



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

October 2, 2020

***Via eFiling***

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

Re: Letter Order Pursuant to § 375.307  
Northern Natural Gas Company  
Docket No. CP20-503-000

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 September 18, 2020. FERC's requests and Northern's responses are attached. An Excel file is being submitted directly to staff via email with the formulas necessary to calculate the requested rates. Northern is filing its response, which includes the spreadsheets, in PDF format for presentation purposes, showing the results of the incremental rate calculations.

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  
Docket No. CP20-503  
Northern Lights 2021 Expansion Project  
Responses to FERC Staff data request dated September 18, 2020

**1. Please calculate incremental cost-based rates for the Northern Lights 2021 Expansion project based on Northern's current rate design.**

Line No.	Calculation of Incremental Cost-Based Rate on SFV Rate Design	Reference	Incremental Cost-Based Rates	Tariff Maximum Rates
1	First Year Estimated Total Cost of Service	Exhibit N, Page 2 of 7	\$ 4,467,267	
2	Less: Costs for Electric Power to Run Pierz Compressor	Per Application	57,344	
2	Net Estimated Fixed Costs		\$ 4,409,923	
4	Incremental Contracted Expansion Volume (Dth/d)	Per Application	45,693	
5	Annual Monthly Reservation Billing Units (Dth)	Line 4 *12	548,316	
6	Fixed Cost Incremental Monthly Reservation Rate per Dth	Line 2/Line 5	\$ 8.0427	
7				
8	Calculation of a Commodity Rate:			
9	Annual Commodity Volume at 65% Load Factor	Line 4 *365*.65	10,840,664	
10	Incremental Cost-Based Commodity Rate per Dth	Line 2/Line 9	\$ 0.0053	

**2. Provide a comparison of the incremental cost-based rate calculations in response to Question 1 above, and Northern's applicable general system rates, illustrating whether the cost-based rates are less than the system rates.**

11	Rate Schedule TFX Monthly Maximum Reservation Rates per Settlement in Docket No. RP19-1353:			
12	Monthly Winter Maximum Reservation Rate per Dth		\$ 12.66	\$ 19.471
13	Monthly Summer Maximum Reservation Rate per Dth		\$ 4.75	\$ 7.3030
14	Average Monthly Maximum Reservation Rate			\$ 12.3730
15	Average Monthly Incremental Reservation Rate per Dth		\$ 8.0427	
16	Incremental Cost Based Rate is less than Maximum Tariff Rate by:			\$ 4.3303
17				
18	Rate Schedule TFX Commodity Rate			\$ 0.0165
19	Incremental Cost-Based Commodity Rate per Dth		\$ 0.0053	
20	Incremental Cost Based Rate is less than Maximum Tariff Rate by:			\$ 0.011

INPUT SHEET

NORTHERN NATURAL GAS COMPANY

6/12/2018

Project Name	NL 2021									
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Capital Investments										
Compression Facilities	\$ 43,813,000	0	0	0	0	0	0	0	0	0
Town Border Stations		0								
Main Line Extension	\$ -									
Branch Lines	\$ 13,575,000	0								
Underground Storage										
Reimbursible	\$ -									
Sub Total	\$ 57,388,000	\$ -								
CIAC	\$ (45,958,164)	-								
Total Additions	\$ 11,429,836	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Inflation Rate 0.00%

Months in Service Year 1 12

O&M Costs	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	\$ 368,566	\$ 368,566	\$ 368,566	\$ 368,566	\$ 368,566	\$ 368,566	\$ 368,566	\$ 368,566	\$ 368,566	\$ 368,566

Revenues	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	\$ 5,020,675	\$ 5,024,023	\$ 5,026,878	\$ 5,026,878	\$ 5,026,878	\$ 5,026,878	\$ 5,026,878	\$ 5,026,878	\$ 5,026,878	\$ 5,026,878

Ad Valorem Tax Rate 1.5485%

Total Revenues  
\$ 50,259,724

Total O&M Costs  
\$ 3,685,660

Northern Natural Gas Company  
 NL 2021  
Revenue Calculation



Firm Transportation Rates and Volumes

	MDQ		Contract Rates	
	Winter	Summer	Winter	Summer
Max TFX Rate	13,025	7,815	\$ 0.6405	\$ 0.2402
Discounted	21,855	13,113	\$ 0.4519	\$ 0.1311
<b>Centpoint Energy Resources Corp</b>				
Max TFX Rate	5,859	5,859	\$ 0.6405	\$ 0.2402
Discounted	3,600	3,600	\$ 0.2050	\$ 0.2050
<b>Northern States Power Company</b>				
Mondovi	248	-	\$ 2.2813	\$ -
North Hudson	149	-	\$ 1.5847	\$ -
East Farmington	957	-	\$ 1.7175	\$ -
<b>Midwest Natural Gas</b>				
	<b>45,693</b>	<b>30,387</b>		

2021	2022	2023	2024
11/01/21 to 10/31/2022	11/01/22 to 10/31/2023	11/01/23 to 10/31/2024	11/01/24 to 10/31/2025
Year 1	Year 2	Year 3	Year 4
\$0	\$0	\$0	\$0
\$1,661,470	\$1,661,470	\$1,661,470	\$1,661,470
\$1,852,735	\$1,856,082	\$1,858,938	\$1,858,938
<b>\$3,514,205</b>	<b>\$3,517,552</b>	<b>\$3,520,408</b>	<b>\$3,520,408</b>
\$867,825	\$867,825	\$867,825	\$867,825
\$269,370	\$269,370	\$269,370	\$269,370
<b>\$1,137,195</b>	<b>\$1,137,195</b>	<b>\$1,137,195</b>	<b>\$1,137,195</b>
\$85,430	\$85,430	\$85,430	\$85,430
\$35,654	\$35,654	\$35,654	\$35,654
\$248,191	\$248,191	\$248,191	\$248,191
<b>\$369,275</b>	<b>\$369,275</b>	<b>\$369,275</b>	<b>\$369,275</b>
<b>5,020,675</b>	<b>5,024,023</b>	<b>5,026,878</b>	<b>5,026,878</b>



Northern Natural Gas Company  
 NL 2021  
Revenue Calculation

Firm Transportation Rates and Volumes

	2032	2033	2034	2035
	11/01/32 to 10/31/2033	11/01/33 to 10/31/2034	11/01/34 to 10/31/2035	11/01/35 to 10/31/2036
	Year 12	Year 13	Year 14	Year 15
	\$0	\$0	\$0	\$0
Max TFX Rate	\$1,661,470	\$1,661,470	\$1,661,470	\$1,661,470
Discounted	\$1,858,938	\$1,858,938	\$1,858,938	\$1,858,938
<b>Centpoint Energy Resources Corp</b>	<b>\$3,520,408</b>	<b>\$3,520,408</b>	<b>\$3,520,408</b>	<b>\$3,520,408</b>
Max TFX Rate	\$867,825	\$867,825	\$867,825	\$867,825
Discounted	\$269,370	\$269,370	\$269,370	\$269,370
<b>Northern States Power Company</b>	<b>\$1,137,195</b>	<b>\$1,137,195</b>	<b>\$1,137,195</b>	<b>\$1,137,195</b>
Mondovi	\$23,985	\$23,985	\$23,985	\$23,985
North Hudson	\$14,411	\$14,411	\$14,411	\$14,411
East Farmington	\$92,557	\$92,557	\$92,557	\$92,557
<b>Midwest Natural Gas</b>	<b>\$130,953</b>	<b>\$130,953</b>	<b>\$130,953</b>	<b>\$130,953</b>
	<b>4,788,556</b>	<b>4,788,556</b>	<b>4,788,556</b>	<b>4,788,556</b>



**NORTHERN NATURAL GAS COMPANY**  
**NL 2021**  
**Tax Depreciation Computation**  
**(\$000)**

Line No.	Description	Year 1 (1)	Year 2 (2)	Year 3 (3)	Year 4 (4)	Year 5 (5)	Year 6 (6)	Year 7 (7)	Year 8 (8)	Year 9 (9)	Year 10 (10)
1	Tax Plant	\$ -	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000
2	Plant Addition	\$ 57,388,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	Total Transmission Plant in Service	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000
4	CIAC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	Total Plant in Service	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000
6	<b>Tax Depreciation</b>										
7	First Year Tax Depreciation Expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	Adjusted Tax Depreciable Basis	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000
9	Conventional Depreciation Rate	1/ 5.00%	9.50%	8.55%	7.70%	6.93%	6.23%	5.90%	5.90%	5.91%	5.90%
10	Conventional Depreciation Expense	\$ 2,869,400	\$ 5,451,860	\$ 4,906,674	\$ 4,418,876	\$ 3,976,988	\$ 3,575,272	\$ 3,385,892	\$ 3,385,892	\$ 3,391,631	\$ 3,385,892
11	Accumulated Tax Depreciation	\$ 2,869,400	\$ 8,321,260	\$ 13,227,934	\$ 17,646,810	\$ 21,623,798	\$ 25,199,071	\$ 28,584,963	\$ 31,970,855	\$ 35,362,486	\$ 38,748,378
12	Cumulative Tax Depreciation Rate	5.00%	14.50%	23.05%	30.75%	37.68%	43.91%	49.81%	55.71%	61.62%	67.52%
13	Adjusted CIAC Tax Depreciable Basis	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14	Conventional Depreciation Rate	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
15	Conventional Depreciation Expense	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
16	Accumulated Tax Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
17	Cumulative Tax Depreciation Rate	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
18	Total Tax Depreciation Expense	\$ 2,869,400	\$ 5,451,860	\$ 4,906,674	\$ 4,418,876	\$ 3,976,988	\$ 3,575,272	\$ 3,385,892	\$ 3,385,892	\$ 3,391,631	\$ 3,385,892
19	Accumulated Tax Depreciation	\$ 2,869,400	\$ 8,321,260	\$ 13,227,934	\$ 17,646,810	\$ 21,623,798	\$ 25,199,071	\$ 28,584,963	\$ 31,970,855	\$ 35,362,486	\$ 38,748,378
20	Accumulated Tax Depreciation %	5.00%	14.50%	23.05%	30.75%	37.68%	43.91%	49.81%	55.71%	61.62%	67.52%

1/ First year depreciation expense is half-year convention

**NORTHERN NATURAL GAS COMPANY**  
NL 2021  
Estimated Revenue and Cost of Service  
(In \$000)

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
1	INCREMENTAL REVENUES	\$ 5,021	\$ 5,024	\$ 5,027	\$ 5,027	\$ 5,027	\$ 5,027
2	INCREMENTAL COST OF SERVICE	\$ 4,467	\$ 4,273	\$ 4,095	\$ 3,933	\$ 3,784	\$ 3,649
3	DIFFERENCE	<u>\$ 553</u>	<u>\$ 751</u>	<u>\$ 932</u>	<u>\$ 1,094</u>	<u>\$ 1,242</u>	<u>\$ 1,378</u>



NORTHERN NATURAL GAS COMPANY  
NL 2021  
Estimated Cost of Service

Line No.	Description	2021 (1)	2022 (2)	2023 (3)	2024 (4)	2025 (5)
1	Operating Expenses 1/ Depreciation and	\$ 368,566	\$ 368,566	\$ 368,566	\$ 368,566	\$ 368,566
2	Amortization Expenses 2/	\$ 274,316	\$ 274,316	\$ 274,316	\$ 274,316	\$ 274,316
3	Taxes					
4	Federal Income Tax 3/	\$ 498,476	\$ 465,462	\$ 435,352	\$ 407,840	\$ 382,682
5	State Income Tax 4/	\$ 136,820	\$ 127,758	\$ 119,494	\$ 111,942	\$ 105,037
6	Other 5/	\$ 888,624	\$ 888,624	\$ 888,624	\$ 888,624	\$ 888,624
7	Return @ 9.16% 6/	\$ 2,300,464	\$ 2,147,870	\$ 2,008,698	\$ 1,881,535	\$ 1,765,252
8	Total Cost of Service	<u>\$ 4,467,267</u>	<u>\$ 4,272,597</u>	<u>\$ 4,095,050</u>	<u>\$ 3,932,824</u>	<u>\$ 3,784,477</u>

1/ Incremental O&M

2/ From Exhibit N, Page 3, Line 14

3/ From Exhibit N, Page 7, Line 12

4/ From Exhibit N, Page 7, Line 15

5/ From Exhibit N, Page 4, Line 2

6/ From Exhibit N, Page 5, Line 5

**NORTHERN NATURAL GAS COMPANY**  
NL 2021  
Estimated Depreciation Expense

Line No.	Description	Months in Service Year 1	2021 (1)	2022 (2)	2023 (3)	2024 (4)	2025 (5)
	Rate 1/						
1	Depreciation Rate		2.40%				
2	Capital Investments						
3	Compression Facilities		\$ 43,813,000	\$ 43,813,000	\$ 43,813,000	\$ 43,813,000	\$ 43,813,000
4	Town Border Stations		\$ -	\$ -	\$ -	\$ -	\$ -
5	Main Line Extension		\$ -	\$ -	\$ -	\$ -	\$ -
6	Branch Lines		\$ 13,575,000	\$ 13,575,000	\$ 13,575,000	\$ 13,575,000	\$ 13,575,000
7	Underground Storage		\$ -	\$ -	\$ -	\$ -	\$ -
8	Reimbursible		\$ -	\$ -	\$ -	\$ -	\$ -
9	Sub-total		\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000
10	CIAC Received (net of gross up)		\$ (45,958,164)	\$ (45,958,164)	\$ (45,958,164)	\$ (45,958,164)	\$ (45,958,164)
11	Total		<u>\$ 11,429,836</u>	<u>\$ 11,429,836</u>	<u>\$ 11,429,836</u>	<u>\$ 11,429,836</u>	<u>\$ 11,429,836</u>
	 <u>Depreciation and Amortization Expense</u>						
12	Depreciation - @ 2.4%	12	\$274,316	\$274,316	\$274,316	\$274,316	\$274,316
13	CIAC Amortization @ 10.00%		-	-	-	-	-
14	Incremental Depreciation Expense		<u>\$274,316</u>	<u>\$274,316</u>	<u>\$274,316</u>	<u>\$274,316</u>	<u>\$274,316</u>

1/ Depreciation rate of 2.30% and 0.1% negative salvage was part of the NNG's filed Rate Case settlement in Docket No. RP19-1353



NORTHERN NATURAL GAS COMPANY  
NL 2021  
Estimated Return

Line No.	Description	2021	2022	2023	2024	2025	2026
		(1)	(2)	(3)	(4)	(5)	(5)
1	Plant	\$ 11,429,836	\$ 11,429,836	\$ 11,429,836	\$ 11,429,836	\$ 11,429,836	\$ 11,429,836
	Less:						
	Accumulated Provision for						
2	Depreciation and Amort.	\$ (274,316)	\$ (548,632)	\$ (822,948)	\$ (1,097,264)	\$ (1,371,580)	\$ (1,645,896)
	Accumulated Deferred						
3	Income Taxes	\$ 13,961,169	\$ 12,569,445	\$ 11,324,267	\$ 10,210,210	\$ 9,214,931	\$ 8,327,634
4	Total Rate Base	<u>\$ 25,116,689</u>	<u>\$ 23,450,649</u>	<u>\$ 21,931,155</u>	<u>\$ 20,542,781</u>	<u>\$ 19,273,187</u>	<u>\$ 18,111,574</u>
	Total Rate of						
5	Return @ 9.16% 1/	\$ 2,300,464	\$ 2,147,870	\$ 2,008,698	\$ 1,881,535	\$ 1,765,252	\$ -
6	Return on Equity	\$ 1,872,341	\$ 1,748,145	\$ 1,634,873	\$ 1,531,376	\$ 1,436,733	\$ 1,350,140
7	Return on Debt	\$ 428,123	\$ 399,725	\$ 373,824	\$ 350,159	\$ 328,518	\$ 308,718
8	Total Return on Rate Base	<u>\$ 2,300,464</u>	<u>\$ 2,147,870</u>	<u>\$ 2,008,698</u>	<u>\$ 1,881,535</u>	<u>\$ 1,765,252</u>	<u>\$ 1,658,858</u>

1/ The 9.16% Rate of Return is based on a 12% after tax return on equity and 62% equity capital

NORTHERN NATURAL GAS COMPANY  
NL 2021  
Estimated Deferred Taxes

Line No.	Description	2021 (1)	2022 (2)	2023 (3)	2024 (4)	2025 (5)
1	Tax Plant (Excluding CIAC)	\$ -	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000
2	Plant Addition	\$ 57,388,000	\$ -	\$ -	\$ -	\$ -
3	Total Plant	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000
4	CIAC	\$ -	\$ -	\$ -	\$ -	\$ -
5	Total Plant in Service	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000	\$ 57,388,000
6	Accumulated Deferred Tax %:					
7	Accumulated Tax Depreciation %	5.00%	14.50%	23.05%	30.75%	37.68%
8	Accumulated CIAC Tax Depreciation % (15 yrs)		6.67%	13.33%	20.00%	26.67%
9	Accumulated Tax Depreciation	\$ 2,869,400	\$ 8,321,260	\$ 13,227,934	\$ 17,646,810	\$ 21,623,798
10	Accumulated CIAC Tax Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -
11	Total Accumulated Tax Depreciation	\$ 2,869,400	\$ 8,321,260	\$ 13,227,934	\$ 17,646,810	\$ 21,623,798
12	Accumulated Book Depreciation %:					
13	Accumulated Book Depreciation % 1/	0.48%	0.96%	1.43%	1.91%	2.39%
14	Accumulated CIAC Book Depreciation % (10 yrs)		10.00%	20.00%	30.00%	40.00%
15	Accumulated Book Depreciation	\$ 274,316	\$ 548,632	\$ 822,948	\$ 1,097,264	\$ 1,371,580
16	Accumulated CIAC Book Depreciation	\$ -	\$ -	\$ -	\$ -	\$ -
17	Total Accumulated Book Depreciation	\$ 274,316	\$ 548,632	\$ 822,948	\$ 1,097,264	\$ 1,371,580
18	Accumulated Excess Tax Depreciation	\$ (2,595,084)	\$ (7,772,628)	\$ (12,404,986)	\$ (16,549,546)	\$ (20,252,218)
19	Effective Tax Rate 2/	26.880%				
20	CIAC Received by Customers	\$ 54,533,957				
21	Deferred Income Taxes related to CIAC	\$ 14,658,728				
22	Total end of year Accumulated Deferred					
23	Taxes Balance	\$ 13,961,169	\$ 12,569,445	\$ 11,324,267	\$ 10,210,210	\$ 9,214,931

1/ Depreciation rate of 2.30% and 0.1% negative salvage was part of the NNG's filed Rate Case settlement in Docket No. RP19-1353

2/ Northern's composite state income tax rate is 7.2962%

NORTHERN NATURAL GAS COMPANY  
NL 2021  
Estimated Federal and State Income Taxes

Line No.	Description	2021 (1)	2022 (2)	2023 (3)	2024 (4)	2025 (5)
1	Return on Equity 1/	\$ 1,872,341	\$ 1,748,145	\$ 1,634,873	\$ 1,531,376	\$ 1,436,733
2	Return on Debt 1/	\$ 428,123	\$ 399,725	\$ 373,824	\$ 350,159	\$ 328,518
3	Total Return	\$ 2,300,464	\$ 2,147,870	\$ 2,008,698	\$ 1,881,535	\$ 1,765,252
	Less:					
4	Interest expense	\$ (428,123)	\$ (399,725)	\$ (373,824)	\$ (350,159)	\$ (328,518)
	Other Adjustments:					
5	Amortization of AFUDC Equity 2/	\$ 2,879	\$ 2,879	\$ 2,879	\$ 2,879	\$ 2,879
6	Subtotal	\$ (425,244)	\$ (396,846)	\$ (370,945)	\$ (347,280)	\$ (325,639)
7	Taxable Income After Adjustments	\$ 1,875,220	\$ 1,751,024	\$ 1,637,752	\$ 1,534,255	\$ 1,439,612
8	Federal Income Tax (26.582% of line 7)	\$ 498,476	\$ 465,462	\$ 435,352	\$ 407,840	\$ 382,682
9	Taxable Income Before Income Taxes	\$ 2,373,696	\$ 2,216,486	\$ 2,073,104	\$ 1,942,095	\$ 1,822,294
	Federal Income Tax Applicable to :					
10	Common Equity	\$ 497,711	\$ 464,697	\$ 434,587	\$ 407,075	\$ 381,916
11	Other Tax Adjustments	\$ 765	\$ 765	\$ 765	\$ 765	\$ 765
12	Total Federal Income Tax	\$ 498,476	\$ 465,462	\$ 435,352	\$ 407,840	\$ 382,682
	State Income Tax Applicable to:					
13	Common Equity	\$ 136,610	\$ 127,548	## \$ 119,284	## \$ 111,732	## \$ 104,827
14	Other Tax Adjustments	\$ 210	\$ 210	## \$ 210	## \$ 210	## \$ 210
15	Total State Income Tax (7.2962% of Line 9) 3/	\$ 136,820	\$ 127,758	\$ 119,494	\$ 111,942	\$ 105,037

1/ The 9.159% Rate of Return is based on a 12% after tax return on equity and 12/31/2019 capital structure.

2/ AFUDC Equity is taxed as it is recovered.

3/ Northern's composite state income tax rate is 7.2962%



**NORTHERN NATURAL GAS COMPANY  
RP03-398 and RP04-155 SETTLEMENT  
CAPITALIZATION AND RATE OF RETURN**

<b>RP03-398 and RP04-155</b>	<b>CAPITALIZATION</b>	<b>CAPITALIZATION PERCENT</b>	<b>COST OF MONEY</b>	<b>RATE OF RETURN</b>
Debt	\$ 1,250,000	37.87858%	4.50%	1.704536%
Equity	\$ 2,050,018	62.12142%	12.00%	7.454570%
Total	<u>\$ 3,300,018</u>	<u>100.00%</u>		<u>9.159106%</u>
			Overall Return	9.16%
			Fed Income Tax	1.98%
			State Income Tax	0.69%
			Pre-tax Return	<u>11.83%</u>
		Year 1 Rate Base:		\$ 25,116,689
		Year 1 Pre-tax Return		\$ 2,971,099

**NORTHERN NATURAL GAS COMPANY**  
**NL 2021**  
**Estimated Revenue and Cost of Service**  
**(IN \$000)**

<b>LINE NO.</b>	<b>DESCRIPTION</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>
	[a]	[b]	[c]	[d]	[e]	[f]	[g]	[h]
1	Incremental Revenues 1/	\$ 114,420	\$ 121,554	\$ 121,584	\$ 120,663	\$ 121,068	\$ 120,340	\$ 120,303
2	Incremental Cost of Service	\$ 89,852	\$ 88,647	\$ 89,982	\$ 87,651	\$ 85,457	\$ 83,356	\$ 81,333
3	Difference	\$ 24,568	\$ 32,907	\$ 31,602	\$ 33,012	\$ 35,611	\$ 36,984	\$ 38,970
4	Retained Underlying Entitlement 2/	\$ 88,851	\$ 93,144	\$ 93,259	\$ 93,357	\$ 93,357	\$ 93,357	\$ 93,357
5	Northern Lights Total Value	\$ 113,420	\$ 126,051	\$ 124,861	\$ 126,369	\$ 128,969	\$ 130,341	\$ 132,327

1/ Assumes that Contracts are rolled over.

2/ Value associated with retention of 995,108 Dth/Day at time of the agreements.

NOTE: Reflects all Northern Lights projects to date.



NL 2021

LINE NO.	DESCRIPTION	2020	2021	2022	2023
1	INCREMENTAL REVENUES				
2	Phase 1	\$ 31,692	\$ 31,793	\$ 31,794	\$ 31,795
3	Phase 2 - Palmyra North	\$ 6,140	\$ 6,140	\$ 6,140	\$ 6,140
4	Phase 3 - West Leg	\$ 2,376	\$ 2,376	\$ 2,376	\$ 2,376
5	LaCross Tomah	\$ 791	\$ 791	\$ 791	\$ 791
6	Menlo	\$ 1,440	\$ 1,440	\$ 1,440	\$ 1,440
7	Ventura North	\$ 129	\$ 129	\$ 129	\$ 129
8	East Leg	\$ 1,894	\$ 1,894	\$ 1,894	\$ 1,894
9	West Leg	\$ 1,905	\$ 1,905	\$ 1,905	\$ 1,905
10	Ventura North II	\$ 476	\$ 476	\$ 476	\$ 476
11	West Leg II	\$ 3,436	\$ 3,436	\$ 3,436	\$ 3,436
12	Aberdeen Line Expansion	\$ 3,031	\$ 3,031	\$ 3,031	\$ 3,031
13	Aberdeen II Expansion	\$ 1,246	\$ 1,246	\$ 1,246	\$ 1,246
14	Carlton I	\$ 69	\$ 69	\$ 69	\$ 69
15	Southwest Iowa Renewable Energy	\$ 108	\$ 108	\$ 108	\$ 108
16	Carlton II	\$ 197	\$ 197	\$ 197	\$ 197
17	2009-10 Zone EF Expansion	\$ 14,291	\$ 14,919	\$ 14,927	\$ 14,934
18	Lamberton	\$ 758	\$ 758	\$ 758	\$ 758
19	Grand Junction	\$ 915	\$ 915	\$ 915	\$ 915
20	West Leg IV Expansion	\$ 1,013	\$ 1,013	\$ 1,013	\$ 1,013
21	2011-12 Zone EF Expansion	\$ 1,279	\$ 1,279	\$ 1,279	\$ 1,279
22	Lake City	\$ 1,898	\$ 1,898	\$ 1,898	\$ 1,898
23	Wilmar Expansion	\$ 331	\$ 331	\$ 331	\$ 331
24	2013-14 Zone EF Expansion	\$ 277	\$ 277	\$ 277	\$ 277
25	Red Wing 2014	\$ 167	\$ 167	\$ 167	\$ 167
26	Black River Falls 2014	\$ 200	\$ 200	\$ 200	\$ 200
27	St. Cloud 2014	\$ 485	\$ 485	\$ 485	\$ 485
28	Mason City 2014	\$ 545	\$ 545	\$ 545	\$ 545
29	St. Cloud II 2014	\$ 1,458	\$ 1,458	\$ 1,458	\$ 1,458
30	2014-16 Zone EF Expansion	\$ 5,793	\$ 6,102	\$ 6,106	\$ 6,109
31	Wilmar Expansion 2015	\$ 558	\$ 558	\$ 558	\$ 558
32	Northern Lights 2017 Expansion	\$ 10,576	\$ 11,113	\$ 11,120	\$ 10,190
33	Cedar Station Upgrade	\$ -	\$ -	\$ -	\$ -
34	Lake Mills	\$ 3,171	\$ 3,171	\$ 3,171	\$ 3,171
35	Rochester Expansion	\$ 7,503	\$ 7,503	\$ 7,503	\$ 7,503
36	NL 2019 (TCA)	\$ 8,271	\$ 8,674	\$ 8,679	\$ 8,684
37	NL 2021	\$ -	\$ 5,157	\$ 5,160	\$ 5,163
38	Total Revenue	\$ 114,420	\$ 121,554	\$ 121,584	\$ 120,663

39	INCREMENTAL COST OF SERVICE							
40	Phase 1	\$ 16,026	\$ 15,551	\$ 15,180	\$ 14,913			
41	Phase 2 - Palmyra North	\$ 793	\$ 769	\$ 751	\$ 739			
42	Phase 3 - West Leg	\$ 114	\$ 111	\$ 109	\$ 108			
43	LaCross Tomah	\$ 328	\$ 320	\$ 311	\$ 303			
44	Menlo	\$ 976	\$ 950	\$ 925	\$ 902			
45	Ventura North	\$ 13	\$ 13	\$ 13	\$ 13			
46	East Leg	\$ 695	\$ 677	\$ 659	\$ 642			
47	West Leg	\$ 660	\$ 650	\$ 634	\$ 620			
48	Ventura North II	\$ 134	\$ 130	\$ 127	\$ 123			
49	West Leg II	\$ 871	\$ 847	\$ 823	\$ 801			
50	Aberdeen Line Expansion	\$ 160	\$ 156	\$ 152	\$ 148			
51	Aberdeen II Expansion	\$ 13	\$ 13	\$ 13	\$ 12			
52	Carlton I	\$ 1	\$ 1	\$ 1	\$ 1			
53	Southwest Iowa Renewable Energy	\$ 1	\$ 1	\$ 1	\$ 1			
54	Carlton II	\$ 20	\$ 20	\$ 19	\$ 19			
55	2009-10 Zone EF Expansion	\$ 12,552	\$ 12,193	\$ 11,921	\$ 11,649			
56	Lamberton	\$ 311	\$ 303	\$ 296	\$ 289			
57	Grand Junction	\$ 42	\$ 41	\$ 40	\$ 39			
58	West Leg IV Expansion	\$ 3	\$ 3	\$ 3	\$ 3			
59	2011-12 Zone EF Expansion	\$ 1,032	\$ 1,010	\$ 975	\$ 961			
60	Lake City	\$ 153	\$ 150	\$ 147	\$ 143			
61	Wilmar Expansion	\$ 121	\$ 119	\$ 116	\$ 114			
62	2013-14 Zone EF Expansion	\$ 77	\$ 75	\$ 74	\$ 72			
63	Red Wing 2014	\$ 80	\$ 78	\$ 76	\$ 75			
64	Black River Falls 2014	\$ 34	\$ 33	\$ 33	\$ 32			
65	St. Cloud 2014	\$ 100	\$ 98	\$ 96	\$ 94			
66	Mason City 2014	\$ 174	\$ 171	\$ 167	\$ 163			
67	St. Cloud II 2014	\$ 208	\$ 204	\$ 199	\$ 195			
68	2014-16 Zone EF Expansion	\$ 1,646	\$ 1,609	\$ 1,571	\$ 1,533			
69	Wilmar Expansion 2015	\$ 110	\$ 107	\$ 105	\$ 102			
70	Northern Lights 2017 Expansion	\$ 7,505	\$ 7,336	\$ 7,174	\$ 7,014			
71	Cedar Station Upgrade	\$ 6,152	\$ 5,989	\$ 5,833	\$ 5,684			
72	Lake Mills	\$ 4,624	\$ 4,509	\$ 4,394	\$ 4,285			
73	Rochester Expansion	\$ 5,994	\$ 5,915	\$ 5,722	\$ 5,541			
74	NL 2019 (TCA)	\$ 28,126	\$ 27,751	\$ 26,887	\$ 26,075			
75	NL 2021	\$	\$ 745	\$ 4,435	\$ 4,243			
76	Total Cost of Service	\$ 89,852	\$ 88,647	\$ 89,982	\$ 87,651			
77	Difference	\$ 24,568	\$ 32,907	\$ 31,602	\$ 33,012			
78	Retained Underlying Entitlement	\$ 88,851	\$ 93,144	\$ 93,259	\$ 93,357			
79	NOTE: Assumes that Contracts are rolled over.							

2024	2025	2026
\$ 31,795	\$ 31,795	\$ 31,795
\$ 6,140	\$ 6,140	\$ 6,140
\$ 2,376	\$ 2,376	\$ 2,376
\$ 791	\$ 791	\$ 791
\$ 1,440	\$ 1,440	\$ 1,440
\$ 129	\$ 129	\$ 129
\$ 1,894	\$ 1,894	\$ 1,894
\$ 1,905	\$ 1,905	\$ 1,905
\$ 476	\$ 476	\$ 476
\$ 3,436	\$ 3,436	\$ 3,436
\$ 3,031	\$ 3,031	\$ 3,031
\$ 1,246	\$ 1,246	\$ 1,246
\$ 69	\$ 69	\$ 69
\$ 108	\$ 108	\$ 108
\$ 197	\$ 197	\$ 197
\$ 14,934	\$ 14,934	\$ 14,934
\$ 758	\$ 758	\$ 758
\$ 915	\$ 915	\$ 915
\$ 1,013	\$ 1,013	\$ 1,013
\$ 1,279	\$ 1,279	\$ 1,279
\$ 2,303	\$ 2,303	\$ 2,303
\$ 331	\$ 331	\$ 331
\$ 277	\$ 277	\$ 277
\$ 167	\$ 167	\$ 167
\$ 200	\$ 200	\$ 200
\$ 485	\$ 485	\$ 485
\$ 545	\$ 289	\$ 289
\$ 1,458	\$ 1,188	\$ 1,188
\$ 6,109	\$ 5,908	\$ 5,870
\$ 558	\$ 558	\$ 558
\$ 10,180	\$ 10,180	\$ 10,180
\$ -	\$ -	\$ -
\$ 3,171	\$ 3,171	\$ 3,171
\$ 7,503	\$ 7,503	\$ 7,503
\$ 8,684	\$ 8,684	\$ 8,684
\$ 5,163	\$ 5,163	\$ 5,163
\$ 121,068	\$ 120,340	\$ 120,303

\$ 14,653	\$ 14,392	\$ 14,134
\$ 726	\$ 714	\$ 702
\$ 106	\$ 105	\$ 103
\$ 298	\$ 293	\$ 287
\$ 885	\$ 869	\$ 852
\$ 13	\$ 13	\$ 13
\$ 631	\$ 619	\$ 608
\$ 610	\$ 600	\$ 590
\$ 121	\$ 119	\$ 117
\$ 786	\$ 771	\$ 756
\$ 146	\$ 143	\$ 137
\$ 12	\$ 12	\$ 12
\$ 1	\$ 1	\$ 1
\$ 1	\$ 1	\$ 1
\$ 18	\$ 18	\$ 18
\$ 11,400	\$ 11,192	\$ 10,997
\$ 263	\$ 276	\$ 273
\$ 38	\$ 37	\$ 37
\$ 3	\$ 3	\$ 3
\$ 944	\$ 926	\$ 912
\$ 140	\$ 137	\$ 134
\$ 112	\$ 109	\$ 107
\$ 70	\$ 69	\$ 67
\$ 73	\$ 71	\$ 69
\$ 31	\$ 30	\$ 30
\$ 91	\$ 89	\$ 87
\$ 159	\$ 155	\$ 151
\$ 190	\$ 186	\$ 181
\$ 1,494	\$ 1,448	\$ 1,411
\$ 99	\$ 97	\$ 94
\$ 6,855	\$ 6,696	\$ 6,536
\$ 5,540	\$ 5,395	\$ 5,251
\$ 4,179	\$ 4,074	\$ 3,969
\$ 5,370	\$ 5,208	\$ 5,053
\$ 25,307	\$ 24,579	\$ 23,880
\$ 4,068	\$ 3,908	\$ 3,762
\$ 85,457	\$ 83,356	\$ 81,333
<u>\$ 35,611</u>	<u>\$ 36,984</u>	<u>\$ 38,070</u>
<u>\$ 93,357</u>	<u>\$ 93,357</u>	<u>\$ 93,357</u>

VERIFICATION

STATE OF NEBRASKA )

COUNTY OF DOUGLAS )

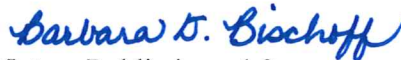
Kirk Lavengood, being duly sworn, on oath, states that he is Vice President, General Counsel and Regulatory Affairs, for Northern Natural Gas Company and is duly authorized to make this affidavit; that he has read the foregoing Data Response of such Company and is familiar with the contents thereof;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

Signed:



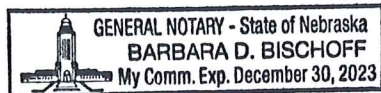
Kirk Lavengood  
Vice President, General Counsel and Regulatory Affairs

SUBSCRIBED AND SWORN TO, before me, this 1 day of October 2020.



Notary Public in and for  
Douglas County, Nebraska


My commission expires:



**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 2 day of October 2020.



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