

**Gas Utility Five-Year Forecast
2016-2020**

**Data Submitted to the
State Corporation Commission of Virginia**

Division of Energy Regulation

August, 2016

Gas Utility Five-Year Forecast

GENERAL INSTRUCTIONS

- I. Prepare a 5-15 page narrative summary of the major trends, events and/or conditions reflected in the forecasted data submitted on pages 1-29 and S1-S5 of the attached forms.

Include in the summary a brief report on any load management, conservation, or energy efficiency programs expected to be in effect during the 5-year planning period. In the report, describe the your companies integrated least-cost planning process and provide estimates of the impact of each demand-side program on average daily load and seasonal peak loads. Also, provide results of any cost/benefit analyses and/or marginal cost studies conducted for these programs.

- II. Briefly describe the planning criteria used to determine design day and design winter requirements, and, in particular, define the parameters on which the design day calculations are based, e.g., design temperatures, relevant probability distributions, etc.
- III. Complete the attached forms according to the detailed instructions.
- IV. Provide the basic assumptions used in developing each of the forecasts presented.
- V. Provide a summary of corporate planning models and their use in developing the forecast data supplied. This includes, but is not limited to, any of the following types of models:
 1. Corporate Financial Models.
 2. Demand Forecast Models.
 3. Gas Purchasing Models.
 4. Risk Analysis Models

**DETAILED INSTRUCTIONS FOR COMPLETING THE SCHEDULES
CONTAINED IN THE
GAS UTILITY FIVE-YEAR FORECAST**

When completing the schedules according to the detailed instructions below, please follow these general guidelines:

1. All dollar amounts in this forecast should be reported in nominal terms.
2. Years should be reported on a calendar year basis, unless otherwise noted.
3. Unless otherwise stated, all definitions coincide with those found in the FERC Form No. 2.
4. Computer printouts of the completed schedules must strictly conform to those of the schedules contained in the instructions. All printouts must be reduced to 8.5 x 11 inches and remain legible.
5. Explain how historical information is reported. We suggest reporting on a booked basis as opposed to normalized or annualized.
6. Any entry into an "Other" category must be explained in a footnote.
7. Please direct any questions to David R. Eichenlaub of the Division of Energy Regulation (804) 371-9050.

Detailed Instructions

Pages 1-5:

"Heating Season" in this case is November 1 through March 31. The off-season is defined as all other times. Explain in a footnote what is included in your company's definition of each type of load. Provide the formula for calculating each data item requested if it is needed for an understanding of the data provided.

Conservation/load management (CLM) forecasts, where requested, represent the impact of utility-sponsored conservation and load management. Provide the company's best estimates of load impacts achieved through such programs. Adjusted loads are the base forecasts adjusted for CLM programs.

In the case of actual adjusted loads, the impacts of CLM programs are assumed and not expressly stated.

On the entries for sendout under design conditions (Sections III, IV & V), do not include transportation volumes in any design calculations except for the design year (Section V).

Pages 6-11:

Natural gas means either gas unmixed or any mixture of natural and manufactured gas.

Commercial and Industrial Sales may be classified according to the basis of classification (small or commercial, and large or industrial) regularly used by the respondent if such basis of classification is not generally greater than 200,000 Mcf per year or approximately 800 Mcf per day of normal requirements.

Report quantities of natural gas sold in Mcf (14.73 psia at 60° F). If billings are on a therm basis, give the Btu contents of the gas sold and the sales converted to Mcf. **If increases or decreases from previous years are not derived from report figures, explain any inconsistencies in a footnote.**

All "Sales for Resale" must be fully detailed in a footnote.

Customers should be reported on the basis of meters in addition to the number of flat rate accounts; except that where separate meter readings are added for billing purposes, one customer should be counted for each group of meters. The average number of customers means the average of twelve figures at the close of each month. **Companies serving customers outside the state of Virginia must complete page 10a in addition to page 10.**

Pages 12-15:

Provide the requested information concerning demand gas purchases and suppliers.

Page 16:

Provide the requested information concerning releases of capacity. For part A, express revenues and volumes in dollars and Mcf, respectively. The entries on lines "c" of each section should be the average rate per Mcf and should be obtained by dividing the respective entries on line "a" by those on line "b". State all rates to the nearest hundredth of a cent.

In part B, state the proportion of capacity released on-system and off-system as a percentage of total capacity released.

Pages 17-18:

For Section A, state the volume of purchased gas as finally measured for the purpose of determining the amount payable for the gas. Include current year receipts of make-up gas that was paid for in prior years. In Section B, state the dollar amount paid and previously paid for the volumes of gas shown in Section A. In Section C, state the average cost per dth to the nearest hundredth of a cent. (Average means Section B divided by Section A x 100.)

"Total Gas Purchases" should include storage injections.

Pages 19-22:

Detail all sources of total gas supply input by category on a supplier by supplier basis. Spot market purchases for a very short period may be grouped

together. System load factor should be calculated in the following manner:
System load factor = Total System inputs divided by maximum available firm inputs.

Pages 23-24:

These pages detail actual and projected delivered fuel prices on a dollar per dth basis by natural gas supply source. Provide all costs on a company basis. Average total cost should be reported on a volume-weighted basis. Explain all average cost calculations.

Pages 25-27:

This gas storage forecast is similar in form to what is found on page 220 in the FERC Form No. 2. End of season figures should be used.

Page 28:

This gas plant forecast is similar in form to what is found on pages 204-209 in the FERC Form No. 2. Include all planned/committed additions or retirements. If any specific component of the four general categories listed has an addition or retirement value in excess of \$100,000, provide details of that component in Section III.

Page 29:

This data should be **Virginia jurisdictional only** and **should not include any transportation revenues or volumes**. The Virginia jurisdictional data should be derived from the data on page 8 under Category B – Total Gas Service and **expressed in dekatherms**. The average rate is the retail revenue divided by sales. The percentage increase (III. b.) is the percentage increase from year to year in the average rate.

Instructions for Completing Five-Year Forecast Supplemental Data Forms

The data on the supplemental pages will be considered confidential.

Pages S1-S2:

All data should be on a total company basis, gas only. The format of this section generally follows that of a typical rate of return statement submitted in an annual informational filing. Where any of the "Other" categories are used, provide a footnote indicating the items included in them. An end of year rate base should be used.

Page S3:

This page need be completed only by those companies that serve customers over a multi-jurisdictional area.

All data should be Virginia jurisdictional, gas only. The format of this section generally follows that of a typical rate of return statement submitted in a rate case. Where any of the "Other" categories are used, provide a footnote indicating the items included in them. An end of year rate base should be used.

Pages S4-S5:

The data should be for the total company. When any of the "Other" categories are used, please indicate by footnote the major items contained in each entry.