred Federal Income Taxes:	
16	Method Life	\$ 13,135,477
17	Bad Debts	178,568
18	Prepaid Insurance	2,466
19	Construction Deposits	(235,495)
20	FAS 106	219,405
21	Reverse Exec Restricted Stock Accr	(141,724)
22	Deferred Compensation	(613,893)
23	Deferred Debits/Reg Assets	2,359,166
24	Allowance for Funds Used During Construction	7,552,131
25	Property Taxes	1,009,918
26	Amortization of Rate Case Expense	96,264
27	Pension Expense in Excess of Tax	190,488
28	Goodwill	(27,335,138)
29	AFUDC Debt	61,672
30	Capitalized Interest	(119,939)
31	Contributions in Aid of Construction	(186,060)
32	Restricted Stock	64,567
33	Repairs Deduction	5,248,419
34	Provision for Deferred Federal Income Taxes	<u>\$ 1,486,292</u>
35	Total Federal Income Tax Expense	<u>\$ (11,813,469)</u>

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate of Return Summary
Capital Structure as of December 31, 2017

Schedule D-1
Page 1 of 1

	Amount	% of Total	% Cost	Weighted Cost %
Long Term Debt	\$1,817.4	48.94%	5.07%	2.48%
Preferred Stock	\$0	0.00%	0.00%	0.00%
Common Equity	<u>\$1,896.1</u>	<u>51.06%</u>	<u>8.80% -9.81%</u>	<u>4.49% -5.01%</u>
Total Capital	\$3,713.5	100.00%		6.97% -7.49%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Equity Issuance Cost Adjustment

Schedule D-1.1
Page 1 of 1

Line No.		
(1)	Retained Earnings ¹	\$1,160,530,000
(2)	Total Common Equity ²	\$1,896,099,000
(3)	Ratio of (1) to (2)	0.61206
(4)	Generic Issuance Cost, f	3.50%
(5)	External Equity Ratio, w [1.0 - (3)]	0.38794
(6)	Net Adjustment Factor, $(w/(1 - f)) + (1 - w)$	1.01407
(7)	Low End Equity Cost [8.673 x Line (6)]	8.80%
(8)	High End Equity Cost [9.673 x Line (6)]	9.81%

Sources:

- 1 Applicant's Workpaper WPD-1a
- 2 Applicant's Schedule D-1

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Embedded Cost of Long-Term Debt

Date of Long-Term Debt: December 31, 2017

Schedule D-1.2
Page 1 of 1

LINE NO.	DEBT ISSUE TYPE	COUPON RATE	ISSUED (DAY/MO/YR) (A)	DATE (DAY/MO/YR) (B)	PRINCIPAL AMOUNT (C)	AMOUNT OUTSTANDING (D)	(DISCOUNT) OR PREMIUM (E)	DEBT EXPENSE (F)	ON REACQUIRE D DEBT (G)	CARRYING VALUE (H=D+E-F-G)	AMORTIZATION OF DEBT ITEMS	INTEREST PAYMENTS PER YEAR	COMPOUND INTEREST RATE	COMPOUND ANNUAL INTEREST	ANNUAL INTEREST COST (I)
1	VECTREN ENERGY DELIVERY OF OHIO														
2	Long-Term Debt														
3	VUHI Pushdown	3.805%	05-Dec-13	05-Dec-23	\$ 24,846,682	\$ 24,846,682	\$ -	\$ -	\$ -	\$ 24,846,682	\$ -	12	3.872%	\$ 961,979	
4	VUHI Pushdown	5.102%	30-Nov-11	30-Nov-26	59,582,075	59,582,075	-	-	-	\$ 59,582,075	-	12	5.223%	3,111,965	\$ 961,979
5	VUHI Pushdown	3.872%	05-Jun-13	05-Jun-28	8,952,105	8,952,105	-	-	-	\$ 8,952,105	-	12	3.941%	352,803	3,111,965
6	VUHI Pushdown	6.062%	30-Nov-11	30-Nov-41	34,732,075	34,732,075	-	-	-	\$ 34,732,075	-	12	6.233%	2,164,925	352,803
7	VUHI Pushdown	5.300%	03-Feb-12	03-Feb-42	99,531,344	99,531,344	-	-	-	\$ 99,531,344	-	12	5.431%	5,405,647	2,164,925
8	VUHI Pushdown	4.600%	05-Jun-13	05-Jun-43	15,914,853	15,914,853	-	-	-	\$ 15,914,853	-	12	4.698%	747,710	5,405,647
9	VUHI Pushdown	4.400%	15-Dec-15	15-Dec-45	62,175,162	62,175,162	-	-	-	\$ 62,175,162	-	12	4.490%	2,791,679	747,710
10	VUHI Pushdown	4.547%	15-Dec-15	15-Dec-55	7,461,103	7,461,103	-	-	-	\$ 7,461,103	-	12	4.642%	346,381	2,791,679
11															346,381
12	Total Vectren Energy Delivery of Ohio				\$313,195,398	\$ 313,195,398	\$ -	\$ -	\$ -	\$ 313,195,398					
13															\$ 15,883,089
14	Embedded Cost of Long-Term Debt (I/H)														
15	Weighted Average Cost of Long Term Debt (Line 16 / Line 15)														5.07%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
CAPM Cost of Equity Estimate

Schedule D-1.3
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Line No.	CAPM Formula	CAPM Cost of Equity Estimate
1	CAPM = risk free return + β (large company total return - risk free return)	
2	4.66+.73(12.1-6.0)	9.11

Source	^Forecasted Treasuries
Energy Information Administration	4.52
US Bureau of Labor statistics	4.8
	4.66

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
DCF Cost of Equity Estimate

Schedule D1.4
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Date	AEE	CMS	Stock Prices (\$): ¹		
			LNT	MGEE	OGE
06/26/17	56.4300	47.5600	41.6900	66.5000	35.8000
06/27/17	55.8900	47.0200	41.1200	65.0000	35.4100
06/28/17	55.3300	46.6000	40.8700	65.0500	35.1000
06/29/17	54.7000	46.3300	40.4500	64.1500	34.9000
06/30/17	54.6700	46.2500	40.1700	64.3500	34.7900
07/03/17	54.1300	46.0000	39.8900	63.6000	34.8300
07/05/17	53.8600	45.8100	39.7600	63.1500	34.6400
07/06/17	53.7500	45.7000	39.6700	62.7000	34.2300
07/07/17	54.1400	45.7500	39.7100	63.3500	34.2200
07/10/17	53.9500	45.5900	39.5600	62.5000	34.2100
07/11/17	53.8100	45.5700	39.5900	62.6500	34.1400
07/12/17	54.4000	46.0400	39.8800	63.5500	34.6400
07/13/17	54.0900	45.7000	39.7300	62.7000	34.4400
07/14/17	54.4300	45.9000	39.9700	62.8500	34.5700
07/17/17	54.8900	46.0000	40.1300	62.9500	34.6900
07/18/17	55.3600	46.1000	40.2800	63.2500	34.8200
07/19/17	55.6600	46.2400	40.5000	63.5500	34.9900
07/20/17	56.1400	46.5900	41.0100	64.7000	35.2000
07/21/17	56.5300	46.7500	41.3800	64.8500	35.4200
07/24/17	55.9200	46.3900	40.8400	63.9500	35.5800
07/25/17	55.8000	46.1600	40.5500	67.9000	35.6500
07/26/17	56.3400	46.5300	40.8700	67.6000	35.6200
07/27/17	56.2700	46.8900	40.7300	66.8000	35.8100
07/28/17	56.1600	46.3000	40.4700	66.5000	35.8000
07/31/17	56.1000	46.2400	40.5300	66.5500	35.8600
08/01/17	56.5300	46.6400	40.8300	66.6000	35.9000
08/02/17	56.7300	46.6400	40.9500	66.6000	35.7400
08/03/17	57.0000	47.0200	41.0900	66.6500	36.0100
08/04/17	57.5000	47.0300	41.0900	65.5000	35.9100
08/07/17	57.9400	47.1900	41.2800	65.9500	36.2200
08/08/17	58.4300	47.4200	41.5700	66.6500	36.2400
08/09/17	58.0800	47.3800	41.5100	65.4000	36.0300
08/10/17	58.5400	47.4800	41.6300	65.6000	35.7000
08/11/17	57.9500	47.3100	41.3700	64.4500	35.4200
08/14/17	58.4500	47.4600	41.6700	64.8000	35.4700
08/15/17	58.8300	47.7600	41.9100	63.8500	35.5100
08/16/17	59.1400	48.0100	42.0800	64.2000	35.6500
08/17/17	58.9100	47.8400	41.7700	63.2000	35.3900
08/18/17	59.2100	48.2100	42.2400	63.6500	35.5900
08/21/17	59.2600	48.2800	42.4000	63.9000	35.7600
08/22/17	59.9100	48.2600	42.7200	65.1500	36.1200
08/23/17	60.2500	48.5800	43.0100	64.7000	36.2900
08/24/17	60.2600	48.3400	42.8600	64.1000	36.2600
08/25/17	60.3700	48.5000	42.8700	63.9500	36.2200
08/28/17	60.5700	48.6300	43.0800	64.0000	36.4100
08/29/17	60.4200	48.7400	43.0600	64.2000	36.1800
08/30/17	60.3000	48.5700	42.7700	63.7000	36.1100
08/31/17	59.9900	48.5400	42.7400	63.6000	35.7200
09/01/17	59.8000	48.4200	42.5700	63.8500	35.7600
09/05/17	59.8600	48.4300	42.9100	63.8000	35.5800
09/06/17	59.4700	48.1800	42.6000	63.7000	35.7000
09/07/17	59.8800	48.4600	42.9500	64.1000	36.0200
09/08/17	60.0900	48.6600	43.1900	64.4500	36.1500
09/11/17	60.9100	49.1000	43.6000	65.1500	36.5900
09/12/17	59.4500	48.0800	42.7500	64.4500	36.1600
09/13/17	58.8900	47.5000	42.4500	64.5500	35.9500
09/14/17	59.5600	47.8900	42.9200	65.5500	36.2700
09/15/17	59.8100	47.8700	42.9000	66.2000	36.3100
09/18/17	59.2500	47.6300	42.4900	66.2500	36.2200
09/19/17	59.2500	47.3900	42.5300	65.3500	36.2500
09/20/17	58.7400	47.0700	42.1500	65.5500	36.1100
09/21/17	58.8100	47.0600	42.0600	65.7000	35.8800
09/22/17	58.5100	46.4700	41.7300	64.8000	35.8400
09/25/17	59.3800	47.1000	42.2500	64.7500	36.2700
09/26/17	59.1400	46.9400	42.2500	65.2500	36.1800
09/27/17	57.9200	46.2300	41.5800	66.0500	36.0200
09/28/17	58.3600	46.3500	41.7000	65.9500	36.1800
09/29/17	57.8400	46.3200	41.5700	64.6000	36.0300
10/02/17	58.3900	46.4200	41.6000	65.4500	36.1700
10/03/17	57.9300	45.9700	41.3800	64.9000	36.1600
10/04/17	58.5500	46.4900	41.9500	65.3500	36.1500
10/05/17	58.8400	46.5300	41.9000	65.7000	36.3200
10/06/17	58.7800	46.3000	41.9200	65.3000	35.5800
10/09/17	59.1500	46.4800	41.9900	65.4000	35.7500
10/10/17	59.8600	47.0000	42.3400	66.1500	36.2000
10/11/17	59.7800	47.3500	42.6600	66.7000	36.4700

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
DCF Cost of Equity Estimate

Schedule D1.4
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Date	AEE	CMS	Stock Prices (\$): ¹			OGE
			LNT	MGEE		
10/12/17	60.3400	47.7200	43.0100	67.2500	36.8500	
10/13/17	60.4100	47.5400	43.0500	66.9500	36.8200	
10/16/17	60.6400	47.4100	43.1200	67.0500	36.7200	
10/17/17	60.9500	47.8100	43.4400	67.0000	36.9200	
10/18/17	61.0100	47.8100	43.3800	67.6000	36.8700	
10/19/17	61.5600	48.1900	43.8500	67.7000	36.9200	
10/20/17	61.5600	48.1800	43.8700	67.5500	37.0900	
10/23/17	61.7200	48.2100	43.7700	67.3000	37.2300	
10/24/17	61.7300	48.4200	43.4800	65.5500	37.0000	
10/25/17	61.1000	47.9700	43.2500	65.4000	36.7300	
10/26/17	61.3800	47.9400	43.3800	66.3500	36.8200	
10/27/17	61.8000	48.2000	43.7500	67.4000	37.0800	
10/30/17	61.8300	47.8000	43.1800	66.3000	36.9000	
10/31/17	61.9900	48.3700	43.2600	66.0500	36.8400	
11/01/17	61.8000	48.0700	43.0700	65.4500	36.6000	
11/02/17	62.3200	48.1200	43.0600	65.9500	36.0600	
11/03/17	62.1900	48.1300	43.8300	65.5500	35.6300	
11/06/17	62.1200	48.0500	43.5900	65.5500	35.3800	
11/07/17	62.8700	48.9100	44.1700	64.7000	35.8400	
11/08/17	62.6600	49.1300	44.0700	64.6500	35.7300	
11/09/17	62.8200	49.2800	44.1000	64.6000	35.5300	
11/10/17	62.4800	49.2700	43.6800	64.1000	35.0100	
11/13/17	63.3900	49.6300	44.3000	64.2000	35.1200	
11/14/17	64.5400	50.5500	45.1800	65.3500	35.8500	
11/15/17	64.0500	50.2200	44.7100	64.2000	35.5500	
11/16/17	63.6400	50.1700	44.6300	64.9000	35.4400	
11/17/17	63.3000	49.5900	44.4000	65.3000	35.2000	
11/20/17	63.1600	49.4100	44.2600	66.9000	34.9400	
11/21/17	63.1600	49.4800	44.1500	65.8000	34.8200	
11/22/17	62.9200	49.4000	44.1900	64.9000	34.9100	
11/24/17	62.9800	49.4400	44.2200	65.1500	34.9000	
11/27/17	63.3900	49.7500	44.6100	64.9000	35.1300	
11/28/17	63.8500	49.7000	44.7800	66.3000	35.4000	
11/29/17	63.6800	49.6100	44.9000	66.8500	35.2800	
11/30/17	63.9600	49.9000	45.1100	66.0000	35.7600	
12/01/17	63.7500	49.7400	44.8300	65.6000	35.2300	
12/04/17	63.0900	49.7600	44.6900	65.4500	35.0500	
12/05/17	62.4800	49.3100	44.3400	64.2000	34.2700	
12/06/17	62.7100	49.4100	44.5400	64.5500	34.1300	
12/07/17	62.6700	49.5800	44.6400	64.2000	34.6500	
12/08/17	63.1900	49.8700	44.9400	63.5000	34.4600	
12/11/17	63.6600	50.0900	45.0800	62.8750	34.5500	
12/12/17	61.3600	49.1700	44.0100	62.0000	34.0500	
12/13/17	61.2500	49.2500	44.2900	63.3500	33.8900	
12/14/17	60.8300	49.0700	43.9500	62.4500	33.8500	
12/15/17	60.9400	49.2500	44.4300	64.0000	34.1500	
12/18/17	60.4100	48.6500	43.6000	63.3500	33.8100	
12/19/17	59.4900	47.7200	42.7700	62.1000	33.3400	
12/20/17	58.6900	47.1600	42.5100	62.0000	32.9700	
12/21/17	58.3700	47.2600	42.3200	61.7000	32.6600	
12/22/17	58.6900	47.3500	42.5000	62.4000	33.0100	
12/26/17	58.3000	46.8100	42.1900	61.9000	32.8300	
12/27/17	58.7000	47.2100	42.4200	63.7000	32.7500	
12/28/17	59.1500	47.3900	42.6600	63.9000	33.0000	
12/29/17	58.9900	47.3000	42.6100	63.1000	32.9100	
01/02/18	58.3900	46.9500	42.1100	62.4000	32.6700	
01/03/18	58.0900	46.6600	41.7400	61.5500	32.6600	
01/04/18	57.4300	46.1400	41.2500	61.5500	32.6000	
01/05/18	57.3900	45.8100	41.0800	61.4500	32.5000	
01/08/18	58.0700	46.3400	41.5400	61.3500	32.7500	
01/09/18	57.3200	45.7100	40.9100	59.9000	32.1000	
01/10/18	56.4800	44.9800	40.1900	59.2000	30.8900	
01/11/18	56.1500	44.3900	39.8400	59.7000	31.2500	
01/12/18	55.5200	44.0100	39.5300	59.0000	30.7400	
01/16/18	55.4600	44.2600	39.5600	59.0500	30.9800	
01/17/18	55.7900	44.5500	40.0600	59.7000	31.4000	
01/18/18	55.3900	44.1000	39.6800	59.1000	31.3300	
01/19/18	55.1600	44.0500	39.4100	59.5500	31.4200	
01/22/18	55.3000	44.1600	39.5500	59.3500	31.5700	
01/23/18	56.0700	44.4600	40.1600	59.5000	31.8600	
01/24/18	55.7400	44.2600	39.8500	59.3500	32.1300	
01/25/18	56.7400	45.0000	40.3900	60.3500	32.3000	
01/26/18	56.9200	44.7900	40.3000	59.8000	32.1400	
01/29/18	55.8800	44.1000	39.6100	59.2500	31.7100	
01/30/18	56.0900	44.3200	39.2600	59.4000	31.7100	
01/31/18	56.6300	44.7500	39.7500	59.8000	32.2000	

Vectren Energy Delivery of Ohio, Inc.
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Date	AEE	CMS	Stock Prices (\$): ¹		
			LNT	MGEE	OGE
02/01/18	55.2100	44.1600	39.0800	58.9500	31.9300
02/02/18	54.8900	43.4800	38.9100	58.3500	31.3500
02/05/18	54.1500	42.7300	38.2200	56.4500	30.6900
02/06/18	53.0000	42.1600	37.5100	55.8500	30.2800
02/07/18	53.1900	42.1600	37.5000	55.6250	30.2800
02/08/18	52.5900	41.7700	37.1400	54.8250	29.6000
02/09/18	55.4200	42.7900	38.4200	56.3500	30.3900
02/12/18	55.0700	42.8800	38.4800	55.9500	30.8700
02/13/18	55.2500	43.0500	38.6300	55.7500	30.9600
02/14/18	54.6800	42.9000	38.1100	54.6000	30.7800
02/15/18	56.2600	43.7400	39.0500	55.1500	31.3400
02/16/18	56.3200	44.2000	39.7500	55.5000	31.5600
02/20/18	55.0800	43.3600	39.1400	54.7500	31.2100
02/21/18	54.4000	43.0200	38.6200	54.5500	30.8200
02/22/18	54.5900	43.0100	38.6000	54.7500	31.4700
02/23/18	56.3500	43.8600	39.4200	55.6500	32.9500
02/26/18	55.7500	43.7700	39.5300	55.3000	32.2800
02/27/18	54.8900	42.7500	38.8000	54.4000	31.5800
02/28/18	54.3000	42.4500	38.6500	52.5000	31.3400
03/01/18	53.9600	42.3600	38.4900	52.7500	31.5400
03/02/18	54.0300	42.5900	38.2200	52.5500	31.1900
03/05/18	55.1200	43.2900	38.9300	54.4500	31.9200
03/06/18	53.9400	42.6900	38.1700	53.9000	31.2000
03/07/18	53.5800	42.4900	38.0600	54.2000	30.8800
03/08/18	53.8600	42.5600	38.3200	54.0500	31.2200
03/09/18	53.9900	42.8600	38.7100	54.1500	31.3500
03/12/18	54.4100	43.0900	39.2100	54.9000	31.4500
03/13/18	54.0900	42.9600	39.3000	55.1000	31.5200
03/14/18	54.6300	43.3200	39.5400	55.1500	31.7900
03/15/18	54.7700	43.7100	39.6600	56.3500	31.6200
03/16/18	55.4900	44.2800	40.1300	56.1000	32.0000
03/19/18	55.2000	43.9800	39.8300	55.8000	31.8900
03/20/18	55.1300	43.9900	39.6800	55.8000	31.7800
03/21/18	54.9000	43.8100	39.6600	55.9500	31.7900
03/22/18	54.9200	43.9500	39.8300	56.2500	31.8100
03/23/18	54.0100	43.2500	39.4500	54.6000	31.4300
03/26/18	54.8500	43.8200	39.8400	55.6000	31.8100
03/27/18	55.8800	44.7500	40.5300	56.3000	32.2600
03/28/18	55.9400	45.0700	40.6200	56.4500	32.3300
03/29/18	56.6300	45.2900	40.8600	56.1000	32.7700
04/02/18	56.6900	45.0100	40.7900	55.2000	32.1200
04/03/18	57.1400	45.2800	40.8200	56.0500	32.5400
04/04/18	56.8100	45.3100	40.9200	56.4000	32.2700
04/05/18	57.4400	45.5600	41.3300	56.8000	32.8500
04/06/18	57.1300	45.3200	41.0200	56.3000	32.3700
04/09/18	56.9600	45.1000	41.0500	56.7000	32.0700
04/10/18	56.2000	44.6300	40.7500	56.8500	31.8000
04/11/18	56.0100	44.5500	41.0200	56.8000	31.8000
04/12/18	55.3300	43.9600	40.5200	56.0000	31.5600
04/13/18	55.5100	44.2100	41.1100	56.1000	31.6100
04/16/18	56.3600	45.0000	41.5900	57.4000	32.3000
04/17/18	56.8900	45.2600	41.8500	58.0500	32.6200
04/18/18	56.5600	45.0700	41.6000	57.8000	32.7500
04/19/18	56.8500	45.3700	41.5300	57.6000	32.7600
04/20/18	56.2700	45.1900	41.5400	57.4500	32.4700
04/23/18	56.6300	45.3700	41.6900	57.5500	32.5100
04/24/18	57.2000	45.7500	42.1000	58.0000	32.8000
04/25/18	57.2100	45.8600	42.2300	57.6500	32.8000
04/26/18	57.8700	46.4400	42.8600	58.2500	32.9100
04/27/18	58.6000	47.1800	43.0600	58.3500	32.9100
04/30/18	58.6200	47.1900	42.9500	58.0500	32.8700
05/01/18	58.3300	47.0500	42.8200	58.7500	32.8300
05/02/18	58.3800	46.8600	42.8700	58.8000	33.1000
05/03/18	58.7400	46.4700	43.2300	58.8500	33.7400
05/04/18	58.9000	46.4500	43.2700	59.4500	34.1700
05/07/18	58.5400	46.0200	42.9400	59.3500	34.3300
05/08/18	56.9100	44.9900	41.7200	58.3500	33.8200
05/09/18	56.2200	44.7300	41.2600	58.3000	33.6000
05/10/18	56.3400	45.2100	41.7400	58.6000	34.2400
05/11/18	56.8700	45.3800	41.6600	58.1000	34.2300
05/14/18	56.5900	45.2500	41.4100	57.2000	33.9900
05/15/18	56.4200	44.6300	41.0500	56.8500	33.6400
05/16/18	55.9400	44.4000	40.8900	56.6000	33.6100
05/17/18	55.8400	44.0800	40.6400	57.1500	33.3100
05/18/18	56.2600	44.1100	40.5700	57.2000	33.3500
05/21/18	56.3400	43.9700	40.2800	57.5500	33.6400

Vectren Energy Delivery of Ohio, Inc.
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Date	AEE	CMS	Stock Prices (\$): ¹		
			LNT	MGEE	OGE
05/22/18	56.7000	44.1200	40.2800	57.9000	33.6500
05/23/18	57.8900	44.7600	40.4900	58.3500	34.0800
05/24/18	58.7800	45.2500	40.7500	59.0000	34.3600
05/25/18	58.8700	45.6200	40.7900	58.9000	34.3900
05/29/18	58.8300	45.8300	41.0000	59.7500	34.4700
05/30/18	59.3900	46.1500	41.4400	60.4500	35.0900
05/31/18	59.1900	46.1300	41.4200	59.6500	35.0200
06/01/18	58.1100	45.1700	40.6300	58.6500	34.3800
06/04/18	57.9800	44.6800	40.2300	58.0000	34.4900
06/05/18	57.4100	44.1700	39.7500	57.2500	34.3200
06/06/18	56.5700	43.3000	39.1300	56.5000	33.6100
06/07/18	56.9000	43.3800	39.1900	56.5000	33.7600
06/08/18	56.6900	43.3500	39.2300	56.3000	33.7500
06/11/18	55.7500	42.6300	38.3800	55.9000	33.2400
06/12/18	56.0600	43.3000	39.0500	56.4500	33.8000
06/13/18	55.7600	43.0900	39.1700	57.2000	34.0000
06/14/18	56.3700	43.6200	39.6200	58.3000	34.5600
06/15/18	56.9700	44.0800	39.9600	59.0500	34.2200
06/18/18	57.6400	44.4800	40.3300	59.8000	34.2900
06/19/18	58.2800	45.2100	41.0800	60.7000	34.4900
06/20/18	58.3100	45.1200	41.0500	60.8500	34.5000
06/21/18	58.5100	45.3300	40.9700	60.9000	34.8000
06/22/18	58.6800	45.4400	41.0900	61.2500	34.9600
<hr/>					
AVERAGE (\$)	57.9463	46.1799	41.4413	61.3118	34.0629
QUARTERLY DIV. ² (\$)	0.4400	0.3325	0.3150	0.3075	0.3025
	0.4400	0.3325	0.3150	0.3225	0.3025
	0.4575	0.3325	0.3150	0.3225	0.3325
	0.4575	0.3575	0.3350	0.3225	0.3325
ANNUAL DIVIDEND (\$)	1.7950	1.3550	1.2800	1.2750	1.2700
YIELD	3.10%	2.93%	3.09%	2.08%	3.73%
REUTERS ³	6.30%	7.05%	5.85%	4.00%	4.30%
YAHOO ¹	6.30%	7.05%	5.85%	4.00%	4.30%
DCF GROWTH FACTOR	6.30%	7.05%	5.85%	4.00%	4.30%
VALUE LINE ² :					
'17 EARNINGS (\$)	7.85	2.50	2.25	2.50	2.15
'19-21 EARNINGS (\$)	9.25	3.00	2.60	3.30	2.50
	4.10%	4.56%	3.61%	6.94%	3.77%
VALUE LINE, "BOXED"	7.50%	8.50%	6.50%	6.00%	2.50%
VALUE LINE	5.80%	6.53%	5.06%	6.47%	3.14%
DCF GROWTH ESTIMATE	6.05%	6.79%	5.45%	5.24%	3.72%
DCF COST OF EQUITY ESTIMATE	9.55%	9.64%	9.34%	8.30%	9.33%
DCF AVERAGE				9.23%	
CAPM COST OF EQUITY ESTIMATE				9.11%	
COST OF EQUITY ESTIMATE				9.17%	

Sources:

- 1 Yahoo Financial
- 2 Value Line Investment Guide
- 3 investor.reuters.com

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
AEE Non-Constant DCF Calculation

Schedule D-1.5
Page 1 of 1

		<u>non const</u>			<u>const</u>		
g=	6.05%		dcf=	9.55%		dcf=	9.34%
D=	\$1.80		P=	-\$57.95		g(e)=	6.37%

<u>YEAR</u>	<u>GROWTH RATE</u>	<u>DIVIDEND</u>
1	6.05%	\$1.90
2	6.05%	\$2.02
3	6.05%	\$2.14
4	6.05%	\$2.27
5	6.05%	\$2.41
6	6.07%	\$2.55
7	6.08%	\$2.71
8	6.10%	\$2.87
9	6.11%	\$3.05
10	6.13%	\$3.24
11	6.15%	\$3.44
12	6.16%	\$3.65
13	6.18%	\$3.87
14	6.20%	\$4.11
15	6.21%	\$4.37
16	6.23%	\$4.64
17	6.24%	\$4.93
18	6.26%	\$5.24
19	6.28%	\$5.57
20	6.29%	\$5.92
21	6.31%	\$6.29
22	6.32%	\$6.69
23	6.34%	\$7.11
24	6.36%	\$7.57
25	6.37%	\$8.05
26	6.37%	\$8.56
27	6.37%	\$9.11
28	6.37%	\$9.69
29	6.37%	\$10.30
30	6.37%	\$10.96

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
CMS Non-Constant DCF Calculation

Schedule D-1.6
Page 1 of 1

		<u>non const</u>			<u>const</u>		
g=	6.79%		dcf=	9.64%		dcf=	9.92%
D=	\$1.36		P=	-\$46.18		g(e)=	6.37%

<u>YEAR</u>	<u>GROWTH RATE</u>	<u>DIVIDEND</u>
1	6.79%	\$1.45
2	6.79%	\$1.55
3	6.79%	\$1.65
4	6.79%	\$1.76
5	6.79%	\$1.88
6	6.77%	\$2.01
7	6.75%	\$2.14
8	6.73%	\$2.29
9	6.71%	\$2.44
10	6.69%	\$2.61
11	6.66%	\$2.78
12	6.64%	\$2.96
13	6.62%	\$3.16
14	6.60%	\$3.37
15	6.58%	\$3.59
16	6.56%	\$3.83
17	6.54%	\$4.08
18	6.52%	\$4.34
19	6.50%	\$4.62
20	6.48%	\$4.92
21	6.46%	\$5.24
22	6.43%	\$5.58
23	6.41%	\$5.94
24	6.39%	\$6.32
25	6.37%	\$6.72
26	6.37%	\$7.15
27	6.37%	\$7.60
28	6.37%	\$8.09
29	6.37%	\$8.60
30	6.37%	\$9.15

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
MGEE Non-Constant DCF Calculation

Schedule D-1.7
Page 1 of 1

g=	5.24%	<u>non const</u>	dcf=	8.30%	<u>const</u>	dcf=	7.42%
D=	\$1.28		P=	-\$61.31		g(e)=	6.37%

<u>YEAR</u>	<u>GROWTH RATE</u>	<u>DIVIDEND</u>
1	5.24%	\$1.34
2	5.24%	\$1.41
3	5.24%	\$1.49
4	5.24%	\$1.56
5	5.24%	\$1.65
6	5.29%	\$1.73
7	5.35%	\$1.83
8	5.41%	\$1.92
9	5.46%	\$2.03
10	5.52%	\$2.14
11	5.58%	\$2.26
12	5.63%	\$2.39
13	5.69%	\$2.52
14	5.75%	\$2.67
15	5.80%	\$2.82
16	5.86%	\$2.99
17	5.92%	\$3.17
18	5.97%	\$3.36
19	6.03%	\$3.56
20	6.09%	\$3.77
21	6.14%	\$4.01
22	6.20%	\$4.25
23	6.26%	\$4.52
24	6.32%	\$4.81
25	6.37%	\$5.11
26	6.37%	\$5.44
27	6.37%	\$5.78
28	6.37%	\$6.15
29	6.37%	\$6.55
30	6.37%	\$6.96

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
LNT Non-Constant DCF Calculation

Schedule D-1.8
Page 1 of 1

g=	5.45%	<u>non const</u>	dcf=	dcf=	<u>const</u>	dcf=	8.71%
D=	\$1.28		P=	-\$41.44		g(e)=	6.37%

<u>YEAR</u>	<u>GROWTH RATE</u>	<u>DIVIDEND</u>
1	5.45%	\$1.35
2	5.45%	\$1.42
3	5.45%	\$1.50
4	5.45%	\$1.58
5	5.45%	\$1.67
6	5.50%	\$1.76
7	5.55%	\$1.86
8	5.59%	\$1.96
9	5.64%	\$2.07
10	5.68%	\$2.19
11	5.73%	\$2.32
12	5.78%	\$2.45
13	5.82%	\$2.59
14	5.87%	\$2.75
15	5.91%	\$2.91
16	5.96%	\$3.08
17	6.00%	\$3.27
18	6.05%	\$3.46
19	6.10%	\$3.67
20	6.14%	\$3.90
21	6.19%	\$4.14
22	6.23%	\$4.40
23	6.28%	\$4.68
24	6.33%	\$4.97
25	6.37%	\$5.29
26	6.37%	\$5.63
27	6.37%	\$5.98
28	6.37%	\$6.37
29	6.37%	\$6.77
30	6.37%	\$7.20

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
OGE Non-Constant DCF Calculation

Schedule D-1.9
Page 1 of 1

g=	3.72%	<u>non const</u>	dcf=	9.33%	<u>const</u>	dcf=	7.58%
D=	\$1.27		P=	34.06		g(e)=	6.37%

<u>YEAR</u>	<u>GROWTH RATE</u>	<u>DIVIDEND</u>
1	5.24%	\$1.34
2	5.24%	\$1.41
3	5.24%	\$1.49
4	5.24%	\$1.56
5	5.24%	\$1.65
6	5.29%	\$1.73
7	5.35%	\$1.83
8	5.41%	\$1.92
9	5.46%	\$2.03
10	5.52%	\$2.14
11	5.58%	\$2.26
12	5.63%	\$2.39
13	5.69%	\$2.52
14	5.75%	\$2.67
15	5.80%	\$2.82
16	5.86%	\$2.99
17	5.92%	\$3.17
18	5.97%	\$3.36
19	6.03%	\$3.56
20	6.09%	\$3.77
21	6.14%	\$4.01
22	6.20%	\$4.25
23	6.26%	\$4.52
24	6.32%	\$4.81
25	6.37%	\$5.11
26	6.37%	\$5.44
27	6.37%	\$5.78
28	6.37%	\$6.15
29	6.37%	\$6.55
30	6.37%	\$6.96

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Growth in U.S. Gross National Product, 1929 to 2017

Schedule D-1.10

Page 1 of 2

Year	GNP (\$billion)	Change (\$billion)	Growth%
1929	105.30		-11.78%
1930	92.90	-12.40	-16.15%
1931	77.90	-15.00	-23.11%
1932	59.90	-18.00	-4.01%
1933	57.50	-2.40	16.70%
1934	67.10	9.60	11.18%
1935	74.60	7.50	14.08%
1936	85.10	10.50	9.75%
1937	93.40	8.30	-6.00%
1938	87.80	-5.60	6.83%
1939	93.80	6.00	10.02%
1940	103.20	9.40	25.78%
1941	129.80	26.60	28.20%
1942	166.40	36.60	22.30%
1943	203.50	37.10	10.52%
1944	224.90	21.40	1.56%
1945	228.40	3.50	0.04%
1946	228.50	0.10	9.89%
1947	251.10	22.60	10.04%
1948	276.30	25.20	-0.80%
1949	274.10	-2.20	10.03%
1950	301.60	27.50	15.78%
1951	349.20	47.60	5.87%
1952	369.70	20.50	5.92%
1953	391.60	21.90	0.41%
1954	393.20	1.60	9.00%
1955	428.60	35.40	5.67%
1956	452.90	24.30	5.52%
1957	477.90	25.00	1.42%
1958	484.70	6.80	8.36%
1959	525.20	40.50	4.04%
1960	546.40	21.20	3.73%
1961	566.80	20.40	7.48%
1962	609.20	42.40	5.56%
1963	643.10	33.90	7.40%
1964	690.70	47.60	8.44%
1965	749.00	58.30	9.49%
1966	820.10	71.10	5.73%
1967	867.10	47.00	9.40%
1968	948.60	81.50	8.16%
1969	1,026.00	77.40	5.49%
1970	1,082.30	56.30	8.60%
1971	1,175.40	93.10	9.83%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Growth in U.S. Gross National Product, 1929 to 2017

Schedule D-1.10

Page 2 of 2

Year	GNP (\$billion)	Change (\$billion)	Growth%
1972	1,291.00	115.60	11.63%
1973	1,441.20	150.20	8.54%
1974	1,564.30	123.10	8.80%
1975	1,701.90	137.60	11.31%
1976	1,894.40	192.50	11.18%
1977	2,106.20	211.80	12.91%
1978	2,378.20	272.00	12.02%
1979	2,664.10	285.90	8.73%
1980	2,896.70	232.60	11.99%
1981	3,243.90	347.20	4.24%
1982	3,381.50	137.60	8.69%
1983	3,675.20	293.70	10.93%
1984	4,077.00	401.80	7.24%
1985	4,372.10	295.10	5.37%
1986	4,607.10	235.00	6.09%
1987	4,887.70	280.60	7.93%
1988	5,275.30	387.60	7.72%
1989	5,682.50	407.20	5.84%
1990	6,014.30	331.80	3.18%
1991	6,205.60	191.30	5.88%
1992	6,570.40	364.80	5.18%
1993	6,910.70	340.30	6.11%
1994	7,332.60	421.90	4.91%
1995	7,692.80	360.20	5.71%
1996	8,132.00	439.20	6.16%
1997	8,632.60	500.60	5.50%
1998	9,107.40	474.80	6.37%
1999	9,687.80	580.40	6.54%
2000	10,321.80	634.00	3.41%
2001	10,673.60	351.80	3.30%
2002	11,026.10	352.50	5.00%
2003	11,577.80	551.70	6.79%
2004	12,364.10	786.30	6.65%
2005	13,186.30	822.20	5.59%
2006	13,923.50	737.20	4.88%
2007	14,603.20	679.70	1.97%
2008	14,890.60	287.40	-2.15%
2009	14,569.80	-320.80	4.12%
2010	15,170.30	600.50	3.92%
2011	15,764.60	594.30	3.98%
2012	16,392.80	628.20	3.31%
2013	16,935.80	543.00	4.17%
2014	17,641.20	705.40	3.41%
2015	18,242.40	601.20	6.37%
2016	19,134.50	892.1	4.89%
2017	19,976.40	841.9	4.40%
			6.37%

Average

Sources: (1) National Income and Product Accounts (NIPA) from the U. S. Bureau of Economic Analysis and Econostats; BEA Data; NIPA Index; Section 1. Domestic Product and Income Table 1.7.5 Relation of Gross Domestic Product, Gross National Product, Net National Product, National Income, and Personal Income. (2) U. S. Department of Commerce; Survey of Current of the United States Business and Historical Statistics

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 310 - Residential
Default Sales Service
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	29.00	37.08	8.08	27.86%	32.50	3.50	12.06%
10	33.85	41.84	7.99	23.59%	37.26	3.41	10.06%
20	38.71	46.60	7.89	20.39%	42.02	3.31	8.56%
30	43.56	51.36	7.80	17.91%	46.78	3.22	7.40%
40	48.41	56.12	7.71	15.92%	51.54	3.13	6.46%
50	53.27	60.88	7.62	14.30%	56.31	3.04	5.70%
60	58.12	65.65	7.52	12.95%	61.07	2.95	5.07%
70	62.98	70.41	7.43	11.80%	65.83	2.85	4.53%
80	67.83	75.17	7.34	10.82%	70.59	2.76	4.07%
90	72.68	79.93	7.25	9.97%	75.35	2.67	3.67%
100	77.54	84.69	7.16	9.23%	80.12	2.58	3.32%
125	89.67	96.60	6.93	7.72%	92.02	2.35	2.62%
150	101.81	108.50	6.69	6.58%	103.92	2.12	2.08%
175	113.94	120.41	6.46	5.67%	115.83	1.89	1.65%
200	126.08	132.31	6.23	4.94%	127.73	1.65	1.31%
225	138.21	144.22	6.00	4.34%	139.64	1.42	1.03%
250	150.35	156.12	5.77	3.84%	151.54	1.19	0.79%
275	162.48	168.03	5.54	3.41%	163.45	0.96	0.59%
300	174.62	179.93	5.31	3.04%	175.35	0.73	0.42%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 311 - Residential
Standard Choice Offer Service
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	29.00	37.08	8.08	27.86%	32.50	3.50	12.06%
10	29.35	37.33	7.99	27.21%	32.75	3.41	11.61%
20	29.69	37.59	7.89	26.58%	33.01	3.31	11.16%
30	30.04	37.84	7.80	25.97%	33.26	3.22	10.72%
40	30.39	38.10	7.71	25.37%	33.52	3.13	10.30%
50	30.74	38.35	7.62	24.78%	33.77	3.04	9.88%
60	31.08	38.61	7.52	24.21%	34.03	2.95	9.48%
70	31.43	38.86	7.43	23.65%	34.28	2.85	9.08%
80	31.78	39.12	7.34	23.10%	34.54	2.76	8.69%
90	32.13	39.37	7.25	22.56%	34.80	2.67	8.31%
100	32.47	39.63	7.16	22.03%	35.05	2.58	7.93%
125	33.34	40.27	6.93	20.77%	35.69	2.35	7.04%
150	34.21	40.91	6.69	19.57%	36.33	2.12	6.18%
175	35.08	41.55	6.46	18.43%	36.97	1.89	5.37%
200	35.95	42.18	6.23	17.34%	37.61	1.65	4.60%
225	36.82	42.82	6.00	16.30%	38.24	1.42	3.87%
250	37.69	43.46	5.77	15.32%	38.88	1.19	3.17%
275	38.56	44.10	5.54	14.37%	39.52	0.96	2.50%
300	39.43	44.74	5.31	13.47%	40.16	0.73	1.86%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 315 - Residential
Transportation Services
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	29.00	37.08	8.08	27.86%	32.50	3.50	12.06%
10	29.35	37.33	7.99	27.21%	32.75	3.41	11.61%
20	29.69	37.59	7.89	26.58%	33.01	3.31	11.16%
30	30.04	37.84	7.80	25.97%	33.26	3.22	10.72%
40	30.39	38.10	7.71	25.37%	33.52	3.13	10.30%
50	30.74	38.35	7.62	24.78%	33.77	3.04	9.88%
60	31.08	38.61	7.52	24.21%	34.03	2.95	9.48%
70	31.43	38.86	7.43	23.65%	34.28	2.85	9.08%
80	31.78	39.12	7.34	23.10%	34.54	2.76	8.69%
90	32.13	39.37	7.25	22.56%	34.80	2.67	8.31%
100	32.47	39.63	7.16	22.03%	35.05	2.58	7.93%
125	33.34	40.27	6.93	20.77%	35.69	2.35	7.04%
150	34.21	40.91	6.69	19.57%	36.33	2.12	6.18%
175	35.08	41.55	6.46	18.43%	36.97	1.89	5.37%
200	35.95	42.18	6.23	17.34%	37.61	1.65	4.60%
225	36.82	42.82	6.00	16.30%	38.24	1.42	3.87%
250	37.69	43.46	5.77	15.32%	38.88	1.19	3.17%
275	38.56	44.10	5.54	14.37%	39.52	0.96	2.50%
300	39.43	44.74	5.31	13.47%	40.16	0.73	1.86%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 320 - General Service
Default Sales Service - Non Federal (Group 1)
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	30.71	48.30	17.59	57.26%	42.24	11.53	37.56%
25	44.91	60.20	15.29	34.04%	54.15	9.24	20.57%
50	59.11	72.10	12.99	21.98%	66.05	6.94	11.74%
75	73.31	84.01	10.69	14.59%	77.96	4.64	6.33%
100	87.52	95.91	8.40	9.60%	89.86	2.35	2.68%
125	101.72	107.82	6.10	6.00%	101.77	0.05	0.05%
150	115.92	119.72	3.80	3.28%	113.67	(2.25)	-1.94%
175	130.12	131.63	1.51	1.16%	125.58	(4.55)	-3.49%
200	144.32	143.53	(0.79)	-0.55%	137.48	(6.84)	-4.74%
225	158.52	155.44	(3.09)	-1.95%	149.38	(9.14)	-5.77%
250	172.73	167.34	(5.38)	-3.12%	161.29	(11.44)	-6.62%
275	186.93	179.25	(7.68)	-4.11%	173.19	(13.73)	-7.35%
300	201.13	191.15	(9.98)	-4.96%	185.10	(16.03)	-7.97%
325	215.33	203.06	(12.27)	-5.70%	197.00	(18.33)	-8.51%
350	229.53	214.96	(14.57)	-6.35%	208.91	(20.62)	-8.99%
375	243.73	226.87	(16.87)	-6.92%	220.81	(22.92)	-9.40%
400	257.94	238.77	(19.16)	-7.43%	232.72	(25.22)	-9.78%
425	272.14	250.68	(21.46)	-7.89%	244.62	(27.51)	-10.11%
450	286.34	262.58	(23.76)	-8.30%	256.53	(29.81)	-10.41%
475	300.54	274.48	(26.06)	-8.67%	268.43	(32.11)	-10.68%
500	314.74	286.39	(28.35)	-9.01%	280.34	(34.40)	-10.93%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 320 - General Service
Default Sales Service - Non Federal (Group 2)
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	42.00	78.74	36.75	87.50%	45.78	3.78	9.00%
25	58.20	94.39	36.19	62.19%	62.22	4.02	6.91%
50	74.40	110.04	35.64	47.90%	78.67	4.27	5.73%
75	90.60	125.69	35.08	38.72%	95.11	4.51	4.98%
100	106.80	141.33	34.53	32.33%	111.56	4.75	4.45%
125	123.01	156.98	33.98	27.62%	128.00	5.00	4.06%
150	139.21	172.63	33.42	24.01%	144.45	5.24	3.76%
175	155.41	188.28	32.87	21.15%	160.89	5.48	3.53%
200	171.61	203.93	32.31	18.83%	177.34	5.73	3.34%
225	187.82	219.58	31.76	16.91%	193.78	5.97	3.18%
250	204.02	235.22	31.21	15.30%	210.23	6.21	3.05%
275	220.22	250.87	30.65	13.92%	226.68	6.46	2.93%
300	236.42	266.52	30.10	12.73%	243.12	6.70	2.83%
350	268.83	297.82	28.99	10.78%	276.01	7.19	2.67%
400	301.23	329.11	27.88	9.26%	308.90	7.67	2.55%
450	333.64	360.41	26.77	8.02%	341.79	8.16	2.45%
500	366.04	391.70	25.67	7.01%	374.69	8.65	2.36%
600	430.85	454.30	23.45	5.44%	440.47	9.62	2.23%
700	495.66	516.89	21.23	4.28%	506.25	10.59	2.14%
800	560.47	579.48	19.02	3.39%	572.03	11.57	2.06%
900	625.27	642.08	16.80	2.69%	637.81	12.54	2.01%
1,000	690.08	704.67	14.58	2.11%	703.60	13.51	1.96%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 320 - General Service
Default Sales Service - Non Federal (Group 3)
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	83.99	162.73	78.74	93.75%	91.56	7.57	9.01%
50	116.40	194.03	77.63	66.70%	124.45	8.06	6.92%
100	148.80	225.33	76.53	51.43%	157.34	8.54	5.74%
150	181.20	256.62	75.42	41.62%	190.23	9.03	4.98%
200	213.61	287.92	74.31	34.79%	223.13	9.52	4.45%
250	246.01	319.21	73.20	29.76%	256.02	10.00	4.07%
300	278.42	350.51	72.09	25.89%	288.91	10.49	3.77%
350	310.82	381.81	70.99	22.84%	321.80	10.98	3.53%
400	343.23	413.10	69.88	20.36%	354.69	11.46	3.34%
450	375.63	444.40	68.77	18.31%	387.58	11.95	3.18%
500	408.04	475.70	67.66	16.58%	420.47	12.44	3.05%
600	472.84	538.29	65.44	13.84%	486.25	13.41	2.84%
700	537.65	600.88	63.23	11.76%	552.04	14.38	2.68%
800	602.46	663.47	61.01	10.13%	617.82	15.36	2.55%
900	667.27	726.07	58.80	8.81%	683.60	16.33	2.45%
1,000	732.08	788.66	56.58	7.73%	749.38	17.30	2.36%
2,000	1,372.65	1,407.07	34.42	2.51%	1,399.68	27.03	1.97%
3,000	2,013.22	2,025.48	12.26	0.61%	2,049.99	36.77	1.83%
4,000	2,653.79	2,643.89	(9.91)	-0.37%	2,700.29	46.50	1.75%
5,000	3,294.36	3,262.29	(32.07)	-0.97%	3,350.59	56.23	1.71%
6,000	3,934.93	3,880.70	(54.23)	-1.38%	4,000.90	65.96	1.68%
7,000	4,575.50	4,499.11	(76.39)	-1.67%	4,651.20	75.70	1.65%
8,000	5,216.07	5,117.52	(98.55)	-1.89%	5,301.50	85.43	1.64%
9,000	5,856.64	5,735.93	(120.71)	-2.06%	5,951.81	95.16	1.62%
10,000	6,497.22	6,354.34	(142.88)	-2.20%	6,602.11	104.89	1.61%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 320 - General Service
Default Sales Service - Federal (Group 1)
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	29.25	46.00	16.75	57.26%	40.24	10.99	37.56%
25	42.38	56.94	14.56	34.36%	51.18	8.80	20.76%
50	55.51	67.88	12.37	22.29%	62.12	6.61	11.91%
75	68.64	78.82	10.19	14.84%	73.06	4.42	6.44%
100	81.76	89.76	8.00	9.78%	84.00	2.23	2.73%
125	94.89	100.70	5.81	6.12%	94.94	0.05	0.05%
150	108.02	111.64	3.62	3.35%	105.88	(2.14)	-1.98%
175	121.15	122.59	1.44	1.19%	116.82	(4.33)	-3.57%
200	134.28	133.53	(0.75)	-0.56%	127.76	(6.52)	-4.85%
225	147.41	144.47	(2.94)	-1.99%	138.70	(8.70)	-5.91%
250	160.54	155.41	(5.13)	-3.19%	149.64	(10.89)	-6.79%
275	173.66	166.35	(7.32)	-4.21%	160.58	(13.08)	-7.53%
300	186.79	177.29	(9.50)	-5.09%	171.52	(15.27)	-8.17%
325	199.92	188.23	(11.69)	-5.85%	182.46	(17.46)	-8.73%
350	213.05	199.17	(13.88)	-6.51%	193.41	(19.64)	-9.22%
375	226.18	210.11	(16.07)	-7.10%	204.35	(21.83)	-9.65%
400	239.31	221.05	(18.25)	-7.63%	215.29	(24.02)	-10.04%
425	252.43	231.99	(20.44)	-8.10%	226.23	(26.21)	-10.38%
450	265.56	242.93	(22.63)	-8.52%	237.17	(28.39)	-10.69%
475	278.69	253.87	(24.82)	-8.90%	248.11	(30.58)	-10.97%
500	291.82	264.82	(27.01)	-9.25%	259.05	(32.77)	-11.23%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 320 - General Service
Default Sales Service - Federal (Group 2)
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	40.00	75.00	35.00	87.50%	43.60	3.60	9.00%
25	55.03	89.51	34.47	62.64%	58.87	3.83	6.96%
50	70.07	104.01	33.94	48.45%	74.13	4.06	5.80%
75	85.10	118.52	33.42	39.27%	89.40	4.30	5.05%
100	100.14	133.03	32.89	32.84%	104.66	4.53	4.52%
125	115.17	147.53	32.36	28.10%	119.93	4.76	4.13%
150	130.20	162.04	31.83	24.45%	135.19	4.99	3.83%
175	145.24	176.54	31.31	21.55%	150.46	5.22	3.60%
200	160.27	191.05	30.78	19.20%	165.73	5.45	3.40%
225	175.31	205.56	30.25	17.26%	180.99	5.69	3.24%
250	190.34	220.06	29.72	15.62%	196.26	5.92	3.11%
275	205.37	234.57	29.20	14.22%	211.52	6.15	2.99%
300	220.41	249.08	28.67	13.01%	226.79	6.38	2.90%
350	250.48	278.09	27.61	11.02%	257.32	6.84	2.73%
400	280.54	307.10	26.56	9.47%	287.85	7.31	2.60%
450	310.61	336.11	25.50	8.21%	318.38	7.77	2.50%
500	340.68	365.13	24.45	7.18%	348.92	8.23	2.42%
600	400.82	423.15	22.33	5.57%	409.98	9.16	2.29%
700	460.95	481.18	20.22	4.39%	471.04	10.09	2.19%
800	521.09	539.20	18.11	3.48%	532.10	11.02	2.11%
900	581.22	597.23	16.00	2.75%	593.17	11.94	2.05%
1,000	641.36	655.25	13.89	2.17%	654.23	12.87	2.01%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 320 - General Service
Default Sales Service - Federal (Group 3)
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	80.00	155.00	75.00	93.75%	87.21	7.21	9.01%
50	110.07	184.01	73.94	67.18%	117.74	7.67	6.97%
100	140.14	213.03	72.89	52.01%	148.27	8.14	5.81%
150	170.20	242.04	71.83	42.20%	178.80	8.60	5.05%
200	200.27	271.05	70.78	35.34%	209.34	9.06	4.53%
250	230.34	300.06	69.72	30.27%	239.87	9.53	4.14%
300	260.41	329.08	68.67	26.37%	270.40	9.99	3.84%
350	290.48	358.09	67.61	23.28%	300.93	10.45	3.60%
400	320.54	387.10	66.56	20.76%	331.46	10.92	3.41%
450	350.61	416.11	65.50	18.68%	361.99	11.38	3.25%
500	380.68	445.13	64.45	16.93%	392.53	11.85	3.11%
600	440.82	503.15	62.33	14.14%	453.59	12.77	2.90%
700	500.95	561.18	60.22	12.02%	514.65	13.70	2.73%
800	561.09	619.20	58.11	10.36%	575.71	14.63	2.61%
900	621.22	677.23	56.00	9.01%	636.78	15.55	2.50%
1,000	681.36	735.25	53.89	7.91%	697.84	16.48	2.42%
2,000	1,282.72	1,315.50	32.78	2.56%	1,308.47	25.75	2.01%
3,000	1,884.08	1,895.75	11.67	0.62%	1,919.10	35.02	1.86%
4,000	2,485.44	2,476.01	(9.43)	-0.38%	2,529.73	44.29	1.78%
5,000	3,086.80	3,056.26	(30.54)	-0.99%	3,140.36	53.56	1.74%
6,000	3,688.16	3,636.51	(51.65)	-1.40%	3,750.99	62.83	1.70%
7,000	4,289.52	4,216.76	(72.76)	-1.70%	4,361.62	72.10	1.68%
8,000	4,890.88	4,797.01	(93.87)	-1.92%	4,972.25	81.37	1.66%
9,000	5,492.24	5,377.26	(114.98)	-2.09%	5,582.88	90.64	1.65%
10,000	6,093.60	5,957.51	(136.09)	-2.23%	6,193.51	99.91	1.64%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 321 - General Service
Standard Choice Offer Service - Non Federal (Group 1)
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	30.71	48.30	17.59	57.26%	42.24	11.53	37.56%
25	33.64	48.93	15.29	45.44%	42.88	9.24	27.45%
50	36.58	49.57	12.99	35.52%	43.52	6.94	18.97%
75	39.52	50.21	10.69	27.07%	44.16	4.64	11.75%
100	42.45	50.85	8.40	19.78%	44.80	2.35	5.53%
125	45.39	51.49	6.10	13.44%	45.44	0.05	0.11%
150	48.32	52.13	3.80	7.87%	46.07	(2.25)	-4.65%
175	51.26	52.77	1.51	2.94%	46.71	(4.55)	-8.87%
200	54.19	53.40	(0.79)	-1.46%	47.35	(6.84)	-12.63%
225	57.13	54.04	(3.09)	-5.40%	47.99	(9.14)	-16.00%
250	60.06	54.68	(5.38)	-8.96%	48.63	(11.44)	-19.04%
275	63.00	55.32	(7.68)	-12.19%	49.27	(13.73)	-21.80%
300	65.94	55.96	(9.98)	-15.13%	49.91	(16.03)	-24.31%
325	68.87	56.60	(12.27)	-17.82%	50.54	(18.33)	-26.61%
350	71.81	57.24	(14.57)	-20.29%	51.18	(20.62)	-28.72%
375	74.74	57.87	(16.87)	-22.57%	51.82	(22.92)	-30.67%
400	77.68	58.51	(19.16)	-24.67%	52.46	(25.22)	-32.46%
425	80.61	59.15	(21.46)	-26.62%	53.10	(27.51)	-34.13%
450	83.55	59.79	(23.76)	-28.44%	53.74	(29.81)	-35.68%
475	86.48	60.43	(26.06)	-30.13%	54.38	(32.11)	-37.13%
500	89.42	61.07	(28.35)	-31.71%	55.01	(34.40)	-38.48%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 321 - General Service
Standard Choice Offer Service - Non Federal (Group 2)
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	42.00	78.74	36.75	87.50%	45.78	3.78	9.00%
25	46.93	83.12	36.19	77.12%	50.95	4.02	8.57%
50	51.87	87.51	35.64	68.71%	56.13	4.27	8.23%
75	56.80	91.89	35.08	61.76%	61.31	4.51	7.94%
100	61.74	96.27	34.53	55.93%	66.49	4.75	7.70%
125	66.68	100.65	33.98	50.96%	71.67	5.00	7.49%
150	71.61	105.03	33.42	46.67%	76.85	5.24	7.32%
175	76.55	109.42	32.87	42.94%	82.03	5.48	7.16%
200	81.48	113.80	32.31	39.66%	87.21	5.73	7.03%
225	86.42	118.18	31.76	36.75%	92.39	5.97	6.91%
250	91.36	122.56	31.21	34.16%	97.57	6.21	6.80%
275	96.29	126.94	30.65	31.83%	102.75	6.46	6.70%
300	101.23	131.33	30.10	29.73%	107.93	6.70	6.62%
350	111.10	140.09	28.99	26.09%	118.29	7.19	6.47%
400	120.97	148.85	27.88	23.05%	128.65	7.67	6.34%
450	130.84	157.62	26.77	20.46%	139.00	8.16	6.24%
500	140.72	166.38	25.67	18.24%	149.36	8.65	6.14%
600	160.46	183.91	23.45	14.61%	170.08	9.62	5.99%
700	180.21	201.44	21.23	11.78%	190.80	10.59	5.88%
800	199.95	218.97	19.02	9.51%	211.52	11.57	5.78%
900	219.69	236.49	16.80	7.65%	232.23	12.54	5.71%
1,000	239.44	254.02	14.58	6.09%	252.95	13.51	5.64%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 321 - General Service
Standard Choice Offer Service - Non Federal (Group 3)
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	83.99	162.73	78.74	93.75%	91.56	7.57	9.01%
50	93.86	171.50	77.63	82.71%	101.92	8.06	8.58%
100	103.74	180.26	76.53	73.77%	112.28	8.54	8.24%
150	113.61	189.03	75.42	66.38%	122.64	9.03	7.95%
200	123.48	197.79	74.31	60.18%	133.00	9.52	7.71%
250	133.35	206.55	73.20	54.89%	143.35	10.00	7.50%
300	143.22	215.32	72.09	50.34%	153.71	10.49	7.32%
350	153.10	224.08	70.99	46.37%	164.07	10.98	7.17%
400	162.97	232.85	69.88	42.88%	174.43	11.46	7.03%
450	172.84	241.61	68.77	39.79%	184.79	11.95	6.91%
500	182.71	250.37	67.66	37.03%	195.15	12.44	6.81%
600	202.46	267.90	65.44	32.33%	215.87	13.41	6.62%
700	222.20	285.43	63.23	28.46%	236.58	14.38	6.47%
800	241.95	302.96	61.01	25.22%	257.30	15.36	6.35%
900	261.69	320.49	58.80	22.47%	278.02	16.33	6.24%
1,000	281.43	338.01	56.58	20.10%	298.74	17.30	6.15%
2,000	471.36	505.78	34.42	7.30%	498.39	27.03	5.74%
3,000	661.29	673.54	12.26	1.85%	698.05	36.77	5.56%
4,000	851.21	841.31	(9.91)	-1.16%	897.71	46.50	5.46%
5,000	1,041.14	1,009.07	(32.07)	-3.08%	1,097.37	56.23	5.40%
6,000	1,231.06	1,176.83	(54.23)	-4.41%	1,297.03	65.96	5.36%
7,000	1,420.99	1,344.60	(76.39)	-5.38%	1,496.68	75.70	5.33%
8,000	1,610.91	1,512.36	(98.55)	-6.12%	1,696.34	85.43	5.30%
9,000	1,800.84	1,680.12	(120.71)	-6.70%	1,896.00	95.16	5.28%
10,000	1,990.76	1,847.89	(142.88)	-7.18%	2,095.66	104.89	5.27%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 321 - General Service
Standard Choice Offer Service - Federal (Group 1)
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	29.25	46.00	16.75	57.26%	40.24	10.99	37.56%
25	31.65	46.21	14.56	46.01%	40.45	8.80	27.80%
50	34.05	46.42	12.37	36.35%	40.66	6.61	19.41%
75	36.44	46.63	10.19	27.95%	40.87	4.42	12.13%
100	38.84	46.84	8.00	20.59%	41.08	2.23	5.75%
125	41.24	47.05	5.81	14.09%	41.29	0.05	0.11%
150	43.64	47.26	3.62	8.30%	41.50	(2.14)	-4.91%
175	46.03	47.47	1.44	3.12%	41.71	(4.33)	-9.40%
200	48.43	47.68	(0.75)	-1.55%	41.92	(6.52)	-13.46%
225	50.83	47.89	(2.94)	-5.78%	42.13	(8.70)	-17.13%
250	53.23	48.10	(5.13)	-9.63%	42.34	(10.89)	-20.46%
275	55.63	48.31	(7.32)	-13.15%	42.55	(13.08)	-23.51%
300	58.02	48.52	(9.50)	-16.38%	42.76	(15.27)	-26.31%
325	60.42	48.73	(11.69)	-19.35%	42.97	(17.46)	-28.89%
350	62.82	48.94	(13.88)	-22.09%	43.18	(19.64)	-31.27%
375	65.22	49.15	(16.07)	-24.64%	43.39	(21.83)	-33.48%
400	67.61	49.36	(18.25)	-27.00%	43.60	(24.02)	-35.52%
425	70.01	49.57	(20.44)	-29.20%	43.81	(26.21)	-37.43%
450	72.41	49.78	(22.63)	-31.25%	44.02	(28.39)	-39.21%
475	74.81	49.99	(24.82)	-33.17%	44.23	(30.58)	-40.88%
500	77.21	50.20	(27.01)	-34.98%	44.44	(32.77)	-42.45%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 321 - General Service
Standard Choice Offer Service - Federal (Group 2)
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	40.00	75.00	35.00	87.50%	43.60	3.60	9.00%
25	44.30	78.78	34.47	77.81%	48.14	3.83	8.65%
50	48.61	82.55	33.94	69.84%	52.67	4.06	8.36%
75	52.91	86.33	33.42	63.16%	57.21	4.30	8.12%
100	57.21	90.10	32.89	57.49%	61.74	4.53	7.91%
125	61.52	93.88	32.36	52.61%	66.28	4.76	7.74%
150	65.82	97.65	31.83	48.37%	70.81	4.99	7.58%
175	70.12	101.43	31.31	44.64%	75.35	5.22	7.45%
200	74.43	105.20	30.78	41.35%	79.88	5.45	7.33%
225	78.73	108.98	30.25	38.42%	84.42	5.69	7.22%
250	83.03	112.76	29.72	35.80%	88.95	5.92	7.13%
275	87.34	116.53	29.20	33.43%	93.49	6.15	7.04%
300	91.64	120.31	28.67	31.28%	98.02	6.38	6.96%
350	100.25	127.86	27.61	27.54%	107.09	6.84	6.83%
400	108.85	135.41	26.56	24.40%	116.16	7.31	6.71%
450	117.46	142.96	25.50	21.71%	125.23	7.77	6.62%
500	126.07	150.51	24.45	19.39%	134.30	8.23	6.53%
600	143.28	165.61	22.33	15.59%	152.44	9.16	6.39%
700	160.49	180.71	20.22	12.60%	170.58	10.09	6.29%
800	177.70	195.82	18.11	10.19%	188.72	11.02	6.20%
900	194.92	210.92	16.00	8.21%	206.86	11.94	6.13%
1,000	212.13	226.02	13.89	6.55%	225.00	12.87	6.07%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 321 - General Service
Standard Choice Offer Service - Federal (Group 3)
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	80.00	155.00	75.00	93.75%	87.21	7.21	9.01%
50	88.61	162.55	73.94	83.45%	96.28	7.67	8.66%
100	97.21	170.10	72.89	74.98%	105.35	8.14	8.37%
150	105.82	177.65	71.83	67.88%	114.42	8.60	8.13%
200	114.43	185.20	70.78	61.86%	123.49	9.06	7.92%
250	123.03	192.76	69.72	56.67%	132.56	9.53	7.74%
300	131.64	200.31	68.67	52.16%	141.63	9.99	7.59%
350	140.25	207.86	67.61	48.21%	150.70	10.45	7.45%
400	148.85	215.41	66.56	44.71%	159.77	10.92	7.33%
450	157.46	222.96	65.50	41.60%	168.84	11.38	7.23%
500	166.07	230.51	64.45	38.81%	177.91	11.85	7.13%
600	183.28	245.61	62.33	34.01%	196.05	12.77	6.97%
700	200.49	260.71	60.22	30.04%	214.19	13.70	6.83%
800	217.70	275.82	58.11	26.69%	232.33	14.63	6.72%
900	234.92	290.92	56.00	23.84%	250.47	15.55	6.62%
1,000	252.13	306.02	53.89	21.37%	268.61	16.48	6.54%
2,000	424.26	457.04	32.78	7.73%	450.01	25.75	6.07%
3,000	596.39	608.06	11.67	1.96%	631.41	35.02	5.87%
4,000	768.52	759.09	(9.43)	-1.23%	812.81	44.29	5.76%
5,000	940.65	910.11	(30.54)	-3.25%	994.21	53.56	5.69%
6,000	1,112.78	1,061.13	(51.65)	-4.64%	1,175.61	62.83	5.65%
7,000	1,284.91	1,212.15	(72.76)	-5.66%	1,357.01	72.10	5.61%
8,000	1,457.04	1,363.17	(93.87)	-6.44%	1,538.41	81.37	5.58%
9,000	1,629.17	1,514.19	(114.98)	-7.06%	1,719.81	90.64	5.56%
10,000	1,801.30	1,665.21	(136.09)	-7.55%	1,901.21	99.91	5.55%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 325- General Service
Transportation Service - Non Federal (Group 1)
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	30.71	48.30	17.59	57.26%	42.24	11.53	37.56%
25	33.64	48.93	15.29	45.44%	42.88	9.24	27.45%
50	36.58	49.57	12.99	35.52%	43.52	6.94	18.97%
75	39.52	50.21	10.69	27.07%	44.16	4.64	11.75%
100	42.45	50.85	8.40	19.78%	44.80	2.35	5.53%
125	45.39	51.49	6.10	13.44%	45.44	0.05	0.11%
150	48.32	52.13	3.80	7.87%	46.07	(2.25)	-4.65%
175	51.26	52.77	1.51	2.94%	46.71	(4.55)	-8.87%
200	54.19	53.40	(0.79)	-1.46%	47.35	(6.84)	-12.63%
225	57.13	54.04	(3.09)	-5.40%	47.99	(9.14)	-16.00%
250	60.06	54.68	(5.38)	-8.96%	48.63	(11.44)	-19.04%
275	63.00	55.32	(7.68)	-12.19%	49.27	(13.73)	-21.80%
300	65.94	55.96	(9.98)	-15.13%	49.91	(16.03)	-24.31%
325	68.87	56.60	(12.27)	-17.82%	50.54	(18.33)	-26.61%
350	71.81	57.24	(14.57)	-20.29%	51.18	(20.62)	-28.72%
375	74.74	57.87	(16.87)	-22.57%	51.82	(22.92)	-30.67%
400	77.68	58.51	(19.16)	-24.67%	52.46	(25.22)	-32.46%
425	80.61	59.15	(21.46)	-26.62%	53.10	(27.51)	-34.13%
450	83.55	59.79	(23.76)	-28.44%	53.74	(29.81)	-35.68%
475	86.48	60.43	(26.06)	-30.13%	54.38	(32.11)	-37.13%
500	89.42	61.07	(28.35)	-31.71%	55.01	(34.40)	-38.48%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 325 - General Service
Transportation Service - Non Federal (Group 2)
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	42.00	78.74	36.75	87.50%	45.78	3.78	9.00%
25	46.93	83.12	36.19	77.12%	50.95	4.02	8.57%
50	51.87	87.51	35.64	68.71%	56.13	4.27	8.23%
75	56.80	91.89	35.08	61.76%	61.31	4.51	7.94%
100	61.74	96.27	34.53	55.93%	66.49	4.75	7.70%
125	66.68	100.65	33.98	50.96%	71.67	5.00	7.49%
150	71.61	105.03	33.42	46.67%	76.85	5.24	7.32%
175	76.55	109.42	32.87	42.94%	82.03	5.48	7.16%
200	81.48	113.80	32.31	39.66%	87.21	5.73	7.03%
225	86.42	118.18	31.76	36.75%	92.39	5.97	6.91%
250	91.36	122.56	31.21	34.16%	97.57	6.21	6.80%
275	96.29	126.94	30.65	31.83%	102.75	6.46	6.70%
300	101.23	131.33	30.10	29.73%	107.93	6.70	6.62%
350	111.10	140.09	28.99	26.09%	118.29	7.19	6.47%
400	120.97	148.85	27.88	23.05%	128.65	7.67	6.34%
450	130.84	157.62	26.77	20.46%	139.00	8.16	6.24%
500	140.72	166.38	25.67	18.24%	149.36	8.65	6.14%
600	160.46	183.91	23.45	14.61%	170.08	9.62	5.99%
700	180.21	201.44	21.23	11.78%	190.80	10.59	5.88%
800	199.95	218.97	19.02	9.51%	211.52	11.57	5.78%
900	219.69	236.49	16.80	7.65%	232.23	12.54	5.71%
1,000	239.44	254.02	14.58	6.09%	252.95	13.51	5.64%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 325 - General Service
Transportation Service - Non Federal (Group 3)
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	83.99	162.73	78.74	93.75%	91.56	7.57	9.01%
50	93.86	171.50	77.63	82.71%	101.92	8.06	8.58%
100	103.74	180.26	76.53	73.77%	112.28	8.54	8.24%
150	113.61	189.03	75.42	66.38%	122.64	9.03	7.95%
200	123.48	197.79	74.31	60.18%	133.00	9.52	7.71%
250	133.35	206.55	73.20	54.89%	143.35	10.00	7.50%
300	143.22	215.32	72.09	50.34%	153.71	10.49	7.32%
350	153.10	224.08	70.99	46.37%	164.07	10.98	7.17%
400	162.97	232.85	69.88	42.88%	174.43	11.46	7.03%
450	172.84	241.61	68.77	39.79%	184.79	11.95	6.91%
500	182.71	250.37	67.66	37.03%	195.15	12.44	6.81%
600	202.46	267.90	65.44	32.33%	215.87	13.41	6.62%
700	222.20	285.43	63.23	28.46%	236.58	14.38	6.47%
800	241.95	302.96	61.01	25.22%	257.30	15.36	6.35%
900	261.69	320.49	58.80	22.47%	278.02	16.33	6.24%
1,000	281.43	338.01	56.58	20.10%	298.74	17.30	6.15%
2,000	471.36	505.78	34.42	7.30%	498.39	27.03	5.74%
3,000	661.29	673.54	12.26	1.85%	698.05	36.77	5.56%
4,000	851.21	841.31	(9.91)	-1.16%	897.71	46.50	5.46%
5,000	1,041.14	1,009.07	(32.07)	-3.08%	1,097.37	56.23	5.40%
6,000	1,231.06	1,176.83	(54.23)	-4.41%	1,297.03	65.96	5.36%
7,000	1,420.99	1,344.60	(76.39)	-5.38%	1,496.68	75.70	5.33%
8,000	1,610.91	1,512.36	(98.55)	-6.12%	1,696.34	85.43	5.30%
9,000	1,800.84	1,680.12	(120.71)	-6.70%	1,896.00	95.16	5.28%
10,000	1,990.76	1,847.89	(142.88)	-7.18%	2,095.66	104.89	5.27%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 325 - General Service
Transportation Service - Federal (Group 1)
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	29.25	46.00	16.75	57.26%	40.24	10.99	37.56%
25	31.65	46.21	14.56	46.01%	40.45	8.80	27.80%
50	34.05	46.42	12.37	36.35%	40.66	6.61	19.41%
75	36.44	46.63	10.19	27.95%	40.87	4.42	12.13%
100	38.84	46.84	8.00	20.59%	41.08	2.23	5.75%
125	41.24	47.05	5.81	14.09%	41.29	0.05	0.11%
150	43.64	47.26	3.62	8.30%	41.50	(2.14)	-4.91%
175	46.03	47.47	1.44	3.12%	41.71	(4.33)	-9.40%
200	48.43	47.68	(0.75)	-1.55%	41.92	(6.52)	-13.46%
225	50.83	47.89	(2.94)	-5.78%	42.13	(8.70)	-17.13%
250	53.23	48.1	(5.13)	-9.63%	42.34	(10.89)	-20.46%
275	55.63	48.31	(7.32)	-13.15%	42.55	(13.08)	-23.51%
300	58.02	48.52	(9.50)	-16.38%	42.76	(15.27)	-26.31%
325	60.42	48.73	(11.69)	-19.35%	42.97	(17.46)	-28.89%
350	62.82	48.94	(13.88)	-22.09%	43.18	(19.64)	-31.27%
375	65.22	49.15	(16.07)	-24.64%	43.39	(21.83)	-33.48%
400	67.61	49.36	(18.25)	-27.00%	43.60	(24.02)	-35.52%
425	70.01	49.57	(20.44)	-29.20%	43.81	(26.21)	-37.43%
450	72.41	49.78	(22.63)	-31.25%	44.02	(28.39)	-39.21%
475	74.81	49.99	(24.82)	-33.17%	44.23	(30.58)	-40.88%
500	77.21	50.2	(27.01)	-34.98%	44.44	(32.77)	-42.45%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 325- General Service
Transportation Service - Federal (Group 2)
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	40.00	75.00	35.00	87.50%	43.60	3.60	9.00%
25	44.30	78.78	34.47	77.81%	48.14	3.83	8.65%
50	48.61	82.55	33.94	69.84%	52.67	4.06	8.36%
75	52.91	86.33	33.42	63.16%	57.21	4.30	8.12%
100	57.21	90.10	32.89	57.49%	61.74	4.53	7.91%
125	61.52	93.88	32.36	52.61%	66.28	4.76	7.74%
150	65.82	97.65	31.83	48.37%	70.81	4.99	7.58%
175	70.12	101.43	31.31	44.64%	75.35	5.22	7.45%
200	74.43	105.20	30.78	41.35%	79.88	5.45	7.33%
225	78.73	108.98	30.25	38.42%	84.42	5.69	7.22%
250	83.03	112.76	29.72	35.80%	88.95	5.92	7.13%
275	87.34	116.53	29.20	33.43%	93.49	6.15	7.04%
300	91.64	120.31	28.67	31.28%	98.02	6.38	6.96%
350	100.25	127.86	27.61	27.54%	107.09	6.84	6.83%
400	108.85	135.41	26.56	24.40%	116.16	7.31	6.71%
450	117.46	142.96	25.50	21.71%	125.23	7.77	6.62%
500	126.07	150.51	24.45	19.39%	134.30	8.23	6.53%
600	143.28	165.61	22.33	15.59%	152.44	9.16	6.39%
700	160.49	180.71	20.22	12.60%	170.58	10.09	6.29%
800	177.70	195.82	18.11	10.19%	188.72	11.02	6.20%
900	194.92	210.92	16.00	8.21%	206.86	11.94	6.13%
1,000	212.13	226.02	13.89	6.55%	225.00	12.87	6.07%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 325 - General Service
Transportation Service - Federal (Group 3)
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	80.00	155.00	75.00	93.75%	87.21	7.21	9.01%
50	88.61	162.55	73.94	83.45%	96.28	7.67	8.66%
100	97.21	170.10	72.89	74.98%	105.35	8.14	8.37%
150	105.82	177.65	71.83	67.88%	114.42	8.60	8.13%
200	114.43	185.20	70.78	61.86%	123.49	9.06	7.92%
250	123.03	192.76	69.72	56.67%	132.56	9.53	7.74%
300	131.64	200.31	68.67	52.16%	141.63	9.99	7.59%
350	140.25	207.86	67.61	48.21%	150.70	10.45	7.45%
400	148.85	215.41	66.56	44.71%	159.77	10.92	7.33%
450	157.46	222.96	65.50	41.60%	168.84	11.38	7.23%
500	166.07	230.51	64.45	38.81%	177.91	11.85	7.13%
600	183.28	245.61	62.33	34.01%	196.05	12.77	6.97%
700	200.49	260.71	60.22	30.04%	214.19	13.70	6.83%
800	217.70	275.82	58.11	26.69%	232.33	14.63	6.72%
900	234.92	290.92	56.00	23.84%	250.47	15.55	6.62%
1,000	252.13	306.02	53.89	21.37%	268.61	16.48	6.54%
2,000	424.26	457.04	32.78	7.73%	450.01	25.75	6.07%
3,000	596.39	608.06	11.67	1.96%	631.41	35.02	5.87%
4,000	768.52	759.09	(9.43)	-1.23%	812.81	44.29	5.76%
5,000	940.65	910.11	(30.54)	-3.25%	994.21	53.56	5.69%
6,000	1,112.78	1,061.13	(51.65)	-4.64%	1,175.61	62.83	5.65%
7,000	1,284.91	1,212.15	(72.76)	-5.66%	1,357.01	72.10	5.61%
8,000	1,457.04	1,363.17	(93.87)	-6.44%	1,538.41	81.37	5.58%
9,000	1,629.17	1,514.19	(114.98)	-7.06%	1,719.81	90.64	5.56%
10,000	1,801.30	1,665.21	(136.09)	-7.55%	1,901.21	99.91	5.55%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 345 - Large General Service
Transportation Service - Non Federal
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	157.48	188.98	31.50	20.00%	167.66	10.17	6.46%
1,000	299.82	350.42	50.60	16.88%	317.87	18.05	6.02%
2,000	434.63	504.34	69.70	16.04%	460.56	25.92	5.96%
3,000	569.45	658.26	88.81	15.60%	603.25	33.80	5.93%
4,000	704.27	812.18	107.91	15.32%	745.94	41.67	5.92%
5,000	839.08	966.10	127.01	15.14%	888.63	49.54	5.90%
6,000	973.90	1,120.02	146.12	15.00%	1,031.32	57.42	5.90%
7,000	1,108.72	1,273.94	165.22	14.90%	1,174.01	65.29	5.89%
8,000	1,243.53	1,427.86	184.32	14.82%	1,316.70	73.17	5.88%
9,000	1,378.35	1,581.78	203.42	14.76%	1,459.39	81.04	5.88%
10,000	1,513.17	1,735.70	222.53	14.71%	1,602.08	88.92	5.88%
20,000	2,798.87	3,199.93	401.06	14.33%	2,965.37	166.50	5.95%
30,000	3,973.17	4,540.28	567.11	14.27%	4,216.10	242.93	6.11%
40,000	5,147.47	5,880.63	733.15	14.24%	5,466.84	319.37	6.20%
50,000	6,321.78	7,220.97	899.19	14.22%	6,717.58	395.80	6.26%
60,000	7,496.08	8,561.32	1065.24	14.21%	7,968.31	472.23	6.30%
70,000	8,670.39	9,901.67	1231.28	14.20%	9,219.05	548.66	6.33%
80,000	9,844.69	11,242.02	1397.33	14.19%	10,469.79	625.09	6.35%
90,000	11,019.00	12,582.36	1563.37	14.19%	11,720.52	701.53	6.37%
100,000	12,193.30	13,922.71	1729.41	14.18%	12,971.26	777.96	6.38%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 345 - Large General Service
Transportation Service - Federal
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	150.00	180.00	30.00	20.00%	159.69	9.69	6.46%
1,000	269.64	317.84	48.20	17.87%	286.83	17.19	6.38%
2,000	389.28	455.67	66.39	17.05%	413.97	24.69	6.34%
3,000	508.92	593.51	84.59	16.62%	541.11	32.19	6.33%
4,000	628.56	731.34	102.78	16.35%	668.25	39.69	6.31%
5,000	748.20	869.18	120.98	16.17%	795.39	47.19	6.31%
6,000	867.84	1,007.01	139.17	16.04%	922.53	54.69	6.30%
7,000	987.48	1,144.85	157.37	15.94%	1,049.67	62.19	6.30%
8,000	1,107.12	1,282.68	175.56	15.86%	1,176.81	69.69	6.29%
9,000	1,226.76	1,420.52	193.76	15.79%	1,303.95	77.19	6.29%
10,000	1,346.40	1,558.35	211.95	15.74%	1,431.09	84.69	6.29%
20,000	2,483.30	2,865.31	382.01	15.38%	2,641.89	158.59	6.39%
30,000	3,560.70	4,100.86	540.16	15.17%	3,792.09	231.39	6.50%
40,000	4,638.10	5,336.41	698.31	15.06%	4,942.29	304.19	6.56%
50,000	5,715.50	6,571.96	856.46	14.98%	6,092.49	376.99	6.60%
60,000	6,792.90	7,807.52	1,014.62	14.94%	7,242.69	449.79	6.62%
70,000	7,870.30	9,043.07	1,172.77	14.90%	8,392.89	522.59	6.64%
80,000	8,947.70	10,278.62	1,330.92	14.87%	9,543.09	595.39	6.65%
90,000	10,025.10	11,514.18	1,489.08	14.85%	10,693.29	668.19	6.67%
100,000	11,102.50	12,749.73	1,647.23	14.84%	11,843.49	740.99	6.67%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 360 - Large Volume Service
Transportation Service - Non Federal
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	524.95	577.44	52.49	10.00%	546.99	22.05	4.20%
500	584.65	642.30	57.65	9.86%	608.84	24.19	4.14%
1,000	644.36	707.16	62.80	9.75%	670.68	26.32	4.09%
2,000	756.26	829.36	73.10	9.67%	786.86	30.60	4.05%
3,000	868.16	951.56	83.40	9.61%	903.03	34.88	4.02%
4,000	980.05	1,073.76	93.71	9.56%	1,019.21	39.15	3.99%
5,000	1,091.95	1,195.96	104.01	9.52%	1,135.38	43.43	3.98%
10,000	1,651.44	1,806.96	155.52	9.42%	1,716.25	64.81	3.92%
15,000	2,210.93	2,417.96	207.03	9.36%	2,297.12	86.19	3.90%
20,000	2,770.41	3,028.96	258.55	9.33%	2,877.98	107.57	3.88%
30,000	3,840.46	4,202.04	361.57	9.41%	3,990.80	150.33	3.91%
40,000	4,910.51	5,375.11	464.60	9.46%	5,103.61	193.10	3.93%
50,000	5,980.56	6,548.19	567.63	9.49%	6,216.42	235.86	3.94%
60,000	6,936.28	7,595.49	659.21	9.50%	7,210.16	273.88	3.95%
70,000	7,892.00	8,642.79	750.79	9.51%	8,203.91	311.91	3.95%
80,000	8,847.71	9,690.09	842.37	9.52%	9,197.65	349.94	3.96%
90,000	9,803.43	10,737.38	933.95	9.53%	10,191.40	387.97	3.96%
100,000	10,759.15	11,784.68	1,025.54	9.53%	11,185.14	425.99	3.96%
150,000	15,537.73	17,021.18	1,483.45	9.55%	16,153.86	616.13	3.97%
200,000	20,316.32	22,257.67	1,941.36	9.56%	21,122.58	806.26	3.97%
250,000	24,166.79	26,473.15	2,306.36	9.54%	25,124.66	957.87	3.96%
300,000	28,017.27	30,688.63	2,671.35	9.53%	29,126.74	1,109.47	3.96%
350,000	31,867.75	34,904.10	3,036.35	9.53%	33,128.83	1,261.07	3.96%
400,000	35,718.23	39,119.58	3,401.34	9.52%	37,130.91	1,412.68	3.96%
450,000	39,568.71	43,335.05	3,766.34	9.52%	41,132.99	1,564.28	3.95%
500,000	43,419.19	47,550.53	4,131.34	9.51%	45,135.08	1,715.89	3.95%
550,000	47,269.67	51,766.00	4,496.33	9.51%	49,137.16	1,867.49	3.95%

Vectren Energy Delivery of Ohio, Inc.
Case No. 18-0298-GA-AIR
Rate 360 - Large Volume Service
Transportation Service - Federal
Typical Bill Comparison

Usage (Ccf)	Applicant Current (\$)	Applicant Proposed (\$)	Increase (\$)	Increase (%)	Staff Proposed (\$)	Increase (\$)	Increase (%)
0	500.00	550.00	50.00	10.00%	521.00	21.00	4.20%
500	548.91	603.81	54.91	10.00%	571.94	23.04	4.20%
1,000	597.81	657.62	59.81	10.01%	622.88	25.07	4.19%
2,000	695.62	765.25	69.63	10.01%	724.77	29.15	4.19%
3,000	793.43	872.87	79.44	10.01%	826.65	33.22	4.19%
4,000	891.24	980.49	89.25	10.01%	928.53	37.29	4.18%
5,000	989.05	1,088.12	99.07	10.02%	1,030.42	41.37	4.18%
10,000	1,478.10	1,626.23	148.13	10.02%	1,539.83	61.73	4.18%
15,000	1,967.15	2,164.35	197.20	10.02%	2,049.25	82.09	4.17%
20,000	2,456.20	2,702.46	246.26	10.03%	2,558.66	102.46	4.17%
30,000	3,434.30	3,778.69	344.39	10.03%	3,577.49	143.19	4.17%
40,000	4,412.40	4,854.92	442.52	10.03%	4,596.32	183.92	4.17%
50,000	5,390.50	5,931.15	540.65	10.03%	5,615.15	224.65	4.17%
60,000	6,259.70	6,887.58	627.88	10.03%	6,520.57	260.87	4.17%
70,000	7,128.90	7,844.01	715.11	10.03%	7,425.99	297.09	4.17%
80,000	7,998.10	8,800.44	802.34	10.03%	8,331.41	333.31	4.17%
90,000	8,867.30	9,756.87	889.57	10.03%	9,236.83	369.53	4.17%
100,000	9,736.50	10,713.30	976.80	10.03%	10,142.25	405.75	4.17%
150,000	14,082.50	15,495.45	1,412.95	10.03%	14,669.35	586.85	4.17%
200,000	18,428.50	20,277.60	1,849.10	10.03%	19,196.45	767.95	4.17%
250,000	21,890.50	24,087.25	2,196.75	10.04%	22,802.85	912.35	4.17%
300,000	25,352.50	27,896.91	2,544.41	10.04%	26,409.25	1,056.75	4.17%
350,000	28,814.50	31,706.56	2,892.06	10.04%	30,015.65	1,201.15	4.17%
400,000	32,276.50	35,516.21	3,239.71	10.04%	33,622.05	1,345.55	4.17%
450,000	35,738.50	39,325.86	3,587.36	10.04%	37,228.45	1,489.95	4.17%
500,000	39,200.50	43,135.51	3,935.01	10.04%	40,834.85	1,634.35	4.17%
550,000	42,662.50	46,945.16	4,282.66	10.04%	44,441.25	1,778.75	4.17%

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Case No(s). 18-0298-GA-AIR

Summary: Staff Report Filed electronically filed by Mr. Jonathan J Borer on behalf of Staff