

FILED
February 7, 2024
INDIANA UTILITY
REGULATORY COMMISSION

JOINT PETITIONERS' EXHIBIT NO. 3

OHIO VALLEY GAS CORPORATION ("OVGC") AND

OHIO VALLEY GAS, INC. ("OVGI")

INDIANA UTILITY REGULATORY COMMISSION

DIRECT TESTIMONY

OF

GREGORY P. ROACH

**SUPPORT FOR FUTURE TEST YEAR
MINIMUM STANDARD FILING REQUIREMENTS,
TEST YEAR CUSTOMER USAGE FORECAST,
CALCULATION OF PROPOSED REVENUE REQUIREMENT,
BALANCE SHEET,
RATE BASE,
RATE DECOUPLING MECHANISM,
CAPITAL STRUCTURE,
WEIGHTED AVERAGE COST OF CAPITAL,
TEST YEAR CUSTOMER USAGE FORECAST,
AND FINANCIAL STATEMENTS OF THE COMPANY**

OHIO VALLEY GAS CORPORATION AND OHIO VALLEY GAS, INC.

DIRECT TESTIMONY OF GREGORY P. ROACH

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Q. Please state your name and business address.

A. Gregory P. Roach, 111 Energy Park Drive, Winchester, IN 47394.

Q. Please identify your employer and position and describe your educational and employment background.

A. I am the Chief Financial and Regulatory Officer of Ohio Valley Gas Corporation and Ohio Valley Gas, Inc. (collectively “OVG” or “Joint Petitioners”). I began this position on April 4, 2022. I have over 30 years of experience working in the electric, gas and water utility sectors as both a consultant and utility employee, beginning with Duke Energy (formerly Public Service Indiana) in January 1980, continuing as an economist for a large consulting firm, a regulatory consultant through my own management consulting firm, and eventually joining the American Water Service Company in 2011. At American Water, I served in the capacity of Manager of Rates for Indiana-American Water Company, Inc. and Michigan-American Water Company, Inc. until I was promoted to Senior Manager of Revenue Analytics.

Q. Please summarize your educational qualifications

A. I graduated from Indiana University in 1980 with a Bachelor of Arts degree in Economics and Political Science. I graduated from Butler University in 1982 with a Master of Science degree in Economics. The details of my professional experience are provided in Appendix A to this testimony.

Q. Have you previously testified before any regulatory agencies?

1 A. Yes, I have provided testimony in numerous regulatory proceedings before the Indiana
2 Utility Regulatory Commission (“IURC” or “Commission”), the Missouri Public Service
3 Commission, the Illinois Commerce Commission, the Iowa Utilities Board, the Kentucky
4 Public Service Commission, the Public Service Commission of New York, the
5 Pennsylvania Public Utility Commission, the State of New Jersey Board of Public Utilities,
6 the Public Utilities Commission of Ohio, the Public Service Commission of West Virginia,
7 the Public Service Commission of Louisiana, the Council of the City of New Orleans, the
8 Virginia State Corporation Commission, the Public Utility Commission of Texas, the
9 Arkansas Public Service Commission, the Common Pleas Court of Ohio, and the Federal
10 Energy Regulatory Commission.

11 **Q. Have you previously testified before the IURC on behalf of OVG?**

12 A. Yes, I testified on behalf of OVG in IURC Cause No. 45400 TDISC-2, TDISC-3, TDISC-
13 4, TDISC-5 and Cause No. 45932.

14 **Q. Please describe the business of OVG.**

15 A. OVG is an operating public utility incorporated under the laws of the State of Indiana, with
16 its principal office and place of business in Winchester, Randolph County, Indiana. The
17 Company provides residential, commercial, industrial and transportation gas utility service,
18 to approximately 29,000 customers in the State of Indiana. In addition, the Company
19 provides gas utility service to approximately 600 customers in Union City, Ohio.

SCOPE OF TESTIMONY

20 **Q. What is the purpose of your direct testimony in this proceeding?**

21 A. The purpose of my testimony in this proceeding is to address:

- 1 • OVG’s proposal for a forecasted Test Year ending September 30, 2025
- 2 • the Company’s development of the Minimum Standard Filing Requirements
- 3 (“MSFRs”), 170 IAC 1-5-1 et seq.,
- 4 • the Company’s proposed Revenue Requirement,
- 5 • the Company’s pro forma net operating income statement for the twelve months
- 6 ended September 30, 2025,
- 7 • the Company’s Original Cost Rate Base on September 30, 2025,
- 8 • the Company’s capital structure and weight average cost of capital for the Test
- 9 Year,
- 10 • the Company’s usage per customer forecast for the Test Year,
- 11 • the Company’s financial statements for period ending September 30, 2025

12 **Q. Please identify the attachments or exhibits you will be sponsoring or co-sponsoring**
13 **and for which you will be providing testimony.**

14 A. I am co-sponsoring Joint Petitioners’ Exhibit No. 8 with OVG witnesses Emily M. Harlow,
15 and Gary M. VerDouw. This exhibit is the revenue requirement model further described in
16 my testimony.

17 **Q. Do you have any workpapers supporting these attachments or Joint Petitioners’**
18 **Exhibit No. 8 REVREQ?**

19 A. Yes. I am sponsoring the following workpapers:

20 Workpaper GPR-1 – Class 1 – Res Non-Heat UPC Forecast

21 Workpaper GPR-2 – Class 2 Res Heating UPC Forecast

22 Workpaper GPR -3 – Class 3 Com Non-Heating UPC Forecast

23 Workpaper GPR -4 – Class 4 Com Heating UPC Forecast

1 Workpaper GPR -5 - Class 5 – Ind Firm UPC Forecast.

2 Workpaper GPR -6 – Class 7 - Pub Ath UPC Forecast.

3 Workpaper GPR -7 – Climate Data

4 Workpaper GPR -8 – Climatic Variable Models

5 Workpaper GPR -9 – Table GPR-1

6 Workpaper GPR-10 – Table GPR-2

7 Workpaper GPR-11 – Tables GPR-3 through GPR-8

8

9 **Q. Were each of the tables, attachments, workpapers or exhibits you sponsor, or co-**
10 **sponsor prepared by you or under your direction and supervision?**

11 A. Yes.

12 **Q. What were the sources of the data used to prepare your tables and Joint Petitioners’**
13 **Exhibit No. 8?**

14 A. The data used to prepare these tables and the exhibit were acquired from the books of
15 account and business records of OVG, the officers and associates of OVG with knowledge
16 of the facts based on their job responsibilities and activities, and other sources, which I
17 examined during my investigation of the matters addressed in this testimony.

18 **Q. Do you consider this data to be reliable and of a type that is normally used and relied**
19 **on in your business for such purposes?**

20 A. Yes, it is.

21 **Q. Do the workpapers and exhibit, inclusive, accurately summarize such data and the**
22 **results of analysis using such data?**

23 A. Yes, they do.

1 **Q. Who is responsible for the calculation of OVG’s revenue requirement and supporting**
2 **schedules within this filing?**

3 A. I am ultimately responsible for the calculation of the overall revenue requirement proposed
4 in this proceeding. Specifically, I am co-sponsoring and supporting Joint Petitioners’
5 Exhibit 8 which includes the Calculation of the Proposed Revenue Requirement, Pro Forma
6 Income Statement, certain Operating Expense Adjustments, Calculation of Original Cost
7 Rate Base, and the Financial Statements of the Company. OVG witness and Senior
8 Manager of Finance & Regulatory Services, Emily Harlow, is responsible for detailing the
9 operations and maintenance (“O&M”) expense forecast that drive the Operating Expense
10 Pro Forma Adjustments leading to and resulting in the Test Year Income Statement ending
11 September 30, 2025. In addition, I will detail the Usage per Customer normalization
12 analysis that Ms. Harlow used as the basis of her sales and revenue forecast for the Test
13 Year. Further, I will detail the calculation of OVG’s Original Cost Rate Base, OVG’s
14 forecasted Capital Structure at September 30, 2025, and determination of OVG’s Weighted
15 Average Cost of Capital used to develop the return on Rate Base component of the
16 proposed Revenue Requirement.

TEST YEAR

17 **Q. Mr. Roach, please state the test year that OVG is proposing for use in setting rates in**
18 **this proceeding.**

19 A. The Company’s proposed rates and charges are based on the forecasted forward looking
20 test year ending September 30, 2025, (the “Test Year”).

21 **Q. Please describe the process by which you developed the forecasted test year.**

1 A. We start by showing a “Base Year” that reflects actual revenues, expenses, and rate base
2 from the most recent twelve-month period prior to the preparation of the rate case filing –
3 in this case, actual revenue and expenses for the twelve months ending September 30, 2023.
4 To advance to the forecasted test year, we consider changes to those cost elements through
5 a verifiable link period and then continue that extrapolation process through the fully
6 forecasted test year. For revenue, we have used a forecast determined by Company witness
7 Emily Harlow, based on a usage normalization analysis performed by me, that explains
8 how the present rate revenues through September 30, 2025, have been derived. Our
9 forecast of expenses is explained in more detail in the testimony of Emily Harlow. In
10 summary, expenses are adjusted for changes to categories of expenses where they can be
11 forecasted. For other expenses, an inflation factor was used to adjust costs for the future
12 period. For most of our expenses that are being adjusted, the assumptions are set forth in
13 Petitioners’ Exhibit 8, Schedules REVREQ8.1 through 8.22. For further detail, we have
14 included digital versions of our forecasting models in the workpapers. The Company’s
15 forecast of rate base is being provided by me based on new projects and investment spend
16 detailed by Company witness Greg Bailey, with the rate base schedules in this case being
17 supported in my testimony. The forecast is composed of both specific projects that are
18 scheduled to be in service during the forecasted test year and projected levels of other
19 activity such as main and service replacements, meter replacements and the like.

20 **Q. Given that your forward-looking test year includes a forecast of plant additions, how**
21 **is it possible to state that the plant is used and useful if the plant is not in service at**
22 **the time of the rate order?**

1 A. For large projects, we are adding plant to the rate base at the projected in-service date of
2 the additions. For other plant, we are basing the plant addition amount based on our
3 projected level of activity. For example, new service additions are projected at \$587,500.
4 We have a continuing level of main and service replacement due, not due to leaks, but
5 replacing bare steel services, old grease wrap mains, odorization equipment upgrades, and
6 old distribution systems that will continue to attention. All this work can be projected as
7 an activity level with considerable accuracy.

8 **Q. How will OVG ensure that rate base additions are in fact used and useful?**

9 A. OVG will employ an in-service certification process approved by this Commission in
10 numerous other cases when applying forecasted Test Year rate making. Only actual capital
11 structure and rate base including only plant that is used and useful at each phase will be
12 included in the rates that are submitted. With the IURC order approving new rates in this
13 cause, OVG will file a compliance filing with new rates calculated and based on a used and
14 useful rate base ending September 30, 2024, and the actual capital structure at that time
15 (the “Step 1” rates compliance filing). Following the end of the forecasted Test Year, OVG
16 will file a final compliance filing with new rates based on actual used and useful Rate Base
17 and capital structure as of September 30, 2025 (the “Step 2” compliance filing). Both the
18 Step 1 and Step 2 submissions are proposed to take effect upon submission on an interim-
19 subject-to-refund basis for a 60-day period during which the OUCC and any intervenors
20 can submit objection.

MINIMUM STANDARD FILING REQUIREMENTS

1 **Q. Has OVG elected to submit information required under the Commission's final rules**
2 **on the minimum standard filing requirement ("MSFRs") (170 I.A.C. 1-5-1 through**
3 **16), as updated through July 31, 2009?**

4 A. Yes. In its Petition in this Cause, OVG provided notice of its election to provide the
5 information required by the MSFRs in this proceeding.

6 **Q. How does the use of a forward-looking test year affect the MSFR information?**

7 A. The enactment of IC 8-1-2-42.7 does affect the MSFR information. The MSFRs laid out
8 in 170 I.A.C 1-5-1 through 16 have not yet been revised to address the differences in MSFR
9 requirements that were not set up to contemplate the inclusion of a forecasted test year. In
10 preparing the MSFRs for this case, OVG attempted to meet the MSFRs to the best of its
11 ability, and when in doubt an attempt was made to provide more data than required. With
12 the MSFRs not yet fully adjusted to reflect a forward-looking test year, the Company has
13 done its best to meet the spirit of the MSFRs to the extent possible.

14 **Q. Are you familiar with the Commission's Recommended Best Practices which were**
15 **announced by General Administrative Order 2013-5?**

16 A. Yes. In anticipation of rate cases to be filed under the then new legislation, the Commission
17 established a recommended procedural schedule and recommended best practices that
18 intended to reduce discovery and to facilitate the proceeding.

19 **Q. Has the Company attempted to comply with those recommended best practices?**

20 A. Yes.

1 **Q. What test year has OVG utilized in this proceeding?**

2 A. As I explained previously, OVG has used a forecasted future test year of the twelve months
3 ended September 30, 2025. The adjusted test year is representative of the Company's
4 ongoing operations and is therefore appropriate for ratemaking purposes.

5 **Q. What rate base valuation date has OVG used for purposes of this proceeding as the**
6 **Company attempted to comply with those recommended best practices?**

7 A. The final rate base valuation date is as of the end of the test year, September 30, 2025. For
8 purposes of Step 1 rates, we have used a rate base valuation date of September 1, 2024.

9 **Q. Where in this filing does OVG set forth the rate base calculation?**

10 A. OVG's proposed original cost rate base is shown in Joint Petitioners' Exhibit 8, Schedule
11 REVREQ9. This schedule begins with actual activity of OVG's utility plant in service and
12 rate base as of the beginning of the historic period September 30, 2022, then updated to the
13 end of the base period, then further, updated to end of the link year on September 30, 2024,
14 with a final update encompassing utility plant and rate base additions for the Company's
15 forecasted test year rate base to September 30, 2025.

16 **Q. Has OVG included the working papers and other information required by Sections 7**
17 **through 16 of the MSFRs?**

18 A. Yes.

RATE CASE SUMMARY – REVENUE REQUIREMENT

19 **Q. Would you please describe the contents of Joint Petitioners' Exhibit No. 8?**

1 A. Joint Petitioners' Exhibit No. 8 is based on a model previously used in Fountaintown Gas
 2 Company's Cause No. 45802-U filing, which was developed using the IURC's small utility
 3 filing application as a template. Joint Petitioners' Exhibit No. 8 has further updated that
 4 model since the Fountaintown filing to incorporate a forecasted Test Year among other
 5 enhancements. Schedules are organized topically. In native excel format the tabs are
 6 organized by schedule and numbered numerically beginning with REVREQ1. Some are
 7 more than one tab, in those instances, each additional tab is designated with a decimal, for
 8 example REVREQ1.1, REVREQ1.2, and so forth. The table below provides the schedule
 9 designation, page number, and description of the schedule.

| Schedule Designation | Page Numbers | Description |
|----------------------|-----------------|--|
| REVREQ1.1 - 1.4 | 1-4 | Balance Sheet |
| REVREQ2.1 - 2.5 | 5-9 | Utility Plant in Service |
| REVREQ3 | 10 | Depreciation analysis |
| REVREQ4 | 11 | Unappropriated Retained Earnings |
| REVREQ5.1 - 5.2 | 12-13 | Cash Flow |
| REVREQ6.1 - 6.14 | 14-27 | Comparative Income Statement |
| REVREQ7.1 | 28 | Schedule of Present and Proposed Rates |
| REVREQ7.2 | 29 | Pro Forma Net Operating Income Statement |
| REVREQ8.1 - 8.20 | 30-51 | Adjustments to Derive the Proposed Revenue |
| REVREQ9 | 52 | Original Cost Rate Base |
| REVREQ10 | 53 | Capital Structure |
| REVREQ11 | 54 | Gross Revenue Conversion Factor |
| REVREQ12 | 55 | Rate Increase Adjustment A - Revenue Requirement Calculation |

10 Schedule REVREQ10, Page 53 of the Exhibit provides the Joint Petitioners' forecasted
 11 Weighted Average Cost of Capital ("WACC") at September 30, 2025. Schedule
 12 REVREQ11, Page 51 of the exhibit is the derivation of the Gross Revenue Conversion
 13 Factor of 133.7252%. Schedule REVREQ12, Page 55 of the exhibit is the Revenue

1 Requirement calculation illustrating a revenue deficit on September 30, 2025, of
2 \$12,062,051.

3 **Q. What net operating income ("NOI") is reflected in the Company's proposed rate**
4 **increase?**

5 A. As shown on Line 7, page 55 of Joint Petitioners' Exhibit No. 8, Schedule REVREQ12,
6 the Company proposes an increase in revenues of \$12,062,051 or 35% over total present
7 rate revenues based upon a proposed NOI of \$6,429,245 as shown on Line 3, page 55 of
8 Joint Petitioners' Exhibit No. 8, Schedule REVREQ12.

9 **Q. What capital structure is used to determine the cost of capital?**

10 A. The Capital Structure and Cost of Capital the Company is presented in the Petitioners'
11 Exhibit No. 8, Schedule REVREQ10. This is the projected Step 2 capital structure. For
12 purposes of estimating the rate increase at Step 1, we have used the same forecasted capital
13 structure, but Step 1 rates will be based on the actual capital structure as of September 30,
14 2024. Additional details on the Capital Structure and Cost of Capital will be provided by
15 Company Witness Ann Bulkley, who is supporting the cost of common equity in this case.

OPERATING INCOME STATEMENT

16 **Q. Please identify and describe Petitioners' Exhibit No. 8, Schedules REVREQ7.2 and**
17 **8.1-8.20?**

18 A. Petitioners' Exhibit No. 8, Schedule REVREQ7.2 presents the pro forma net operating
19 income statement at present and proposed rates. The detailed pro forma adjustments made
20 to revenues and expenses are sponsored by Company Witness Emily Harlow and reported
21 in Schedules REVREQ8.1 – 8.22.

1 **Q. Please explain the general nature of the pro forma adjustments to results of**
2 **operations at present and proposed rates that Joint Petitioners witness Emily Harlow**
3 **is sponsoring in Joint Petitioners' Exhibit 8, Schedules REVREQ8.1 – 8.22?**

4 A. Each of the adjustments to results of operations for the forecasted test year is necessary to
5 reflect changes in operating conditions which are not fully reflected in the actual operating
6 results of the base year (the twelve months ended September 30, 2023). The adjustments
7 to pro forma results of operations at proposed rates that Ms. Harlow and Mr. VerDouw
8 sponsor in this proceeding are necessary to give effect to the increase in revenue and the
9 incremental increase in cost experienced by OVG in serving its customers because of the
10 proposed increase in rates. Consequently, it is necessary to give effect to these adjustments
11 to properly determine the pro forma operating revenues, operating expenses and resulting
12 operating income at present and proposed rates.

13 **Q. What is the main driver for the need of a rate revision?**

14 A. Table GPR-2 below illustrates the main driver of OVG's request for a rate revision.
15 Referring to Table GPR-2, medical expenses for the Test Year ending September 30, 2025,
16 are forecasted to be approximately \$4.8 M greater than those used to calculate current base
17 rates (\$1.353M), an annual growth rate of 18.4%. Conversely, Non-Medical O&M
18 expenses are forecasted to have grown \$5.422M, or 5.2% annually for the forecasted Test
19 Year as compared to the value used in the calculation of current base rates. From a pure
20 O&M expense perspective, for those components of O&M not under direct OVG control,
21 the Company has seen expenses grow 3.5x more than those O&M expenses under OVG
22 control.

| Line Number | Period | Column A | Column B | Column C | Column D | Column E | Column F |
|-------------|------------------------------|---------------------------|------------------------------------|--------------------|-----------------|-----------------|-------------|
| | | Total O&M Expenses Adjust | Group Medical & Dental Expenses*** | M&D as % Total O&M | Annual CAGR**** | Non-Medical O&M | Annual CAGR |
| 1 | 12 months Ending 6/30/2016* | \$ 10,728,748 | \$ 1,353,330 | 12.6% | | \$ 9,375,418 | |
| 2 | 12 months Ending 9/30/2025** | \$ 20,993,329 | \$ 6,195,890 | 29.5% | 18.42% | \$ 14,797,439 | 5.20% |

* Cause No. 44891, Exhibit SMK-2, Page 4 of 5, as adjusted by Pro-Forma Adjustments SMK-3, page 1 and 2 of 2.
** Joint Petitioner's Exhibit REVREQ7.2, Column G, Lines 9-13.
***FERC 926.1
**** Compound Annual Growth Rate = CAGR (%) = (Ending Value ÷ Beginning Value) ^ (1 ÷ Number of Periods) – 1

1 **Q. What is the test year Net Operating Income at Present Rates as shown on Joint**
2 **Petitioners' Exhibit No. 8, Schedule REVREQ7.1 – 7.2?**

3 A. Test Year Net Operating Income at Present Rates as adjusted is a net loss: (\$2,590,783).

4 **ORIGINAL COST RATE BASE**

5 **Q. Would you please explain Petitioners' Exhibit No. 8, Schedule REVREQ9?**

6 A. Yes. Joint Petitioners' Exhibit No. 8, Schedule REVREQ9 summarizes the various
7 components of original cost rate base for OVG in 12-month increments beginning with
8 September 30, 2022, through September 30, 2025. The information is presented on a total
9 OVG basis. As shown on page 1 of 1, the original cost rate base of OVG on September
10 30, 2025, as adjusted, is \$68,108,569.

11 *Utility Plant in Service*

12 **Q. Would you please explain development of Utility Plant in Service values reported on**
13 **Petitioners' Exhibit No. 8, Schedule REVREQ9, Line 1?**

14 A. Yes. Joint Petitioners' Exhibit No. 8, Schedule REVREQ9 projects Utility Plant in Service
15 as of September 30, 2025, of \$138,780,212. This value is summation of the beginning

1 balances, additions to plant, retirements from plant and other adjustments for periods
2 ending September 30, 2023, September 30, 2024, and September 30, 2025, reported in Joint
3 Petitioners' Exhibit No. 8, REVREQ2.1 – 2.5.

4 *Accumulated Depreciation*

5 **Q. Would you please explain the development of Accumulated Provision for**
6 **Depreciation values reported on Joint Petitioners' Exhibit No. 8, Schedule**
7 **REVREQ9, Line 2?**

8 A. Yes. Joint Petitioners' Exhibit No. 8, Schedule REVREQ3, Line 2, Column D, projects
9 Accumulated Provision for Depreciation as of September 30, 2025, of \$78,096,166. This
10 value is the sum of successive updates to September 30, 2023, ending balance for accruals
11 and retirements through September 30, 2024, which in turn is updated for accruals and
12 retirements through the Test Year through September 30, 2025.

13 **Q. Would you please describe Joint Petitioners' pro forma adjustments to Depreciation**
14 **Expense that eventually impact Accumulated Depreciation?**

15 A. Yes. As detailed in Joint Petitioners' Witness Emily Harlow's testimony related to an
16 adjustment to depreciation expense, there is a corresponding adjustment to capture the
17 appropriate accumulated depreciation for the link year ending September 30, 2024. From
18 December 31, 2021, to December 31, 2023, OVG tested a specific rate method at the asset
19 level for capturing depreciation expense to take advantage of the ERP (enterprising
20 resource planning) system automation. We have since determined that this method was not
21 using our Commission-approved depreciation accrual rates. Upon discovery of this error,
22 OVG halted the program, instead reverting to the approved accrual rates. This required an
23 adjustment to correct the balance of accumulated depreciation at December 31, 2023. OVG

1 has reported this adjustment on Schedule REVREQ3, page 1 of 1, line 6, Column B, which
2 is the composite depreciation expense amount adjusted for the accumulated provision for
3 depreciation for the link year ended September 30, 2024.

4 *Gas Stored Underground*

5 **Q. Would you please explain the development of Gas Stored Underground values**
6 **reported on Joint Petitioners' Exhibit No. 8, Schedule REVREQ9, Line 4?**

7 A. Yes. Joint Petitioners' Exhibit No. 8, Schedule REVREQ9 reports the value of Gas Stored
8 Underground as of September 30, 2025, of \$1,848,472. This value flows from the Joint
9 Petitioners' Exhibit No. 8, Schedule REVREQ1.2, Comparative Balance Sheet gas stored
10 underground items for periods ending September 30 in 2023, 2024 and the Test Year 2025.
11 These values are reported on line 4 in Columns B, C and D respectively.

12 *Cash Working Capital*

13 **Q. Would you please explain the development of Cash Working Capital values reported**
14 **on Joint Petitioners' Exhibit No. 8, Schedule REVREQ9, Line 5?**

15 A. Yes. We have used the 45-day method for calculating cash working capital. Joint
16 Petitioners' Exhibit No. 8, Schedule REVREQ9 reports the value of Cash Working Capital
17 as of September 30, 2025, of \$2,624,166. This value flows from the Schedule REVREQ7.2
18 items including transmission expense, distribution expense, customer expense, sales
19 expense and administrative & general expense for periods ending September 30 in 2023,
20 2024 and the Test Year 2025. These values are reported on line 5 in Columns B, C and D
21 respectively.

1 *Materials & Supplies*

2 **Q. Would you please explain the development of Material and Supplies values reported**
3 **on Joint Petitioners' Exhibit No. 8, Schedule REVREQ9, Line 6?**

4 A. Yes. Joint Petitioners' Exhibit No. 8, Schedule REVREQ9 reports the value of the 13-
5 month Material and Supplies average as of September 30, 2025, of \$2,951,855. This value
6 flows from beginning balances reported on Schedule REVREQ1.2, Comparative Balance
7 Sheet, for 12-month periods ending September 30 in 2023, 2024 and the Test Year 2025.
8 These values are reported on line 6 in Columns B, C and D respectively. The conversion
9 of the Comparative Balance Sheet 12-month values to 13-month averages is reported in
10 Join Petitioners 2024-2025 Balance Sheet workpaper.

11 **CAPITAL STRUCTURE AND COST OF CAPITAL**

12 **Q. Mr. Roach, are you sponsoring the Company's capital structure in this cause?**

13 A. Yes, I am.

14 **Q. What capital structure do you recommend be used for computing the Company's**
15 **Weighted Average Cost of Capital ("WACC") for ratemaking purposes?**

16 A. I recommend using the actual capital structure as of September 30, 2024 (Step 1) and
17 September 30, 2025 (Step 2). We have included the projection of the capital structure as
18 of the end of the test year in our revenue requirement calculation in Joint Petitioners' No.
19 8, Schedule Exhibit REVREQ10, Page 1.

20 **Q. Would you please briefly describe Join Petitioners' Exhibit No. 8, Schedule**
21 **REVREQ10.**

1 A. Joint Petitioners' Exhibit No. 8, Schedule REVREQ10, reports OVG's pro forma
2 September 30, 2025, test year capitalization for ratemaking purposes, which corresponds
3 to the Step 2 general rate base valuation date used in the original cost rate base calculation
4 shown in Schedule REVREQ9. As shown on Schedule REVREQ10, the total projected
5 capitalization of OVG for the test year ending September 30, 2025, is \$72,486,707 and the
6 overall WACC is 9.44%. This WACC reflects a cost of common equity estimate of 11.0%
7 based on the return on equity ("ROE") recommended by OVG's ROE consultant, Anne
8 Bulkley.

9 **Q. Please describe Part C of Joint Petitioners' Exhibit No. 8, Schedule REVREQ10.**

10 A. Part C of Joint Petitioners' Exhibit No. 8, Schedule REVREQ10 shows the calculation of
11 the weighted cost rate for long-term debt utilized by Company witness Emily Harlow in
12 the determination of the interest synchronization deduction regarding State and Federal
13 Income Taxes.

14 **Q. Please describe the long-term debt.**

15 A. As approved by Commission order in Cause No. 45538, OVG entered a long-term debt
16 arrangement with First Merchants Bank (the Bank) at a principal amount of \$6M, paying
17 a 3.25% interest, with a term ending August 3, 2026. An adjustment of the rate on this
18 long-term debt was approved by the Commission in Cause No. 45932 to 4.5% on
19 December 20.2023.

20 **Q. Please explain the adjustments you made to OVG's common equity balance at**
21 **September 30, 2025?**

1 A. Starting with the Company's common equity balance as of September 30, 2023, we
2 adjusted the retained earnings component expected to occur between September 30, 2023,
3 and September 30, 2025. These adjustments reflect the Company's 2024 and 2025
4 forecasts as sponsored by Company witness Emily Harlow. These adjustments are
5 necessary to best approximate the common equity balance that is supporting the rate base.
6 No common equity infusions are projected to occur during that time, so none are reflected
7 in the common equity balances in the forecast period.

8 **Q. What is the basis for the 11.0% cost rate assigned to the Company's common equity**
9 **component on September 30, 2025?**

10 A. As noted previously, the cost of common equity has been developed from the ROE
11 recommended by Ann Bulkley, the Company's consultant on this issue.

12 **Q. What is OVG's overall WACC?**

13 A. The overall WACC is calculated by summing the component costs of the capital structure,
14 with each component weighted by its respective proportion to total capitalization. Based
15 on the pro-forma capital component balances and component costs I have described,
16 OVG's WACC is 9.44%, as shown on Joint Petitioners' Exhibit No. 8, Schedule
17 REVREQ10, Part B, Column D at Line 11.

18 **RATE DECOUPLING MECHANISM ("RDM")**

19 **Q. Please describe OVG's cost structure and revenue structure (or basic rate design).**

20 A. A gas distribution utility's business consists predominantly of fixed costs that do not vary
21 with usage. Gas distribution utilities operate their transmission and distribution systems to
22 provide gas service to a customer's premises whether that customer uses a minimal amount

1 of gas or more per month. Gas distribution utilities must be ready to provide and deliver
 2 gas to customers when called upon. To do so, gas distribution utilities maintain a
 3 significant infrastructure to provide and deliver natural gas to customers, to provide
 4 customer service, to administer accounting and billing systems and to provide other critical
 5 internal and external services. Such fixed costs cannot be avoided in the gas distribution
 6 industry. Based on its current base rates, approximately 100% of OVG's costs are fixed
 7 and 0% of OVG's costs are variable.

8 OVG's revenues are derived from its Commission-approved rate schedules. The
 9 Company's current schedule of gas rates includes a Fixed and Volumetric Charge¹ Under
 10 the Company's present rate structure. Approximately 24% of its revenues are fixed
 11 (including miscellaneous revenues), while approximately 76% of its revenues are variable
 12 as delineated in the testimony of Joint Petitioners' Witness Mr. Gary VerDouw and
 13 summarized in Table GPR-3 below. The Company's current gas rate designs do not fully
 14 collect fixed costs through fixed charges (or initial consumption blocks), and variable costs
 15 through variable charges.

| Cost Component | Costs | Revenues | Variance |
|-------------------|-------|----------|----------|
| Fixed | 100 | 24 | -76 |
| Variable | 0 | 76 | N/A |

¹ The Company also receives some revenues (approximately 4%) from miscellaneous revenues.

1 **Q. Why is OVG proposing a Rate Decoupling Mechanism through the Sales**
2 **Reconciliation Component Rider discussed by Mr. VerDouw?**

3 A. As the above table demonstrates, OVG's rate design still places a disproportionate focus
4 on the spinning meters, tying a gas distribution utility company's recovery of fixed costs,
5 in large part, directly to its customers' gas usage or volumetric sales. The variability in
6 weather, customer usage patterns and the number of customers can have a substantial effect
7 on the Company's actual revenues. Changes in customer usage patterns can reflect
8 seasonal variation in usage (e.g., from winter to summer) as well as long-term use trends
9 in response to either efficiency or climatic factors. This is true for OVG as well as other
10 gas distribution utilities in the State of Indiana.

11 Tying a gas distribution utility company's recovery of fixed costs, and therefore, in large
12 part its earnings, directly to its volumetric sales produces a serious problem. The gas
13 distribution utility industry is capital intensive, and it is expected to incur significant capital
14 expenditure needs over the next 20 years. The need to recover a rate of return on these
15 significant investments, however, does not vary with usage. With such a heavy reliance
16 on variable volumetric sales, as spinning gas meters slow down, the costs of operating gas
17 distribution systems are not being recovered.

18 **Q. Is linking cost recovery to consumption consistent with improving gas usage**
19 **efficiency?**

20 A. No. Revenue, driven by relatively flat or slightly declining use per customer, is generally
21 flat, while the nature of investment (rate base) has shifted largely from plant needed for
22 serving new customers to non-revenue producing infrastructure replacement and
23 compliance with pipeline safety standards. The resulting trends in gas sales have been a

1 source of fiscal stress for OVG and small gas distribution companies generally, are a
2 potential disincentive to further investment in efficiency as well as an impediment to
3 ongoing funding of pipeline safety investment. This problem is exacerbated by the fact
4 that gas supply in general is a rising-cost industry from the perspective of base rates.
5 Hence, the traditional cost of service model is not well adapted to a no/low growth, high
6 investment utility environment and is unlikely to create and maintain conditions where
7 utilities like OVG plan for and invest in infrastructure necessary for operations,
8 maintenance, and pipeline safety while protecting the affordability of utility service for
9 present and future generations of customers.

10 **Q. How would an RDM address this imbalance?**

11 A. Instead of tying a gas distribution utility company's recovery of fixed costs, and therefore,
12 in large part its earnings, directly to its volumetric sales, the RDM more closely aligns
13 revenue with costs (based on the regulatory determined revenue requirement or on a per
14 customer basis), where revenues are trued up or down to meet the target at the end of the
15 adjustment period. The result is that a utility's actual gas distribution utility revenue will
16 be more consistent with its projected revenue requirements and should not increase or
17 decrease with changes in sales. This makes the gas distribution utility indifferent to selling
18 less natural gas and management decision-making can then refocus on making least-cost
19 investments to deliver reliable, safe natural gas services to customers even when such
20 investments reduce throughput. The result is a better alignment of utility and customer
21 interests to provide for more economically and environmentally efficient resource
22 decisions. The Company's rates should be based on how well we meet our customers'
23 utility service needs – not simply based on how much the meter spins.

1 **Q. What other benefits would an RDM provide over traditional tariff designs?**

2 A. The Company's gas service rates for its customers are designed based on the projected pro
3 forma volume of gas to be sold for these services under normal conditions during the
4 forecasted future test year. Under traditional ratemaking, therefore, the Company will
5 recover its revenue requirement only if the level of sales volumes upon which the rate
6 design is predicated is achieved.

7 Deviations from the projected pro forma gas volumes used in the establishment of the gas
8 service rates will result in either over or under recovery of the Company's revenue
9 requirement. Insofar as the traditional ratemaking model is premised on determining
10 properly recoverable costs and the expected sales volumes over which costs will be
11 recovered, the traditional ratemaking model clearly fails to achieve its goal if actual sales
12 volumes do not exactly match the projected pro forma volumes used to establish the rates.

13 One of the more controversial aspects of traditional rate cases can be the forecast level of
14 gas sales during the year the new rates will be in effect - regardless of whether a particular
15 jurisdiction uses a historic, forecast, or multiyear test years. It is well-documented that for
16 most gas companies, gas sales per customer are remaining flat or slightly declining due to
17 appliance efficiencies and warming climatic trends. This is true with respect to OVG.
18 With limited organic customer growth compensating for the trend in gas use per customer,
19 rates must be raised to provide a corresponding balance to the reduction in revenue.
20 Whether through simple daily tasks or the installation of more gas efficient products, our
21 customers continue to find ways to mitigate gas use in their homes. Below I demonstrate
22 this phenomenon, explain the reasons why and show that the trend is not abating.
23 Nevertheless, many ratepayer advocates continue to argue that any stagnation or reduction

1 in sales is temporary and their resulting revenue projections continue to fail to adequately
2 reflect the usage per customer trend. Depending on how the RDM is implemented, it can
3 generally reduce or eliminate most if not all controversies over forecasting.

4 **Q. How will an RDM reduce rate case controversy?**

5 A. As a ratemaking tool, the RDM will effectively reduce or even eliminate the
6 contentiousness related to the process of determining the projected pro forma gas volumes
7 used to set gas service rates, and will help ensure that the Company would receive the
8 authorized revenue, no more and no less, and customers would pay the appropriate price
9 for gas service in their monthly bills, whether collected through the fixed service charge or
10 the volumetric charges. Depending on how the RDM is designed, it will generally reduce
11 or eliminate controversies over sales forecasting.

12 If the total revenue target is set directly, forecasting debates become largely irrelevant
13 because any errors are trued up. If, on the other hand, the allowed revenue level per
14 customer approach is used, then the problem shifts from forecasting gas service sales to
15 effectively forecasting number of customers and use per customer. This is likely to reduce
16 but not eliminate the controversy.

17 **Q. Could an RDM potentially reduce OVG's general rate case frequency?**

18 A. Under traditional ratemaking, in an environment of flat or falling sales, a regulated
19 company will suffer earnings erosion in the period between rate cases that will prompt the
20 entity filing more frequent rate cases. An RDM should help the Company avoid more
21 frequent rate cases as compared to a regulatory environment that does not provide the
22 flexibility of the RDM, which is a benefit to customers. With an RDM in place, in an

1 environment of flat or falling sales, the Company will not need to consistently file rate
2 cases to recover sales unit shortfalls. On the other hand, when the Company does
3 experience sales growth, it will refund the revenue more than the authorized amounts to
4 customers.

5 **Q. Does weather impact the natural gas sales volume?**

6 A. Yes, weather and climatic trends create fluctuations in usage, costs and revenues that are
7 outside the utility's control. Generally, usage is increased by cold weather and reduced by
8 milder, warmer weather (relatively), primarily in the winter heating month, although the
9 variation is regionally influenced, as well. Weather has never been satisfactorily addressed
10 through traditional ratemaking models. Here again, actual weather can work either in favor
11 of or against the Company from a financial standpoint as it will collect revenue that
12 potentially varies significantly from the authorized revenue requirement. The Company
13 has no effective way of managing or controlling this factor under traditional ratemaking
14 channels. Although the ratemaking process has historically tried to take this into
15 consideration by basing rates on "normal" weather conditions, as a practical matter, normal
16 weather is never really achieved. In fact, "weather" is difficult to even define from a
17 statistical perspective and establishing "normal" weather is even more difficult particularly
18 in the face of ongoing global climate change. A mechanism that mitigates the adverse
19 effect of weather variability on revenues recognizes that normal weather is a condition that
20 will likely never be achieved and is ever changing in the face of global climate change and
21 effectively reduces the adverse impacts of weather variability for both the Company and
22 its customers.

1 **Q. Does an RDM eliminate some of the difficulties of trying to design an effective weather**
2 **normalization mechanism for a gas utility?**

3 A. With respect to the variability in weather, there has never been a consistent definition of
4 “weather” that has been adopted for weather normalization purposes in the utility industry
5 generally. In Indiana, the IURC has relied on a partial adjustment of base rates for heating
6 degree day departures to certain 30-year averages via the NTA mechanism. Since it is only
7 a partial adjustment, the result is that gas companies have consistently received either too
8 little or too much revenue due to the vagaries of weather, leaving customers paying too
9 little or too much fixed costs in their water bills, compared to the fixed costs that the rates
10 were designed to recover. With weather, a utility’s earnings are affected by the mere
11 caprice of the influence of weather on revenue. It seems counter-intuitive for a poorly run
12 utility to experience higher than forecasted revenue due to cold weather or an efficient
13 utility to suffer an earnings shortfall from warmer weather. An RDM reduces the
14 possibility of this anomalous ratemaking outcome.

15 **Q. What are the details of the RDM mechanism that OVG is proposing in this cause?**

16 A. The details of the OVG proposed RDM including the revenue components covered by the
17 mechanism, the monthly deferral/accrual accounting, the annual filing, and the term for
18 recovering or refunding any revenue over/under recovery is detailed in Joint Petitioners’
19 Witness Gary VerDouw.

20 **CUSTOMER USAGE FORECAST**

21 **Q. The Joint Petitioners are proposing implementation of a RDM in this proceeding.**
22 **You have testified that such a mechanism protects both customers and the utility from**

1 **variations in gas unit sales volumes impacting revenues. Why are Joint Petitioners**
2 **proposing normalization of customer sales for long-term trends in appliance**
3 **efficiency and climatic trends?**

4 A. While the addition of the RDM protects both customers and the utility from changes in
5 sales volumes impacting revenues over the longer term, it is in the best interest of both for
6 the Joint Petitioners to forecast Test Year sales units as accurately as possible. Imprecise
7 forecasting of the forward-looking Test Year unit sales volumes could result in significant
8 over or under recovery of revenue which would result in a correspondingly significant
9 adjustment to the RDM rider for the following 12-Months. Such large or significant
10 adjustments are not in the best interest of either the customers or the utility.

11 **Q. What factors impact long-term customer gas usage?**

12 A. The two major factors impacting long-term customer usage of natural gas are 1) long-term
13 climatic trends and 2) gas appliance efficiency improvements.

14 **Q. How do these long-term customer usage trends compare to seasonal weather impact**
15 **on customer usage?**

16 A. Traditionally, gas distribution utilities such as OVG will experience significant seasonal
17 increases in customer usage due to heating demand during colder weather, typically
18 experienced in the November through April timeframe. This demand can be magnified as
19 usage spikes during very cold arctic system infiltration into the OVG service territory during
20 the heating season. These seasonal fluctuations in gas heating demand have become less
21 intense as average monthly temperatures have increased year to year due to the impact of
22 global climate change. Additionally, the base level of usage is slowly eroded on a per
23 customer basis as more efficient gas water heaters and furnaces are brought to the market.

1 **Q. Did you analyze OVG customer usage data to provide an adjustment to forecasted**
 2 **test year usage for these long-term trends?**

3 A. Yes, I did.

4 **Q. Please describe the analysis of OVG customer usage data you executed to provide**
 5 **forecasted test year usage for these long-term trends attributable to changing climate**
 6 **and appliance efficiency.**

7 A. I employed standardized multivariate regression statistical analysis to forecast Test Year
 8 usage per customer for the classes listed in Table GPR-4. For each of those rate classes, I
 9 employed 120 months of class level usage per customer data for the period of January 2013
 10 through December of 2022. To evaluate the impact of changing climate and any appliance
 11 efficiency impacts on customer gas usage, I analyzed the relationship of gas use per
 12 customer to several climate series, time, and seasonality.

| Table GPR-4 Ohio Valley Gas Company and Inc Class Level Usage Per Customer Analysis & Forecast | | |
|--|------------------|-----------------|
| Rate Class | Class Type | Type Of Service |
| Class-1 | Residential | Non-Heat |
| Class-2 | Residential | Heating |
| Class-3 | Commercial | Non-Heat |
| Class-4 | Commercial | Heating |
| Class-5 | Industrial | Firm |
| Class-7 | Public Authority | All |

13 **Q. What climatic data series did you evaluate in your analysis and how did you weigh or**
 14 **aggregate the NOAA station level data to perform system level analysis comprised of**
 15 **5 districts geographically spread throughout the state of Indiana?**

1 A. The first step to creating the climatic data base required to perform per customer usage
 2 modeling of OVG system usage, we evaluated what NOAA weather data was reported on
 3 a minimum daily basis and geographically located at or near the five OVG districts
 4 comprising OVG's total system usage. Further, we choose NOAA weather stations that
 5 had contiguous daily data for the period of January 2013 through December 2022. Lastly,
 6 the available station data sets had to have reported heating degree days (HDD), the daily
 7 minimum temperature (MIN) and the daily maximum temperature (MAX) over that period.
 8 Based on available data sets from specific NOAA weather stations meeting the 10-year
 9 monthly frequency requirement, we settled on the following NOAA weather station to
 10 OVG district relationship as reported in Table GPR-5.

| Business Unit ID | OVG District | NOAA Weather Station |
|---------------------|-----------------|-------------------------|
| 1010 | Portland | Richmond |
| 1020 | Winchester | Muncie |
| 1040 | Connersville | Richmond |
| 1051 | Tell City | Evansville |
| 1054 | Tell City | Evansville |
| 1090 | Sullivan | Terre Haute |

11 **Q. How did you aggregate and organize OVG usage data in your analysis?**

12 A. We have taken data reported for each of the five OVG districts and aggregated that data
 13 into system total usage per customer for each of the 6 customer classes described in Table
 14 GPR-4.

1 **Q. How did you weigh the data from each of the four separate NOAA weather stations**
2 **into a single climatic variable that you could apply to your total system usage per**
3 **customer modeling?**

4 A. Employing the four NOAA weather stations detailed in Table GPR-5 above, we created
5 weighted climatic variables that are the ratable sum of each NOAA weather station's
6 observed value scaled by the total usage of the associated OVG district's usage. With such
7 weighting in place, we were able to create climatic weather variables that directly
8 correspond to and are scaled by the amount of gas consumed at the five OVG districts and
9 hence associate the weather attributable to that district's usage by month.

10 **Q. What climatic variables did you eventually employ in your regression analysis of**
11 **usage per customer by class?**

12 A. For purposes of our regression-based usage modeling, we employed the monthly
13 minimum, monthly maximum, and total monthly heating degree days for each month
14 January 2013 to December 2022 by weather station. Unfortunately, NOAA does not
15 routinely report average temperature on a monthly frequency. With that data being
16 unavailable at that frequency, we created our own "min/max average monthly temperature"
17 which is the average of the monthly minimum and monthly maximum temperatures.

18 **Q. Having described your development of usage and climatic data, will you describe the**
19 **modeling you performed in support of developing the system level class usage per**
20 **customer forecast?**

21 A. Employing multivariate regression analysis, I analyzed each customer class described in
22 Table GPR-4 by modeling each classes' usage per customer on a monthly frequency for
23 the period January 2013 through December 2022 for the relationship between class level

usage per customer for changes in the climatic variables, seasonal factors, specific grain drying usage, and time. The variables eventually selected for each class's customer usage forecast model are reported in Table GPR-6 below.

Table GPR-6
Ohio Valley Gas Company & Inc.
Class Level Usage Per Customer Analysis & Forecast
Model Components

| Rate Class | Class Type | Time | Seasonal* | Grain Drying | MIN/MAX AVG** | HDD** |
|------------|---------------------|------|-----------|--------------|---------------|-------|
| Class-1 | Residential NH | | **** | | **** | |
| Class-2 | Residential Heating | | **** | | | **** |
| Class-3 | Commercial NH | | | **** | **** | |
| Class-4 | Commercial Heating | | **** | | | **** |
| Class-5 | Industrial Firm | | **** | | | **** |
| Class-7 | Public Authority | | **** | | | **** |

* Seasonal Variable specific for each customer class.
** Weighted by total usage per district per month.

Q. Having described your development of usage and climatic data, will you describe the modeling you performed in support of developing the system level class usage per customer forecast?

A. Yes, in general, applying standard multivariate regression analysis to our 10-year year monthly frequency data base, each of the class level models we eventually optimized are defined by application of a seasonal heating variable in conjunction with a climatic variable to capture long-term climatic trends. The one exception to this general concept is the Commercial Non-Heating class. Because this class's usage is so dominated by a two-month window (mid-October through mid-December) where grain drying demands increases usage per customers by as much as 20x, I employed the use of a binary variable

- 1 to explain this extreme change in usage not exhibited by any other customer class. The
 2 result of our modeling efforts for each class is presented in Table GPR-7 below.

| Rate Class | Class Type | R ² | F | Durbin Watson | Variable Indicators (T/P) | | | | Predicted |
|------------|---------------------|----------------|-------|---------------|---------------------------|-------------|-------------|-------------|---|
| | | | | | Seasonal | Min/Max | Avg | HDD | |
| Class-1 | Residential NH | 0.779 | 206.7 | 1.23 | 2.87 / .01 | -9.92 / .00 | | | Class_1_Res_NH = 4.195 - 0.049*M_M_AVG_W + 0.468*Season |
| Class-2 | Residential Heating | 0.855 | 345.4 | 1.37 | 4.40 / .00 | | 13.65 / .00 | | Class_2_Res_Heat = -0.117 + 0.296*HDD_W + 2.493*Season |
| Class-3 | Commercial NH | 0.727 | 155.8 | 2.07 | | -3.31 / .00 | | 16.48 / .00 | Class_3_Com_NH = 67.181 + 138.259*Grain_Dry_2 - 0.695*M_M_AVG_W |
| Class-4 | Commercial Heating | 0.890 | 474.7 | 1.58 | 7.72 / .00 | | 17.73 / .00 | | Class_4_Com_Heat = 0.505 + 0.965*HDD_W + 10.834*Season_2 |
| Class-5 | Industrial Firm | 0.910 | 590.7 | 1.04 | -5.64 / .00 | | 26.92 / .00 | | Class_5_Ind_Firm = 15.729 + 9.404*HDD_W - 53.871*Season_2 |
| Class-7 | Public Authority | 0.872 | 398.9 | 1.30 | 3.286 / .00 | | 16.44 / .00 | | Class_7_PA = 2.305 + 1.563*HDD_W + 8.2*Season_2 |

- 3
- 4 **Q. Will you please explain the nature and reason for applying a binary variable in your**
 5 **regression modeling for the Commercial Non-Heating class?**
- 6 A. Yes. A binary variable is a standard regression modeling technique where a variable is
 7 applied that seeks to explain behavior that has two states: either “on” or “off”. In the case
 8 of the Commercial Non-Heating customer usage, the impact of grain drying usage by this
 9 customer firm group was so dominant, that neither climatic nor seasonal factors alone could
 10 explain the class’s usage behavior. In this case, based on each year’s growing season
 11 drying needs (that vary depending on amount of rain experienced during that season), the
 12 value to “turn on” grain drying would be activated for the months October through
 13 December.
- 14 **Q. Did you find direct evidence of appliance efficiency impacting customer usage in your**
 15 **modeling? If not, why not?**
- 16 A. Based on our ten-year monthly frequency modeling of class level OVG customer gas
 17 usage, I was unable to identify any long-term usage trends that could be attributed solely
 18 to increased appliance efficiency over the passage of time defined by our data set, January

1 2013 to December 2022. Generally, due to the great sensitivity over the extended period of
2 gas usage demand for heating due to seasonal climatic conditions, the variability of usage
3 from one year and one season to next are generally explained and dominated by climatic
4 trends and seasonality. Hence, the variability of usage is so climatically driven and
5 dominating, that any long-term usage response due to appliance efficiency is not
6 identifiable given the current fidelity of the data available.

7 **Q. Does the difficulty of identifying a long-term appliance efficiency-based usage trend**
8 **in your modeling imply or lead to the conclusion it doesn't exist?**

9 A. No, it doesn't. Based on my experience with utility usage modeling and analysis over the
10 course of my career, it is clear to me that gas usage is so dominated by seasonal heating
11 demand, that any long-term usage trends due to appliance efficiency improvements are
12 overwhelmed by and inseparable from long-term climatic changes.

13 **Q. Describe how you employed your class level modeling results to produce the Test Year**
14 **usage per customer forecast employed by Joint Petitioners' witness Emily Harlow.**

15 A. Utilizing the regression-based equations reported in Table GPR-7, in conjunction with 10-
16 year monthly averages for the climatic variables employed in the model creation, I
17 produced monthly class level usage per customer that is normalized for 10-year climatic
18 data. The climatic normalized usage per customer for each class is presented in Table
19 GPR-8 below.

| Month | Residential | | Commercial | | Industrial | Public |
|-----------|-------------|---------|------------|---------|------------|-----------|
| | Non-Heat | Heating | Non-Heat | Heating | Firm | Authority |
| January | 3.24 | 13.02 | 47.06 | 46.03 | 299.89 | 66.69 |
| February | 3.03 | 12.34 | 44.00 | 43.81 | 278.33 | 63.11 |
| March | 2.57 | 9.30 | 37.50 | 33.92 | 181.90 | 47.08 |
| April | 2.13 | 6.40 | 31.28 | 24.46 | 89.73 | 31.76 |
| May | 1.78 | 4.78 | 26.34 | 19.18 | 38.23 | 23.20 |
| June | 0.73 | 0.56 | 18.05 | 2.73 | 37.37 | 14.10 |
| July | 0.59 | 0.07 | 15.98 | 1.13 | 21.81 | 3.32 |
| August | 0.68 | 0.23 | 17.38 | 1.62 | 26.62 | 4.11 |
| September | 0.87 | 1.23 | 20.02 | 4.90 | 58.54 | 9.42 |
| October | 1.38 | 3.49 | 165.58 | 12.25 | 76.30 | 21.33 |
| November | 2.53 | 9.25 | 175.23 | 22.92 | 180.26 | 46.81 |
| December | 2.92 | 11.14 | 42.45 | 39.90 | 240.18 | 56.76 |

- 1
- 2 **Q. How is your climatic usage per customer normalization different from the normal**
- 3 **temperature adjustment (“NTA”) that has been adopted in Joint Petitioners’ base**
- 4 **rates?**
- 5 **A.** The NTA is a simple scaler mechanism adopted by the Commission for gas distribution
- 6 utilities to adjust monthly billing usage for short-term departures as compared to a 30-year
- 7 average heating degree day index value respectively. Such an adjustment protects both
- 8 customers and the utilities from significant large swings in weather for a specific billing
- 9 period which could severely impact customers’ bills from both customer and utility
- 10 perspectives. My forecast of normalized Test Year usage is a completely different concept
- 11 utilized for a different purpose. My forecast of Test Year per customer usage, normalizes
- 12 monthly per customer class usage for each class’s response to climatic change over the
- 13 period 2013-2022, normalized to the average of the last 10-years climatic experience. In

1 less technical terms, I have estimated each customer class's response to the last decade of
2 climatic change and forecasted normalized monthly per customer usage based on the last
3 decades average climatic observations. The NTA attempts to adjust billing usage for short-
4 term monthly departures from a 30-year average. My forecast estimates the impact of a
5 decade's worth of climate change on usage and estimates per customer usage for the Test
6 Year based on that trend indexed to the last 10-year average climate data.

7 **Q. How was the usage forecast for the three transportation service classes made for the**
8 **Test Year?**

9 A. As detailed in the testimony of Joint Petitioners' witness Emily Harlow's testimony, due
10 the specific nature of each transportation customers usage that define these three customer
11 classes (5T, 6T, 9T), it was not possible to do aggregate class level usage per customer
12 modeling. Further, these customers' usage does not tend to be as weather sensitive as usage
13 for Class 1, 2, 3, 4, 5 and 7. As a result, Ms. Harlow did a customer-by-customer specific
14 usage forecast for the Test Year.

15 **Q. How was your use per customer forecast applied by Joint Petitioners' witness Emily**
16 **Harlow to develop the total sales volumes and revenue forecasts for the Test Year?**

17 A. In her direct testimony, Ms. Harlow details the application of the monthly forecasted class
18 level usage per customer with projected number of customers as inputs into her
19 development of rate class total usage for the Test Year. Ms. Harlow then takes the
20 appropriate customer and volumes charges times the monthly usage and number of
21 customers being billed to arrive at monthly revenue for each month of the Test Year.

1 **Q. Since Joint Petitioners' witness Emily Harlow used your monthly class use per**
2 **customer to develop the total sales volumes and revenue forecasts for the Test Year,**
3 **then both the Test Year sales and revenue forecasts are normalized for the long-term**
4 **impact of climatic change on OVG customer usage?**

5 A. Yes.

6 **FINANCIAL STATEMENTS OF THE COMPANY**

7 **Q. Please identify and describe Joint Petitioners' Exhibit No. 8, Schedules REVREQ1.1**
8 **– 1.4, REVREQ6.1 - 6.14 and REVREQ5.1 – 5.2?**

9 A. Joint Petitioners' Exhibit No. 8, Schedules REVREQ1.1 - 1.4, REVREQ6.1 – 6.14 and
10 REVREQ5.1 – 5.2 present the financial statements of the Company. Schedule
11 REVREQ6.1 – 6.14 represents a comparative Statement of Income for the 12-month
12 periods ended September 30, 2022, through 2025. Schedule REVREQ1.1 – 1.4 presents
13 the comparative Balance Sheet as of September 2022, 2023, 2024, and 2025. Schedule
14 REVREQ5.1 – 5.2 presents the Statement of Cash Flows for the twelve-month periods
15 ending September 30, 2022, 2023, 2024 and 2025 respectively.

16 **Q. Does this conclude your prefilled direct testimony?**

17 A. Yes, it does.

Appendix A

Professional Experience of Gregory P. Roach

I have over 30 years of experience working in the electric, gas and water utility sectors as both a consultant and utility employee, beginning with Public Service Indiana (now Duke Energy) in January 1980, where my responsibilities were focused on transforming PSI's load forecasting processes from time series to econometric based models. In May 1982, I accepted the position of Senior Economist with the management-consulting firm of R. W. Beck and Associates ("Beck") (now part of Science Applications International Corporation, "SAIC"). I received numerous promotions through my career with Beck to the eventual position of Principal Economist. During my career at Beck, I was responsible for the management of all rates/regulatory, load forecasting and financing feasibility client engagements managed by the Indianapolis office. As such, I delivered testimony on behalf of agency, municipal and co-op clients throughout the United States related to cost of service, rate design, load forecasting, system planning, electric and gas production plant economic feasibility, revenue requirement pro-forma adjustments, production cost optimization and cost of capital to state regulatory commissions and the Federal Energy Regulatory Commission.

In May 1991 I took the position of Principal Economist with the regulatory management consulting firm of SVBK Consulting Group ("SVBK"). In that position, I was responsible for all consulting engagements executed from the Indianapolis regional office on behalf of SVBK's national utility clients. In addition to the regulatory matters that I testified to while at SVBK, I offered testimony related to merger & acquisition cost reductions/synergies, large power pool generation and transmission dispatch strategies, power pool generation/transmission pricing schemes, price

elasticity sales adjustments and retail rate impact of specific power/transmission pooling cost minimization arrangements and payments.

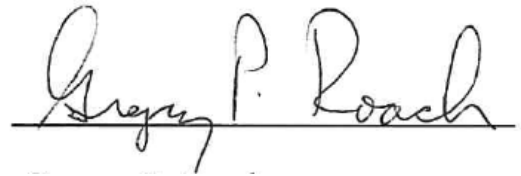
In July 1993, I became owner and president of a retail operations holding company with three franchise store outlets. In that position, I was responsible for all management, operation, sales, and financial functions of the firm.

In November 1998, I sold the retail holding company to begin operations of the Roach Consulting Group Ltd. as Principal Consultant. In that position I advised industrial and utility clients related to business intelligence systems, enterprise/manufacturing resource planning systems, customer information systems as well as general accounting systems. I also appeared as an expert witness providing testimony related to economic and punitive damages in personal injury and wrongful death legal proceedings. In July 2011, I joined the American Water Service Company as Manager of Rates and Regulation, supporting Indiana-American and Michigan-American Water Companies. In August 2014, I accepted the position of Manager of Revenue Analytics with the American Water Service Company. In November 2017, I was promoted to the position of Senior Manager of Revenue Analytics with the American Water Service Company. In April 2022, I joined the Ohio Valley Gas Company as Chief Financial Officer.

VERIFICATION

I, Gregory P. Roach, Chief Financial Officer of Petitioners Ohio Valley Gas Corporation and Ohio Valley Gas, Inc. affirm under penalties for perjury that the foregoing is true to the best of my knowledge, information, and belief.

Dated this 7th day of February 2024.

A handwritten signature in cursive script that reads "Gregory P. Roach". The signature is written in black ink and is positioned above a solid horizontal line.

Gregory P. Roach
Chief Financial Officer
Ohio Valley Gas Corporation
Ohio Valley Gas, Inc.