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June 18, 2021

—Via Electronic Filing and U.S. Mail—

Steven M. Kahl, Executive Director  
North Dakota Public Service Commission  
State Capitol Building, Dept. 408  
600 East Boulevard  
Bismarck, ND 58505-0480

RE: EXTREME COLD WEATHER EVENT INVESTIGATION (NATURAL GAS)  
INFORMAL HEARING-FOLLOW-UP (CASE NO. PU-21-102)

Dear Mr. Kahl:

Northern States Power Company (NSP), doing business as Xcel Energy, submits to the North Dakota Public Service Commission responses to additional requests for information during the June 9, 2021 Informal Hearing regarding the impacts of the extreme cold weather events of February 2021 on our natural gas business.

In response to several questions regarding the Company's storage portfolio, NSP holds contracted storage on three interstate pipelines/storage providers. NSP's natural gas local distribution company (LDC) holds approximately 14.7 Bcf of storage capacity and 242,784 Dth of maximum withdrawal capacity. The NSP Generation portfolio includes 8.2 Bcf of capacity and 151,584 Dth of withdrawal capacity. These portfolios, which are contracted and accounted for separately, have been acquired over many years, beginning in 1993 for the LDC.

The storage portfolio has been largely stable over the past 10 years with only minor adjustments to NSP's portfolio in that time. Generally, the opportunity to expand our storage portfolio with major pipeline storage expansions is rare. The last expansion of the certificated capacity of Northern Natural Gas' storage fields was completed in 2008. At that time, Northern added approximately 8 Bcf of storage capacity, and NSP was awarded 2.9 Bcf of that capacity.

NSP's storage service details are summarized in Table 1 below:

**Table 1 – NSP Storage Capacity Additions**

| <b>Local Distribution Company (Home Heating Etc)</b> |                          |                             |                       |                          |                             |
|------------------------------------------------------|--------------------------|-----------------------------|-----------------------|--------------------------|-----------------------------|
|                                                      | <b>As of Jan 1, 2021</b> |                             |                       | <b>As of Jan 1, 2011</b> |                             |
| <b>Pipeline</b>                                      | <b>Capacity</b>          | <b>Max Daily Withdrawal</b> | <b>First Acquired</b> | <b>Capacity</b>          | <b>Max Daily Withdrawal</b> |
| NNG                                                  | 8,084,975                | 140,230                     | 6/1/1993              | 8,084,975                | 140,230                     |
| ANR Pipeline*                                        | 945,872                  | 15,256                      | 5/1/2001              | 946,368                  | 15,264                      |
| ANR Storage                                          | 1,165,185                | 9,248                       | 4/1/2003              | 994,305                  | 15,297                      |
| NNG                                                  | 4,500,000                | 78,050                      | 6/1/2006              | 4,500,000                | 78,050                      |
| <b>Total</b>                                         | <b>14,696,032</b>        | <b>242,784</b>              |                       | <b>14,525,648</b>        | <b>248,841</b>              |
| <b>Electric Generation</b>                           |                          |                             |                       |                          |                             |
|                                                      | <b>As of Jan 1, 2021</b> |                             |                       | <b>As of Jan 1, 2011</b> |                             |
| <b>Pipeline</b>                                      | <b>Capacity</b>          | <b>Max Daily Withdrawal</b> | <b>First Acquired</b> | <b>Capacity</b>          | <b>Max Daily Withdrawal</b> |
| NNG                                                  | 500,000                  | 8,672                       | 6/1/2006              | 500,000                  | 8,672                       |
| NNG                                                  | 4,760,822                | 82,574                      | 6/1/2008              | 4,760,822                | 82,574                      |
| ANR Pipeline*                                        | 3,016,900                | 60,338                      | 4/1/2008              | 3,018,400                | 60,368                      |
| <b>Total</b>                                         | <b>8,277,722</b>         | <b>151,584</b>              |                       | <b>8,279,222</b>         | <b>151,614</b>              |

\* ANR Pipeline’s tariff option to adjust the Max Storage Quantity each year in accordance with the Transporter's Use (Fuel) charge. This allows the shipper to maintain the same delivered level of storage quantity regardless of the fuel charge.

Regarding the difference between the capacity withdrawal values shown on Schedule B, page 10 of the monthly *Cost of Gas* (COG) filing and those discussed in the two previous Informal Hearings for this proceeding, the 242,784 Dth listed above and shown in the COG filing are the billing units for our storage agreements. That figure represents the maximum withdrawal capacity available over the season and is the billing determinant used for calculating rates and assessing service charges.

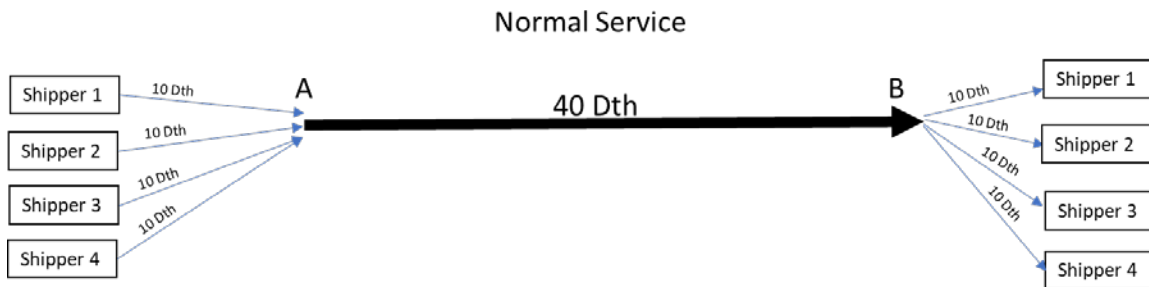
The 190,372 Dth figure discussed in our Informal Hearing presentations is the maximum withdrawal that was available during February, as a result of the operational parameters of the service. That is to say, storage service is subject to “ratchets,” which are changes to the injection and withdrawal capability based on the physical characteristics of each of the storage fields and inventory. Essentially, as the heating season moves forward and gas is pulled out of storage, the physical pressure in the field is reduced and there is a corresponding reduction in the withdrawal capacity. These ratchets are detailed in the providers’ tariffs and storage agreements.

As mentioned in the Informal Hearing on June 9, in 2017 NSP worked with Northern Natural Gas to create new operating parameters for storage for electric generation service. While no capacity was added either to the storage field or the

Company's portfolio as part of the process, the parameters of the service were adjusted to provide more flexibility for NSP Generation. This service allowed NSP Generation access to more withdrawal capacity during summer and shoulder months, but placed certain inventory requirements to make those flexibilities possible.

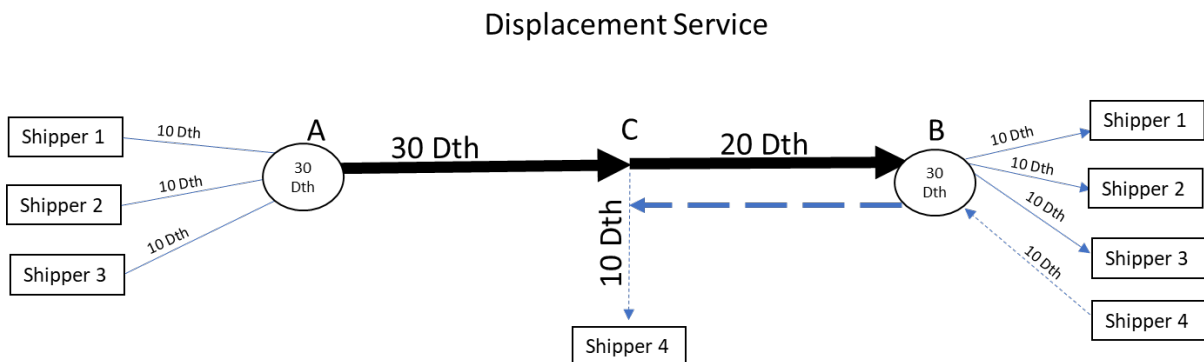
Finally, although it's not central to the cost review in this case, we'd like to briefly clarify pipeline displacement service given there were questions about it at the June 9 Informal Hearing. On a day-to-day basis, pipelines may use displacement service as an efficient tool to reduce the amount of fuel needed to deliver requested gas quantities. Using Figures 1 and 2 below, we provide a simplified example of how displacement works:

**Figure 1 – Normal Pipeline Delivery**



Assume four shippers each placed 10 units of gas on the pipeline at point A for delivery to point B, where physical flow is from point A to point B representing normal transportation service. In this case, 40 units of gas are physically delivered to point B.

**Figure 2 – Pipeline Displacement**



To illustrate displacement service, assume three shippers each placed 10 units of gas on the pipeline at point A for delivery to point B, and one shipper placed 10

units on the pipeline at point B for delivery to point C. In other words, the service requirement is for 30 units of gas to be delivered to point B and 10 units to be delivered to point C. Because the actual flow of gas on the pipeline is from point A to point B, it is not necessary to *physically move* all 30 units to point B in order to meet the service requirements. The three shippers place a total of 30 units at point A, the pipeline physically moves 30 units to point C, then 20 units to point B, where it meets the 10 units currently there. This results in 30 units at point B and 10 units at point C as requested.

If you have any questions, please feel free to contact me at (701) 371-5256.

Sincerely,

A handwritten signature in blue ink that reads "David H. Sederquist". The signature is written in a cursive, flowing style.

DAVID H. SEDERQUIST  
SENIOR REGULATORY CONSULTANT