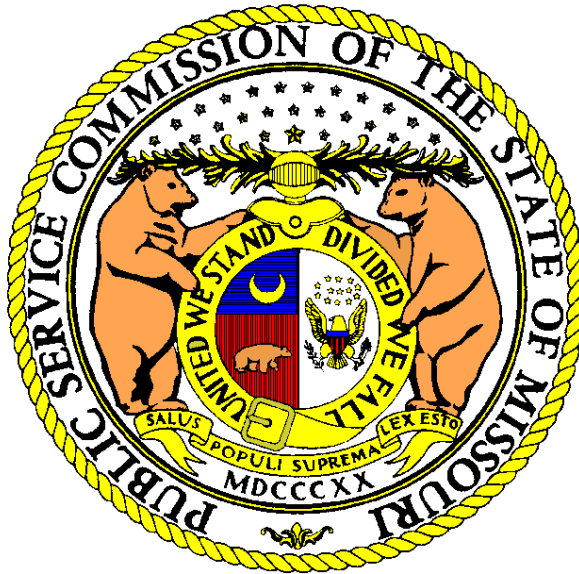


# MISSOURI PUBLIC SERVICE COMMISSION

## STAFF PRELIMINARY REPORT



### AN INVESTIGATION INTO THE INTERRUPTION OF SUMMIT NATURAL GAS OF MISSOURI, INC.'S GAS DELIVERIES IN THE LEBANON, MISSOURI REGION

FILE NO. GO-2018-0195

MARCH 21, 2018

\*\* Denotes Confidential Information \*\*

## I. Executive Summary

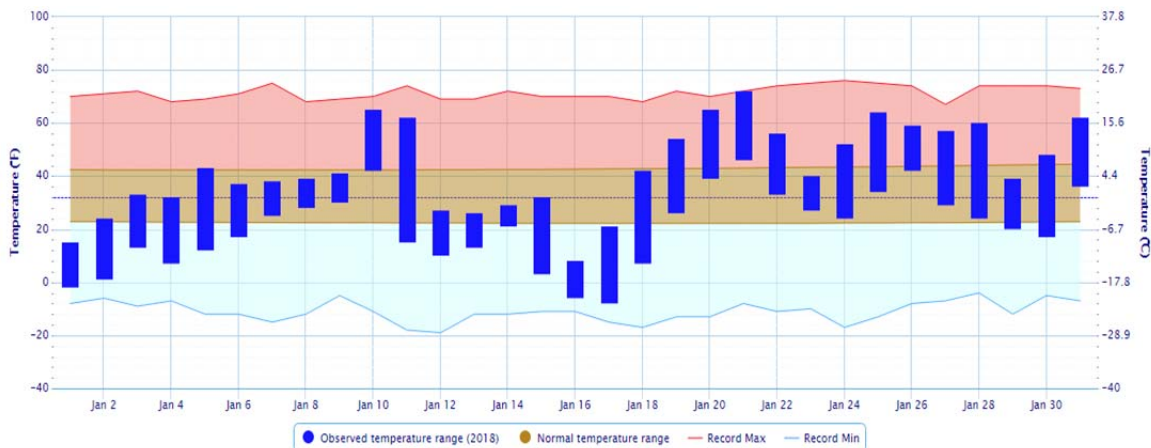
On January 18, 2018, the Commission issued an Order Opening An Investigation, noting “[i]t has come to the Commission’s attention that Summit Natural Gas of Missouri, Inc. (“Summit” or “Company”) has recently interrupted gas deliveries to certain transportation customers in its Rogersville service division, including the Lebanon, Missouri area.” The Commission directed Staff to investigate to determine whether there were any violations of tariff provisions, legal requirements or reliability standards. Staff provides this report of its investigation and recommendations.

No evidence was found that violations of pipeline safety regulations caused or contributed to the customer interruptions in January 2018. Further, it appears Summit complied with its tariffs. However, the tariffs are general in nature and should be clarified to more clearly reflect Summit’s internal procedures. Therefore, as discussed in more detail below, Staff recommends Summit improve its customer communication and education efforts, and review and modify its tariffs and contracts to provide consistency and details related to curtailment processes and requirements.

Staff received some additional information for which additional follow-up is required. Staff will provide a final report either summarizing that information and any further recommendations or indicating no new information was gleaned from that follow-up.

## II. Summary of Events

January 2018 experienced several days that were below normal. As an example, the National Weather Service January 2018 Monthly Climate Summary for Springfield, Missouri follows:



Summit was able to meet capacity requirements by reducing the demands of the transportation customers. Summit did not curtail any firm service customers. All of the customers that were

On January 3, 2018 through January 4, 2018, and again on January 16, 2018 through January 18, 2018, Summit curtailed the following customers.

Per the response to Staff Data Request No. 0002, all curtailed customers were allowed to continue to heat their respective facilities and each customer was billed at its normal rate for any gas used during the curtailment. Summit further noted in response to Staff data requests that no meters were shut off due to interruption.

Staff also received comments from \*\* \_\_\_\_\_ \*\* (“curtailed customer”) stating, \*\* \_\_\_\_\_

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daily quantity and provides no details regarding curtailment or interruption, and there is no indication the applicable tariff provides for interruptible service. The curtailed customer identifies the following concerns: 1) Greater transparency in Summit's contracting practices is needed; 2) Greater transparency of changes in Summit's capacity is needed to improve confidence in the business community regarding adequacy and reliability of service; 3) The Commission is encouraged to evaluate Summit's curtailment plans.

### **III. Summary of Summit's System**

Summit owns and operates \*\* \_\_\_\_\_

\_\_\_\_\_.<sup>1</sup> \*\* Summit provides natural gas service to several cities or portions of counties in the Gallatin, Warsaw, Lake of the Ozarks, Rogersville, Lebanon and Branson areas. The Rogersville Division<sup>2</sup> interconnects with Southern Star Central Gas Pipeline ("SSC"). SSC is an interstate pipeline regulated by the Federal Energy Regulatory Commission ("FERC"). This interconnection is the sole source of pipeline supply for the Rogersville Division. A map of the certificated area for the Rogersville Division is located on Sheet No. 3C of Summit's tariff. A simplified and generalized map of Summit's pipeline that serves the Rogersville Division is available at <https://psc.mo.gov/NaturalGas/>.<sup>3</sup>

Summit operates a natural gas compressor \*\* \_\_\_\_\_

\_\_\_\_\_. \*\* This compressor can increase the pressure of natural gas flowing on Summit's transmission pipeline to Lebanon, Missouri.

#### Summary of Tariff

Summit currently has two specific tariff provisions that allow the Company to curtail or interrupt customers served on the transportation rate schedule.

First, on Tariff Sheet No. 31 of Summit's transportation service rate schedule, the character of service states:

Service provided under this schedule shall be subject to interruption or curtailment due to system capacity or supply constraints, to be determined in the Company's sole discretion reasonably exercised in accordance with the Company's Gas Rules and Regulations and with the terms and, if applicable, conditions of the Company's transportation tariff.

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<sup>1</sup> This data is based on annual reports submitted by Summit Natural Gas of Missouri for CY 2016.

<sup>2</sup> Lebanon, MO is within the Rogersville Division.

<sup>3</sup> This map is provided by the Missouri Public Service Commission for informational purposes only, and is not to be relied on for actual locations.

The transportation rate schedule also provides on Tariff Sheet No. 38 under Capacity Interruptions that, except for an emergency, Summit will endeavor to notify the customers prior to interruption. These tariff provisions allow Summit to interrupt or curtail usage on Summit's distribution system for transportation customers due to system capacity or supply constraints.

Further, on Tariff Sheet No. 87 Summit's Emergency Curtailment Plan states:

In the event curtailment is warranted, commercial and industrial customers having facilities wherein the interruption thereof will not imperil human life or health will be interrupted first in a sequence of largest to smallest. Service will be restored in the reverse order.

Per Summit's response to Staff Data Request No. 0009 Summit considered the curtailment that occurred on January 3, 2018 and January 16, 2018 to be an emergency situation within the scope of Summit's Emergency Response Plan.<sup>4</sup> However, Summit also mentioned in Staff Data Request No. 0009 the Company does not consider the curtailment to have been a reportable incident under 4 CSR 240-40.020(12)(A) because the curtailment did not arise from a safety related condition. This assumption is perplexing. 4 CSR 240-40.020(12)(A) is the requirements to report safety related conditions. A reportable incident is not the same thing as a safety related condition. The definition of a federal reportable incident is in 4 CSR 240-40.020(2)(C). The definition of a Missouri reportable incident is in 4 CSR 240-40.020(4). Each of these has specific reporting requirements, and each also contains a requirement to report an event that is significant in the judgement of the operator even though it did not meet the other criteria. For these reasons, Staff's Safety Engineering Unit asked Summit specific safety-related questions.

Summit's internal procedure to implement the emergency curtailment plan, in pertinent part, states:<sup>5</sup>

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<sup>4</sup> Staff Data Request No. 0009.

<sup>5</sup> Provided in response to Staff Data Request No. 0010.

## Staff Investigation

a. Procurement Analysis Unit

According to SSC's website, the Rogersville interconnection has 22,000 MMBtu per day of operating and design capacity. Also on SSC's website, the Rogersville Division is stated to have 19,100 MMBtu per day of Maximum Daily Quantity (MDQ) transportation capacity at the interconnection with SSC at that SSC delivery point.

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\_\_\_\_\_\* Therefore, from a gas procurement perspective, Summit had adequate interstate pipeline capacity for the coldest days experienced during the curtailment events.

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\_\_\_\_\_\* So the lower pressures experienced are not attributable to constraints from a gas procurement perspective.

## b. Safety Engineering Unit

Staff considered instances where there may have been an event necessitating or causing a reduction in pipeline operating pressures and sent data requests to Summit to investigate if violations of Commission pipeline safety regulations<sup>6</sup> caused or contributed to the customer interruptions in January 2018. Applicable regulations considered in this investigation were:

<sup>6</sup> Pipeline Safety Regulations refers to 4 CSR 240-40.020, 4 CSR 240-40.030 and 4 CSR 240-40.080.

1. 4 CSR 240-40.020(3): Immediate Notice of Federal Incidents<sup>7</sup> and 4 CSR 240-40.020(4): Immediate Notice of Missouri Incidents<sup>8</sup>

Certain releases of natural gas are reportable to the Commission as incidents if the volume of unintentional gas loss and/or cost of gas released meet reporting requirements.<sup>9</sup> In response to Staff data requests, Summit indicated that there were no unintended releases of gas from Summit's transmission or distribution pipelines providing gas to Lebanon, Missouri during December 2017 or January 2018.<sup>10</sup> Additionally, Summit stated that it did not consider the curtailment to be a reportable incident.<sup>11</sup>

Since there were no unintended releases of gas during the time period in question, and it was not otherwise considered a reportable incident in the judgement of the operator, Staff did not find evidence of violations of the reporting requirements of 4 CSR 240-40.020(3) or 4 CSR 240-40.020(4).

2. 4 CSR 240-40.020(11)(C): Changes

Certain changes, including construction or any planned rehabilitation, replacement, modification, upgrade or update to a facility other than a section of line pipe that costs ten million dollars or more require notification to the Commission before the event occurs.<sup>12</sup>

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<sup>3</sup> \*\* Summit's response to Staff's Data Request No. 0021 indicated that the new compressor total project cost is estimated at \$100,000.

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<sup>7</sup> Federal Incidents are defined in 4 CSR 240-40.020(2)(C) as any of the following events: 1. An event that involves a release of gas from a pipeline and that results in one or more of the following consequences: A. A death or personal injury necessitating inpatient hospitalization; or B. Estimated property damage of fifty thousand dollars (\$50,000) or more, including loss to the operator and others, or both, but excluding the cost of gas lost; or C. Unintentional estimated gas loss of three (3) million cubic feet or more; or 2. An event that is significant, in the judgment of the operator, even though it did not meet the criteria of paragraph (2)(C)1.

<sup>8</sup> A Missouri Incident is an event that 1. An event that involves a release of gas involving the operator's actions or pipeline system, or where there is a suspicion by the operator that the event may involve a release of gas involving the operator's actions or pipeline system, and results in one (1) or more of the following consequences— A. A death; B. A personal injury involving medical care administered in an emergency room or health care facility, whether inpatient or outpatient, beyond initial treatment and prompt release after evaluation by a health care professional; or C. Estimated property damage of ten thousand dollars (\$10,000) or more, including loss to the gas operator or others, or both, and including the cost of gas lost; or 2. An event that is significant, in the judgement of the operator, even though it did not meet the criteria of paragraph (4)(A)1.

<sup>9</sup> An unintentional estimated gas loss of 3 million cubic feet or more in 4 CSR 240-40.020(2) definition of Federal Incident or total cost including lost gas of \$10,000 or more for notification of Missouri incidents in 4 CSR 240-40.020(4).

<sup>10</sup> Company response to Staff Data Request No. 0018.

<sup>11</sup> Company response to Staff Data Request No. 0009.

<sup>12</sup> 4 CSR 240-40.020(11)(C)1.

<sup>13</sup> Company response to Staff Data Request No. 0014.4.

Since Summit's estimated cost for the new compressor project is well below the reporting requirement, Staff did not find evidence of violation of the reporting requirements of 4 CSR 240-40.020(11)(C)1.

### 3. 4 CSR 240-40.020(12): Reporting Safety-Related Conditions<sup>14</sup>

Safety-related conditions must be reported to the Commission unless corrected by repair or replacement within 5 working days after the day a representative of the operator first determines that the condition exists.<sup>15</sup> Summit's responses to Staff data requests asking if Summit was aware of any constraints (e.g. leaks, on-going repairs, defects, safety-related conditions) on its pipelines serving Lebanon, Missouri during December 2017 or January 2018 indicated that it was not aware of any constraints that would have prevented it from operating at its Maximum Allowable Operating Pressure (MAOP)<sup>16</sup> on either its transmission pipeline to Lebanon, Missouri<sup>17</sup> or its Lebanon, Missouri distribution system.<sup>18</sup> Additionally, Summit's responses indicated that MAOPs of the transmission<sup>19</sup> and distribution<sup>20</sup> pipelines serving Lebanon, Missouri had not been exceeded.

Since Summit was not aware of any events that would constitute a safety-related condition during the time period in question, Staff did not find evidence of violation of the reporting requirements of 4 CSR 240-40.020(12).

### 4. 4 CSR 240-40.030(4)(CC): Protection Against Accidental Overpressuring

Commission pipeline safety regulation 4 CSR 240-40.030(4)(CC) requires among other things that with certain exceptions,<sup>21</sup> each pipeline that is connected to a gas source so that the MAOP could be exceeded, as the result of pressure control failure or some other type of failure, must have pressure relieving or pressure limiting devices that meet the

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<sup>14</sup> The list of safety-related conditions in 4 CSR 240-40.020(12) includes general corrosion that has reduced the wall thickness of a pipeline operating at a hoop stress of 20% or more of its specified minimum yield strength to less than that required for the maximum allowable operating pressure, localized corrosion pitting to a degree where leakage might result, unintended movement or abnormal loading by environmental causes, such as an earthquake, landslide or flood that impairs the serviceability of a pipeline, any material defect or physical damage that impairs the serviceability of a pipeline that operates at a hoop stress of 20% or more of its specified minimum yield strength, any malfunction or operating error that causes the pressure of a pipeline to rise above its maximum allowable operating pressure plus allowable build-up, any safety-related condition that could lead to an imminent hazard and causes (either directly or indirectly by remedial action of the operator) 20% or more reduction in operating pressure or shut-down of operation of a pipeline.

<sup>15</sup> 4 CSR 240-40.020(13)(A), excludes Saturday, Sunday and federal holidays.

<sup>16</sup> Maximum Allowable Operating Pressure (MAOP) means the maximum pressure at which a pipeline or segment of pipeline may be operated under 4 CSR 240-40.030.

<sup>17</sup> Company response to Staff Data Request No. 0016.

<sup>18</sup> Company response to Staff Data Request No. 0017.

<sup>19</sup> Company response to Staff Data Request No. 0016.

<sup>20</sup> Company response to Staff Data Request No. 0017.

<sup>21</sup> Exceptions are referenced to 4 CSR 240-40.030(DD), Control of the Pressure of Gas Delivered from Transmission Lines and High-Pressure Distribution Systems to Service Equipment.



requirements of (4)(EE)<sup>22</sup> and (FF)<sup>23</sup>. \*\*

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Since Summit took precautions against over-pressurization during times when CNG was used as a supply source, Staff did not find evidence that Summit violated 4 CSR 240-40.030(4)(CC) in its efforts to maintain system supply.

5. 4 CSR 240-40.030(13)(S): Pressure Limiting and Regulating Stations – Telemetry or Recording Gauges

Commission pipeline safety regulation 4 CSR 240-40.030(13)(S) requires among other things that each distribution system providing service to more than 1,000 customers be equipped with graphic telemetry, recording pressure gauges or another device to indicate the gas pressure in the district, and that if there are indications of abnormally high or low pressures, the regulator and auxiliary equipment must be inspected and the necessary measures employed to correct any unsatisfactory operating conditions.

In response to Staff data requests, Summit indicated that there was one brief icing event involving a regulator at the Lebanon, Missouri City Gate on January 2, 2018. Summit stated that it was detected by Summit's Supervisory Control and Data Acquisition (SCADA) system and quickly remediated. Summit further stated that because of the brief duration of the problem, customers on the distribution system were not adversely affected and no customer outages attributed to this event.<sup>26</sup> Additionally, Summit stated that in response to the icing event, Summit installed larger filtration devices upstream of the regulators to eliminate moisture and also installed heaters on the supply gas to the regulators and the monitor pilot regulators. Summit stated that it is currently evaluating other City Gates for the potential of similar icing issues, and that no such issues have occurred.<sup>27</sup>

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<sup>22</sup> 4 CSR 240-40.030(4)(EE) provides the requirements for design of pressure relief and limiting devices.

<sup>23</sup> 4 CSR 240-40.030(4)(FF) provides required capacity of pressure relieving and limiting stations.

<sup>24</sup> Company response to Staff Data Request No. 0014.

<sup>25</sup> Company response to Staff Data Request No. 0014.1.

<sup>26</sup> Company response to Staff Data Request No. 0019.

<sup>27</sup> Company response to Staff Data Request No. 0019.1.

Since Summit had the required monitoring equipment to indicate the gas pressure in the district and since Summit took actions to correct unsatisfactory operating conditions, Staff did not find evidence that Summit violated the requirements of 4 CSR 240-40.030(13)(S).

Some information provided in response to data requests in this case refer to installation of a new compressor. During the next routine pipeline safety inspection of Summit in Lebanon, Missouri, SEU Staff will inspect the new compressor for compliance with applicable requirements of 4 CSR 240-40.030.<sup>28</sup>

The SEU Staff has no recommendations to Summit at this time. In the event SEU discovers safety related concerns during its routine safety inspections, it will address any such concerns in accordance with department procedures.

c. Tariff/Rate Design Unit

Staff concludes that based on the system conditions in the time frame of January 3-4, 2018 and January 16-18, 2018 under the provisions of Tariff Sheet No. 31 there is no evidence that Summit was unreasonable in its exercise of discretion to curtail customers.

Staff concludes that based on the system conditions in the time frame of January 3-4, 2018 and January 16-18, 2018, under the provisions of Tariff Sheet No. 87 there is no evidence that Summit acted unreasonably in its interruption of customers, to the extent that the curtailment event is interpreted to have fallen under the Emergency Curtailment Plan Provisions.<sup>29</sup>

Whether to interpret the supply disruption event as occurring under sheet 31 or 87 is confused by language contained in Summit's internal procedures to implement the emergency curtailment plan. While "Interruptible Transport" is listed as the first Group Class to be subject to potential curtailment under the internal plan outlining the process to implement Sheet 87, the plan also states that prior to implementing the curtailment of firm service loads, concurrent efforts will be taken to reduce Summit's and customers' demand. These efforts would reasonably include curtailment of interruptible customers pursuant to Sheet 31.

While, in Staff's opinion, Summit has not violated its tariff, it is Staff's opinion that Summit could have better informed its customers of the curtailment process. Therefore, Staff recommends Summit prepare and provide to nonresidential customers a document better describing the implementation of Emergency Curtailment Plan, and/or revise Tariff Sheet No. 87

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<sup>28</sup> 4 CSR 240-40.030 (4)(M), (4)(N), (4)(O), (4)(P), (4)(Q), (4)(R), (5)(E), (9)(E), (10)(C), (12)(C), (13)(P) and (13)(Q) contain design, construction, welding, cathodic protection, testing and operation and maintenance requirements for compressor stations.

<sup>29</sup> \*\*

to include the following language based on the current internal document provided in response to Staff Data Request No. 0010:

A. In the event curtailment is warranted, nonresidential customers having facilities wherein the interruption thereof will not imperil human life or health will be interrupted generally in the following order \*\*

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d. Customer Experience Department

Staff submitted data requests to Summit to obtain detailed information on the effect upon customers with non-interruptible service who had contacted Summit's Call Center on January 2, 2018, regarding an interruption of service. The response to Data Request No. 0023 provided information on those customer calls including the rate class, call date and the arrival and departure dates of a service technician and what condition was found at the customer's address.

[illegible]

While these customers were not subscribed to an interruptible tariff, the operational problems experienced by the system did affect a number of other customers in the form of low pressure service.

The Tariff/Rate Design Unit section of this report makes a recommendation that Summit provide information to its non-residential customers that provides greater detail on its Emergency Curtailment Plan. Tariff sheets, contracts and internal documents reviewed by Staff do not all provide the same level of detail and can lead to customers not fully understanding the requirements of their contracted level of service. Staff recommends Summit develop more detailed consistent documents to inform its customers of the curtailment processes and requirements. These specifications need to be fully discussed with prospective customers before executing contracts.