



505 Nicollet Mall  
PO Box 59038  
Minneapolis, MN 55459-0038

April 12, 2019

Mr. Daniel Wolf  
Executive Secretary  
Minnesota Public Utilities Commission  
121 7<sup>th</sup> Place East, Suite 350  
St. Paul, MN 55101-2147

**VIA E-FILING**

**RE: In the Matter of a Commission Inquiry into the Impact of Severe Weather in  
January and February 2019 on Utility Operations and Service**

**Initial Comments**

**Docket No. E,G-999/CI-19-160**

Dear Mr. Wolf:

CenterPoint Energy Resources Corp., d/b/a CenterPoint Energy Minnesota Gas, ("CenterPoint Energy," the "Company") respectfully submits the attached comments in response to the Notice of Comment Period issued by the Minnesota Public Utilities Commission ("Commission") on March 18, 2019. The Notice of Comment Period requested all utilities provide information regarding the impact of recent cold weather on utility operations. CenterPoint Energy submits the following information in response to the Commission's request for information as it pertains to natural gas utilities.

**Natural Gas Reinforcement Projects**

The Commission requested that CenterPoint Energy provide a written account of the natural gas reinforcement projects it has planned in the two areas where it deployed compressed natural gas ("CNG") trailers. During the extreme weather in January CenterPoint Energy deployed two CNG stations near the communities of Richfield and Cambridge, Minnesota, to supply the system with supplemental natural gas in the event system pressures dropped below required operating pressures.

As part of our ongoing system evaluation, the Company had identified a portion of the Cambridge system as a potential concern that required additional planning to prepare for the extreme weather. A low-density neighborhood near Cambridge is served by a two-inch main and our engineers were aware that the gas pressure at the end of the system would fall during extreme cold weather. With temperatures forecasted to be well-below zero, engineering determined it was prudent to site and staff a temporary CNG station in this area to bolster the

system if pressures dropped below acceptable levels. In the end, additional supply was not required. In 2019, the Company will install approximately 800 feet of four-inch diameter main in that area that will operate at the typical system pressure of 50 pounds per square inch ("psi"). The additional pipe will reinforce the Cambridge system and the system will be able to better maintain pressure during future cold weather events without the need for temporary CNG supply.

Similar to the area in Cambridge, a particular area near our Richfield system was also identified as a concern leading up to the cold weather. Last year our system modeling showed a potential low-pressure problem in the area. Additional pressure testing validated that the pressures dropped at this system point during colder weather. As a result, engineering determined a temporary CNG station should be placed at the low pressure point that occurred between two feeder pipes. The station was used for approximately one hour each day on January 30 and January 31 to sustain operating pressures above five psi during the weather events that occurred on those dates. To reinforce the Richfield system and rectify the pressure issues the Company will install approximately 500 feet of 4-inch main that will operate at 10 psi. The reinforcement will supplement the existing piping so that temporary supplies will not be necessary for future weather events.

#### **Curtailment Activity During the Cold Weather Period**

Each natural gas utility was asked to report on curtailment activity during this weather event. CenterPoint Energy called a full curtailment from January 28 through February 1, 2019. Approximately 1,600 customers were curtailed, and approximately 600 (38 percent) of those customers did not comply with full curtailment. The customers who had unauthorized usage were all subject to, and billed, curtailment penalties. The penalties assessed totaled approximately \$1 million.

The Commission also requested the percentage of curtailable customers the utility is able to monitor in real time. The Company does not have equipment that can read interruptible meters concurrent with the customers' usage. Rather, our meter reading equipment provides after-the-fact usage, so we receive customer usage information one day after the usage occurred.

#### **Root Cause of Curtailment Non-Compliance**

As part of our post-curtailment practice, Company representatives investigate every instance of non-compliance to determine the cause of the unauthorized usage. At this point in our process the Company has identified the following factors that contributed to customer non-compliance with full curtailment:

**Table 1: Root Causes of Curtailment Non-Compliance and Associated Remedies**

<b>Cause</b>	<b>Approximate Percentage of Customers Affected</b>	<b>Remedy</b>
1) Customer Back-Up Systems Experienced Mechanical Failures: Customer systems had moisture or regulators and valves that froze or malfunctioned	36%	Physical failures are being addressed by the customers or were fixed during the curtailment event.
2) Customer Staffing: Customers did not have proper staffing on-site at start of curtailment so were late in curtailing usage or never curtailed	26%	Company will reiterate curtailment requirements with customers.
3) Customer System Modifications: Customers either pulled their backup systems or added equipment that only runs on natural gas and is not interruptible	11%	Customers will be assessed and switched to firm service where available. Customers who do not have firm service available to them (e.g., customers behind constrained points) will be required to install a backup system or obtain firm capacity.
4) Fuel Shortages: Customers used their backup fuels faster than expected or experienced delays in refueling	6%	Company representatives will assist customers to determine appropriate backup supply volumes.
5) Communication Issues: Customers did not provide the Company the correct curtailment contact information	5%	Company will collect the correct contact information.
6) Electric Curtailments: Customers were also curtailed from electricity usage but their backup systems could not interrupt from both fuels and customers made the choice to burn natural gas	Less than 1%	Customers will be required to install backup modifications to prevent further issues or move to firm service.
7) Cause Not Yet Determined: Customer has not yet responded to Company request	16%	Company will continue to follow up as necessary.

The Company will also continue to assess new and existing customers to ensure that they meet the interruptible tariff requirements and are able to either process-interrupt or switch to a functioning backup system.

### **Commission Communication During Cold Weather Events**

The Commission requested utilities to explain whether the Commission could help convey messages to the public during polar vortex-type events. Generally, during times of high customer demand due to cold weather, the Company has not had reason to issue blanket communications to all our customers because the issues that typically arise are point-specific, and the issues, such as a frozen regulator, do not affect large numbers of customers. Interruptible customers receive curtailment phone calls and have access to general curtailment information on our website alerting them to curtailments during periods of high usage, but those messages are also specific to the situation and the customer. If the Commission were to issue broad statements about customer usage or system constraints the Company is concerned that the statements could cause customer confusion or anxiety. Unless an issue that occurs that affects all natural gas customers statewide, in which case it might be helpful for the Commission to issue a press release or other wide-reaching communications, the Company will continue to generate customer communications on an as-needed basis. The Company will also attempt to ensure that all state agencies that could receive customer calls regarding service issues during peak-day events have the Company's contact information so that agency representatives can encourage customers to call the Company directly to speak with specialists who can dispatch employees as necessary to investigate particular situations.

### **Lessons Learned and Best Practices for Weather Event Planning**

The Commission requested utilities to provide an account of lessons learned and steps taken to help prepare for the next severe weather event. First and foremost, the Company believes that robust planning is the most important factor in preparing for, and executing during, extreme weather events. The Company's design-day analysis is the first, and perhaps most important, tool used to ensure we are adequately prepared to serve all firm needs under peak load conditions. Our design day model and peak day forecast were sufficient in that the Company had secured sufficient entitlement and supply (both upstream and peaking) to serve all firm load during the weather event. The Company will continue to work with stakeholders to ensure our forecasting models are incorporating the variables that could affect peak-day usage. The Company's underground storage, LNG supply and propane peaking facilities also provide invaluable tools that allow us to quickly supplement the system as needed to manage the demand.

Equally as important to our entitlement planning is our distribution system planning that allows us to identify our system pinch-points and monitor low-pressure areas as the design-day event is occurring. This identification of low pressure areas allowed us to temporarily stage the CNG stations in Richfield and Cambridge so that natural gas was available at the exact point that could have required supplemental supply to increase operating pressures. The Company will continue to model system flows and investigate potential problems using pressure recorders so that we can prioritize necessary system upgrades and minimize potential pressure issues on our system. This modeling is especially important so that we can identify and monitor trends in increased usage that can occur over time behind certain gate stations.

During the actual events the Company instituted emergency procedures, including hourly calls for all operations management personnel, so that we could prioritize technician responses and identify emerging issues. Communication among all Company departments and also with the interstate pipelines and suppliers is imperative because many factors outside of the Company's control can affect system performance. The Company will continue to utilize the emergency planning organization it utilized during these events. At all times the Company prioritizes the safety of our customers and employees, and we have implemented procedures so that our employees operate safely under extreme conditions.

Finally, the Company will continue to review the unauthorized usage that occurred during the curtailments and we will assess whether the interruptible customers that did not interrupt can satisfy the tariff conditions and either utilize backup systems or interrupt their processes when curtailments are called. Customers who cannot interrupt will be moved out of interruptible to firm classes so that we can adequately plan for their usage during peak-day events.

### **EFVs**

The Commission also specifically asked about the functioning of excess flow valves ("EFVs") and regulators and whether the utilities learned anything that could be used to prevent natural gas outages in the future. The Company did experience excess flow valve-related issues associated with some newer construction locations and after investigating the cause we have attributed the issues to the effects of moisture trapped within the piping systems. Moisture can be introduced within newly installed pipe during the construction process and migrate at times of high gas flow. Moisture in the system can cause EFVs to false trip or freeze, both of which stop the flow of gas within the service line. Efforts are underway to institute procedures, equipment and training to attempt to eliminate moisture intrusion into pipelines at the time of pipeline installation. These efforts should minimize the adverse effects on these valves due to moisture.

Please contact me if you have any questions regarding this filing.

Sincerely,

/s/ Amber S. Lee  
Director Regulatory Affairs  
(612) 321-4625  
[Amber.Lee@CenterPointEnergy.com](mailto:Amber.Lee@CenterPointEnergy.com)

C: Service List

STATE OF MINNESOTA                    )  
  ) ss.  
COUNTY OF HENNEPIN                )

Marie M. Doyle, being first duly sworn on oath, deposes and says she served the attached Initial Filing of CenterPoint Energy in Docket No. G-008/M-19-160 via e-filing to the Minnesota PUC as well as those requesting electronic service on the service list and to all others on the service list via U.S. Mail at the City of Minneapolis.

\_\_\_\_\_  
/s/  
Marie M. Doyle

Subscribed and sworn to before me  
this 12th day of April, 2019.

\_\_\_\_\_  
/s/  
Melodee S. Carlson Chang, Notary Public  
My Commission Expires January 31, 2024

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Tamie A.	Aberle	tamie.aberle@mdu.com	Great Plains Natural Gas Co.	400 North Fourth Street  Bismarck, ND 585014092	Electronic Service	No	OFF_SL_19-160_Official
Kristine	Anderson	kanderson@greatermngas.com	Greater Minnesota Gas, Inc.	202 S. Main Street  Le Sueur, MN 56058	Electronic Service	No	OFF_SL_19-160_Official
Alison C	Archer	aarcher@misoenergy.org	MISO	2985 Ames Crossing Rd  Eagan, MN 55121	Electronic Service	No	OFF_SL_19-160_Official
Brenda A.	Bjorklund	brenda.bjorklund@centerpointenergy.com	CenterPoint Energy	505 Nicollet Mall  Minneapolis, MN 55402	Electronic Service	No	OFF_SL_19-160_Official
Joe	Brophy	jbrophy@efgroupplc.com	Centra Pipelines Minnesota Inc.	Energy Fundamentals Group LP 2324 Main Street Loondon, ON N6P1A9  CANADA	Electronic Service	No	OFF_SL_19-160_Official
Aakash	Chandarana	Aakash.Chandarana@xcelenergy.com	Xcel Energy	414 Nicollet Mall  Minneapolis, MN 55401	Electronic Service	No	OFF_SL_19-160_Official
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1800  St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_19-160_Official
Joseph	Dammel	joseph.dammel@ag.state.mn.us	Office of the Attorney General-RUD	Bremer Tower, Suite 1400 445 Minnesota Street St. Paul, MN 55101-2131	Electronic Service	No	OFF_SL_19-160_Official
Seth	DeMerritt	Seth.DeMerritt@wecenergygroup.com	MERC (Holding)	700 North Adams PO Box 19001 Green Bay, WI 543079001	Electronic Service	No	OFF_SL_19-160_Official
Laura	Demman	laura.demman@nngco.com	Northern Natural Gas Company	1111 S. 103rd Street  Omaha, NE 68125	Electronic Service	No	OFF_SL_19-160_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Ian	Dobson	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_19-160_Official
Linda A.	Farquhar	linda_farquhar@transcanda.com	Great Lakes Gas Transmission Company	700 Louisiana Street, Suite 700  Houston, TX 77002-2700	Electronic Service	No	OFF_SL_19-160_Official
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 280  Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_19-160_Official
Bruce	Gerhardson	bgerhardson@otpc.com	Otter Tail Power Company	PO Box 496 215 S Cascade St Fergus Falls, MN 565380496	Electronic Service	No	OFF_SL_19-160_Official
Allen	Krug	allen.krug@xcelenergy.com	Xcel Energy	414 Nicollet Mall-7th fl  Minneapolis, MN 55401	Electronic Service	No	OFF_SL_19-160_Official
Douglas	Larson	dlarson@dakotaelectric.com	Dakota Electric Association	4300 220th St W  Farmington, MN 55024	Electronic Service	No	OFF_SL_19-160_Official
Amber	Lee	Amber.Lee@centerpointenergy.com	CenterPoint Energy	505 Nicollet Mall  Minneapolis, MN 55402	Electronic Service	No	OFF_SL_19-160_Official
Annie	Levenson Falk	annielf@cubminnesota.org	Citizens Utility Board of Minnesota	332 Minnesota Street, Suite W1360  St. Paul, MN 55101	Electronic Service	No	OFF_SL_19-160_Official
Michael	Loeffler	mike.loeffler@nngco.com	Northern Natural Gas Co.	CORP HQ, 714 1111 So. 103rd Street Omaha, NE 681241000	Electronic Service	No	OFF_SL_19-160_Official



First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Pam	Marshall	pam@energycents.org	Energy CENTS Coalition	823 7th St E St. Paul, MN 55106	Electronic Service	No	OFF_SL_19-160_Official
Mike	McMullen	mmcmullen@misoenergy.org	MISO	2985 Ames Crossing Rd Eagan, MN 55121	Electronic Service	No	OFF_SL_19-160_Official
Brian	Meloy	brian.meloy@stinson.com	Stinson, Leonard, Street LLP	50 S 6th St Ste 2600 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_19-160_Official
David	Moeller	dmoeller@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022093	Electronic Service	No	OFF_SL_19-160_Official
Andrew	Moratzka	andrew.moratzka@stoel.com	Stoel Rives LLP	33 South Sixth St Ste 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_19-160_Official
Kate	O'Connell	kate.oconnell@state.mn.us	Department of Commerce	Suite 50085 Seventh Place East St. Paul, MN 551012198	Electronic Service	No	OFF_SL_19-160_Official
Greg	Palmer	gpalmer@greatermngas.com	Greater Minnesota Gas, Inc.	PO Box 68 202 South Main Street Le Sueur, MN 56058	Electronic Service	No	OFF_SL_19-160_Official
Richard	Savelkoul	rsavelkoul@martinsquires.com	Martin & Squires, P.A.	332 Minnesota Street Ste W2750 St. Paul, MN 55101	Electronic Service	No	OFF_SL_19-160_Official
Kristin	Stastny	kstastny@briggs.com	Briggs and Morgan, P.A.	2200 IDS Center 80 South 8th Street Minneapolis, MN 55402	Electronic Service	No	OFF_SL_19-160_Official

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Joseph K	Sullivan	joseph.k.sullivan@state.mn.us	Department of Commerce	85 7th Place East Ste 500  Saint. Paul, MN 55101-2198	Electronic Service	No	OFF_SL_19-160_Official
Lynnette	Sweet	Regulatory.records@xcelenergy.com	Xcel Energy	414 Nicollet Mall FL 7  Minneapolis, MN 554011993	Electronic Service	No	OFF_SL_19-160_Official
Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_19-160_Official
Mary	Wolter	mary.wolter@wecenergygroup.com	Minnesota Energy Resources Corporation (HOLDING)	231 West Michigan St  Milwaukee, WI 53203	Electronic Service	No	OFF_SL_19-160_Official
Aaron W.	Wright	N/A	Viking Gas Transmission Company	ONEOK, Inc. 100 W. Fifth Street, MD 12- 2 Tulsa, OK 74103	Paper Service	No	OFF_SL_19-160_Official