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Columbia Gas® of Kentucky
A NiSource Company

October 2, 2015

Mr. Jeff Derouen
Executive Director
Public Service Commission
Commonwealth of Kentucky
211 Sower Boulevard
P.O. Box 615
Frankfort, KY 40602

RE: Case No. 2015-00084

Dear Mr. Derouen,

Enclosed for docketing with the Commission is an original and ten (10) copies of Columbia Gas of Kentucky Inc.'s Responses to the Commission's Second Set of Data Requests in the above referenced case. Should you have any questions about this filing, please contact me at 614-460-4648.

Sincerely,

Stephen B. Seiple
Assistant General Counsel

Enclosures

cc: Hon. Richard S. Taylor

I hereby certify that each response to Staff's Second Set of Data Requests is true and accurate to the best of my knowledge, information and belief, formed after a reasonable inquiry.

Stephen B. Seiple
Assistant General Counsel

Attorney for
COLUMBIA GAS OF KENTUCKY, INC.

COLUMBIA GAS OF KENTUCKY, INC.
RESPONSE TO STAFF'S SECOND REQUEST FOR INFORMATION
DATED SEPTEMBER 18, 2015

1. Refer to Columbia's Response to Staffs Initial Request for Information ("Response"), Item 5, the first page of the attached four-page spreadsheet ("the Spreadsheet") which identifies the locations for which Columbia is seeking a deviation from 807 KAR 5:022, Section 14(22)(a).

a. Describe what is meant by the term "Station Number," as found at the top of the first column. Based on this description, how many "Station Numbers" does Columbia have?

b. Describe what is meant by the term "System Number," as found at the top of the second column. Based on this description, how many "System Numbers" does Columbia have?

c. Describe what is meant by the term "System Name," as found at the top of the sixth column. Based on this description, how many "System Names" does Columbia have?

d. Describe what is meant by the term "Premise ID," as found at the top of the ninth column. Based on this description, how many "Premise IDs" does Columbia have?

e. Describe what is meant by the term "Station Location," as found at the top of the tenth column. Based on this description, how many "Station Locations" does Columbia have?

Response:

a. Station number, as used in the response, is a number used to identify the pressure control facilities at a district station. Columbia also identifies its measuring stations using a station number. Columbia has 447 station numbers associated with district stations.

b. System number is an 8 digit number that corresponds to a file number that identifies the maximum allowable operating pressure (MAOP) of a piping network. Columbia has 314 system numbers.

c. System name is an arbitrary name designated for each system. The name usually contains a town, street name, property, neighborhood, line number, or other identifying feature. Columbia has 314 System Names.

d. Premise ID is a seven digit number that identifies a collection of facilities that Columbia operates and maintains at a specific location. Columbia has 847 Premise IDs.

e. Station location was a general geographic location that was requested. Columbia has 847 premises each having a station location.

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2. Refer to Columbia's Response, Item 5, page 1 of the Spreadsheet. Lines 7 and 8 both reference Station Number 1061 and have the same Station Location, but all other identifiers, including the System Number, Customer Number, Pipe Length, Pipe Size, System Name, MAOP, Normal Operating Pressure, and Premise ID, are different. Is the Station Number 1061 accurate for both? Explain.

Response:

Yes, Station Number 1061 is accurate for both. The station number identifies the pressure control facilities at a premise. With this particular station, there are two regulator runs each supplying different systems. Please note that the Premise ID is the same for Station Number 1061.

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3. Refer to Columbia's Response, Item 5, page 2 of the Spreadsheet.

a. Lines 17 and 18 both reference Station Number 1230 and have the same Station Location, but other identifiers, including the System Number, Customer Number, Pipe Length, Pipe Size, System Name, MAOP, Normal Operating Pressure, and Premise ID, are different. Is the Station Number 1230 accurate for both? Explain.

b. Line 17, Station Number 1230, lists an MAOP of 5 and normal operating pressure of 10 psig. Are these numbers accurate? If so, explain why the operating pressure exceeds the MAOP.

c. Line 19, Station Number 1237, lists an MAOP of 10 and normal operating pressure of 100 psig. Are these numbers accurate? If so, explain why the operating pressure exceeds the MAOP.

d. Line 21, Station Number 1251 lists an MAOP of 20 and a normal operating pressure of 40 psig. Are these numbers accurate? If so, explain why the operating pressure exceeds the MAOP.

e. Line 24, Station Number 1277 lists an MAOP of 10 and a normal operating pressure of 38 psig. Are these numbers accurate? If so, explain why the operating pressure exceeds the MAOP.

f. Line 26, Station Number 1279, lists an MAOP of 10 and a normal operating pressure of 11 psig. Are these numbers accurate? If so, explain why the operating pressure exceeds the MAOP.

g. Line 36, Station Number 1405, lists an MAOP of 10 and a normal operating pressure of 35 psig. Are these numbers accurate? If so, explain why the operating pressure exceeds the MAOP.

Response:

a. Yes, Station Number 1230 is accurate for both. The station number identifies the pressure control facilities at a premise. With this particular station, there are two regulator runs each supplying different systems. Please note that the Premise ID is the same for Station Number 1230.

b. No, the normal operating pressure is incorrect. The normal operating pressure for System 32010065 supplied by station 1230 is 4 psig. The MAOP is correctly identified as 5 psig. This was a data entry error that occurred when preparing the spreadsheet.

c. No, the normal operating pressure is incorrect. The normal operating pressure for System 32050001 supplied by station 1237 is 7 psig. The MAOP is correctly identified as 10 psig. This was a data entry error that occurred when preparing the spreadsheet.

d. No, the normal operating pressure is incorrect. The normal operating pressure for System 32010176 supplied by station 1251 is 17.5 psig. The MAOP is correctly identified as 20 psig. This was a data entry error that occurred when preparing the spreadsheet.

e. No, the normal operating pressure is incorrect. The normal operating pressure for System 32010172 supplied by station 1277 is 7 psig. The MAOP is correctly identified as 10 psig. This was a data entry error that occurred when preparing the spreadsheet.

f. No, the normal operating pressure is incorrect. The normal operating pressure for System 32010175 supplied by station 1279 is 7 psig. The MAOP is correctly identified as 10 psig. This was a data entry error that occurred when preparing the spreadsheet.

g. No, the normal operating pressure is incorrect. The normal operating pressure for System 32005003 supplied by station 1405 is 7.5 psig. The MAOP is correctly identified as 10 psig. This was a data entry error that occurred when preparing the spreadsheet.

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4. Refer to Columbia's Response, Item 5, page 3 of the Spreadsheet. Line 22, Station Number 1585, lists an MAOP of 5 and a normal operating pressure of 41 psig. Are these numbers accurate? If so, explain why the operating pressure exceeds the MAOP.

Response:

No, the normal operating pressure is incorrect. The normal operating pressure for System 32010005 supplied by station 1585 is 4.5 psig. The MAOP is correctly identified as 5 psig. This was a data entry error that occurred when preparing the spreadsheet.

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5. Refer to Columbia's Response, Item 5, page 4 of the Spreadsheet.

   a. Line 5, Station Number 1693, lists an MAOP of LP and a normal operating pressure of 10 psig. Are these numbers accurate? If so, explain why the operating pressure exceeds the MAOP.

   b. Line 7, Station Number 1695, lists an MAOP of LP and a normal operating pressure of 10 psig. Are these numbers accurate? If so, explain why the operating pressure exceeds the MAOP.

Response:

a. No, the normal operating pressure is incorrect. The normal operating pressure for System 32001024 supplied by station 1693 is 10" w.c. The MAOP is correctly identified as LP. This was a data entry error that occurred when preparing the spreadsheet.

b. No, the normal operating pressure is incorrect. The normal operating pressure for System 32001007 supplied by station 1695 is 10" w.c. The

MAOP is correctly identified as LP. This was a data entry error that occurred when preparing the spreadsheet.

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6. Refer to Columbia's Response, Item 5, page 4 of the Spreadsheet. Line 17, Station No. 803523, indicates that there are no customers being served. Is this correct?

Response:

There are no customers directly served by this station; however, the piping system supplied by this station lays across open fields to other pressure control stations that subsequently supply customers in Maysville.

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7. Refer to Columbia's Response, Item 5, second sentence. Columbia states that changes in its "infrastructure since the application was filed and optimum identification of monitoring points has reduced the number of gauges sought in the deviation to 159 locations."

a. Describe the changes that occurred to Columbia's infrastructure to cause the reduction in the number of gauges sought in the deviation.

b. Explain what is meant by "optimum identification of monitoring points" and how this caused a reduction in the number of gauges sought in the deviation.

c. Does Columbia expect any further reductions in the number of gauges sought in the deviation? If so, identify the station number and explain.

d. Provide a detailed cost estimate for installing the pressure gauges at the 159 locations that Columbia has identified.

e. Provide a detailed cost estimate of the operations and maintenance expenses for the 159 pressure gauges.

Response:

a. The changes that required the reduction in the number of gauges sought for the deviation are as follows:

i. A highway relocation required the installation of a new station and retirement of station 1169. This was a single supply of a small industrial park. As part of the relocation two single supply systems were combined into one. Columbia is still seeking a deviation for the gauge for the combined system 32010051.

ii. A customer paid Columbia to relocate a district station supplying a small pipeline system to accommodate road construction. The new station and pipeline were tied into Columbia's System number 32010187 that already had an existing pressure monitoring point.

iii. An aging district station supplying a small system (32010121) was retired and the outlet piping uprated and combined into another small system. Columbia is no longer

seeking a deviation for System 32010121, but is still seeking a deviation for the combined system (32010135).

iv. Columbia installed a gauge at Station 1143 supplying System 32010190 and is no longer seeking a deviation for that piping system.

v. Columbia installed a remote pressure monitoring unit on Station 1477 in Germantown. This unit monitors both the inlet and outlet systems to this station. Columbia is no longer seeing a deviation for either the inlet (32024002) or outlet (32024001) systems to Station 1477.

vi. A project in Athens was planned and is currently under construction that will include a remote pressure monitoring site that will eliminate the need for a deviation for System 32046002.

b. The optimum identification of monitoring points just means choosing the location such as in item v above that can monitor two pressure systems at the same time.

c. Before the end of the year, Columbia plans to retire station 1160 in Lexington and uprate the downstream system to be commensurate with the upstream system eliminating the need

for a deviation for one more pressure recording instrument. Columbia has no other plans to reduce the number of gauges sought in the deviation.

d. See attached cost detail. The cost detail includes the reduction of the additional pressure recording instrument identified in response c. above.

e. See attached cost detail. The cost detail includes the reduction of the additional pressure recording instrument identified in response c. above.

Capital Cost Detail	
Number of Instruments	158
Estimated Unit Cost of Instrument	$1,800
Estimated Miscellaneous Material per Unit	$50
Estimated Installation Labor Per Unit	$158
Estimated Overheads	$522
Subtotal	$2,530
Total Capital Investment	$399,740

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8. Refer to Columbia's Response, Item 8. Of the locations for which a deviation is sought, provide which locations and the number of pressure surveys per location that Columbia conducted during winter operations for each of the previous five winters. Explain how the presence of permanent pressure-recording gauges, as required in 807 KAR 5:022, Section 14, would affect Columbia's winter operations planning at these locations.

Response:

The presence of permanent pressure recording gauges would not change Columbia's winter operations planning because Columbia seeks more immediate feedback on how its systems are operating under peak conditions. In Columbia's vernacular, a single pressure survey during the winter consists of pressure readings from perhaps 200-250 sites. As stated in response to Staff's Request Set One No. 08, the results are noted on forms, reviewed and compared to Columbia's infrastructure model. The notes are not accumulated for retention.

The surveys allow Columbia to monitor its systems and, permanent pressure gauges would not change Columbia's winter operations survey procedures to ensure the reliability of its operating system.

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9. Refer to Columbia's Response, Item 9. Columbia states that its station design considers the following items to comply with 49 CFR 192.741(b): 1) the pressure differential across the district station; 2) the number of valves in the by-pass; 3) the capacity of the station; 4) the presence of internal relief on the regulators; and 5) the presence of customers having large volume measurement equipment on the system. Explain each item and identify the threshold of each item at which Columbia determines a recording gauge is necessary. Explain whether Columbia considers the number of customers supplied.

Response:

Small distribution systems could be accidentally overpressured due to minor leakthrough in a district station's by-pass valve. In general new customers have pilotless ignition on their gas appliances so no pilot load exists to absorb minor leakthrough. The most vulnerable situations are:

1. A system having fewer than 100 customers and a high pressure differential across the district regulator station.
2. A system having fewer than 100 customers and a high pressure differential with only one valve in the by-pass.
3. A system having fewer than 100 customers with a high capacity station designed for a future load.
4. A system having fewer than 100 customers with no other pressure relief.

Columbia installs a redundant relief valve on systems vulnerable to this kind of over-pressure potential. A pressure recording chart would be recommended on a single supply system that was considered vulnerable to overpressure without a redundant relief valve.

Some large volume customers have either billing charts that capture a system's pressure or electronic measurement. Columbia's M&R techs collect the measurement data either semi-monthly or monthly. They observe the charts or run an audit trail to look for abnormal pressure readings. A single supply system having a customer with this type of measurement would not ordinarily be considered for an additional gauge at the district station.