



Northern Natural Gas Company  
P.O. Box 3330  
Omaha, NE 68103-0330  
402 398-7200

January 11, 2021

***Via eFiling***

Ms. Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426

Re: OEP/DPC/CB-1  
Northern Natural Gas Company  
Docket No. CP20-503-000  
Northern Lights 2021  
§ 375.308(x)(3)

Dear Ms. Bose:

Northern Natural Gas Company (Northern) hereby submits for filing with the Federal Energy Regulatory Commission (FERC) in the above-referenced docket Northern's responses to the data request issued by FERC staff January 5, 2021. FERC's requests and Northern's responses are attached.

Northern's responses to data requests 1 and 2, including the Revised Exhibit G and Gregg Models, provide methodologies as well as specific operating and engineering details and have been labeled "**CU//CEII --- DO NOT RELEASE (CRITICAL ENERGY INFRASTRUCTURE INFORMATION).**" Therefore, pursuant to 18 CFR section 388.112, Northern requests confidential and privileged treatment of this information due to the confidential nature of the contents. The person to be contacted regarding the request for privileged and confidential treatment is as follows:

Michael T. Loeffler  
Senior Director, Certificates and External Affairs  
Northern Natural Gas Company  
1111 South 103rd Street  
Omaha, NE 68124-1000  
Telephone: 402-398-7077  
Email: mike.loeffler@nngco.com

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Kimberly D. Bose, Secretary  
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Since eLibrary does not accept ULF files, the library file for the Gregg Models is not included in the electronic filing and is, instead, being emailed directly to Darya Khanin, FERC staff.

Any questions regarding the filing should be directed to the undersigned at (402) 398-7103.

Respectfully submitted,

/signed/ Michael T. Loeffler

Michael T. Loeffler  
Senior Director, Certificates and External Affairs

cc: Parties of record

**Northern Natural Gas Company**  
Data Response Form For Docket No. CP20-503-000

Requesting Party: FERC  
Reference No: FERC-eng03  
Requester's Name: Darya Khanin  
Subject: FERC engineering data request

**Data Request:**

1. The hydraulic models representing the St Cloud – Elk River – Willmar branch line system have eight unexpected receipt nodes that show an increased amount of inlet gas in the proposed model. It appears that the nodes bring in additional gas that accounts for the 120 percent and 150 percent proration. Explain why additional gas comes in at these specific nodes and not from the interconnections with the Northern's mainline. Otherwise, provide updated hydraulic models and corresponding flow diagrams if applicable.

**Response:**

**FILED AS CRITICAL ENERGY INFRASTRUCTURE INFORMATION (CEII)**

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Posted: 01/11/2021

Responsibility: Royce A. Ramsay

Northern Natural Gas Company  
Data Response Form For Docket No. CP20-503-000

Requesting Party: FERC  
Reference No: FERC-eng03  
Requester's Name: Darya Khanin  
Subject: FERC engineering data request

**Data Request:**

2. The difference in gas flow between the existing and the proposed models was calculated at the three points of interconnection between the Ventura North models and the St Cloud – Elk River – Willmar branch line system models. These calculations show inconsistencies between the two sets of models. Explain or correct.

**Response:**

**FILED AS CRITICAL ENERGY INFRASTRUCTURE INFORMATION (CEII)**

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Posted: 01/11/2021

Responsibility: Royce A. Ramsay

Northern Natural Gas Company  
Data Response Form For Docket No. CP20-503-000

Requesting Party: FERC  
Reference No: FERC-eng03  
Requester's Name: Darya Khanin  
Subject: FERC engineering data request

**Data Request:**

3. In its December 12, 2018 Data Reply filed in Docket No. CP18-534-000, Northern explained that net consequence of the Carlton Adjustment is that mainline flow is higher in the corridor between the Ventura and North Branch compressor stations when the adjustment volume is applied; therefore, Northern utilizes the Carlton Resolution models to calculate mainline capacity in the Ventura to North Branch segment. Furthermore, Northern stated that the full contract volume is utilized to calculate capacity on all other mainline segments and branch lines. However, the greatest difference between the Northern Lights 2021 Project hydraulic models and the corresponding hydraulic models featuring the Carlton Adjustment is outside of the Ventura to North Branch segment. Provide an updated discussion on how the Carlton Resolution impacts the design of the hydraulic models for the existing and the proposed operations for the Northern Lights 2021 Project.

**Response:**

The models filed for the Northern Lights 2021 project do not incorporate the traditional Carlton Adjustment. The Carlton Adjustment reduces Carlton receipt volume to a nominal 250 MMcf/d, a reduction of 200-250 MMcf/d compared to firm volume, with a corresponding reduction in delivery volume. Since Carlton was the primary receipt point for the Northern Lights 2021 project, constituting 40.999 MMcf/d of the 45.693 MMcf/d needed for the project, Northern chose not to file Carlton Adjusted models as they would not depict the increased receipt correctly. Instead, full capacity models were provided showing the incremental Carlton receipt.

Northern did include two models with the filing depicting maximum Carlton South operating capacity. These models are included since northbound contracts offsetting southbound contracts result in net Carlton South flow in the base models below maximum capacity. Southbound shippers have firm rights to flow up to the operating capacity. The existing Carlton South maximum operating capacity is 247 MMcf/d. Following Northern Lights 2021 modifications, the Carlton South maximum operating capacity increases to 307 MMcf/d. Shippers contracted 40.999 MMcfd of the 60 MMcfd increase in Northern Lights 2021.

These mainline models, whose file names end with "Carlton South OpCap," have adjustments at two points to simulate a reduction in northbound flow that allows Carlton South to reach maximum operating capacity. The receipt volume at the "CARLTON GRLKS ITE" point was increased to maximum capacity and the delivery volume to the "MARQUETTE TO" point was reduced as needed. Carlton South flow is shown in the two models as flow through model leg name "43027088."

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Subject: FERC engineering data request

**Data Request:**

4. Exhibit G contains Horsepower Data table for two compressor stations. Provide a Horsepower Data table for each compressor station represented in the hydraulic models. For each compressor unit, identify the type of unit and fuel usage, if applicable.

**Response:**

The revised Exhibit G filed in response to Data Request 2 includes all compressor stations in the branch line and mainline models. Data for the branch line stations and mainline stations from Ventura to Hugo is sourced from the contract models. Data for the North Branch, Carlton and proposed Hinckley stations is sourced from the Carlton South maximum operating capacity models.

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Posted: 01/11/2021

Responsibility: Royce A. Ramsay

**Northern Natural Gas Company**  
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Requesting Party: FERC  
Reference No: FERC-eng03  
Requester's Name: Darya Khanin  
Subject: FERC engineering data request

**Data Request:**

5. In a public document, identify end use of the gas for the volumes to be delivered to each shipper.

**Response:**

The shippers for this project, CenterPoint Energy Resources Corporation, Northern States Power Company, and Midwest Natural Gas, are state-regulated local distribution companies that will utilize the entitlement to serve various residential, commercial and small industrial entities within their respective service territories.

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Posted: 01/11/2021

Responsibility: Royce A. Ramsay

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VERIFICATION

STATE OF NEBRASKA )

COUNTY OF DOUGLAS )

Royce A. Ramsay, being duly sworn, on oath, states that he is Vice President, Operations, for Northern Natural Gas Company and is duly authorized to make this affidavit; that he has read the foregoing Data Response of such Company and is familiar with the contents thereof; that all the facts therein are true and correct to the best of his knowledge, information and belief.

Signed:

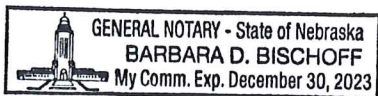


Royce A. Ramsay  
Vice President, Operations

SUBSCRIBED AND SWORN TO, before me, this 8 day of January 2021.

*Barbara D. Bischoff*  
Notary Public in and for  
Douglas County, Nebraska

My commission expires:





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**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated this *11* day of *January* 2021.



Michael T. Loeffler  
Sr. Director of Certificates and External Affairs  
P.O. Box 3330  
Omaha, Nebraska 68103-0330  
Telephone: (402) 398-7103