



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

February 1, 2021

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

Re: Northern Natural Gas Company  
Docket No. RP21-\_\_\_\_-000  
Periodic Rate Adjustments for Fuel

Dear Ms. Bose:

Northern Natural Gas Company (Northern) submits herewith for filing as part of its FERC Gas Tariff, Sixth Revised Volume No. 1 (Tariff), the following tariff sheets to be effective April 1, 2021:

SIXTH REVISED VOLUME NO. 1  
Twenty Eighth Revised Sheet No. 54  
Fifteenth Revised Sheet No. 60  
Fifteenth Revised Sheet No. 60A  
Thirteenth Revised Sheet No. 61  
Twenty Sixth Revised Sheet No. 62

Reason for Filing

The revised tariff sheets are being filed in accordance with Sections 53A and 53B of the General Terms and Conditions of Northern's Tariff, as further discussed herein. This filing updates and establishes:

- Field Area transmission fuel percentages,
- Market Area transportation fuel percentage,
- Storage fuel percentage,
- Storage under-recovery retainage percentage (URR Percentage)<sup>1</sup>,
- Systemwide unaccounted for percentage (UAF), and
- Market Area electric compression rate.

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<sup>1</sup> The URR Percentage was established in the settlement of the rate case in Docket No. RP19-1353-009.

True-up adjustments for all fuel and UAF percentages, and the Market Area electric compression commodity rate are included in the computations.

Although the proposed effective date of the tariff sheets is April 1, 2021, Northern respectfully requests that the Federal Energy Regulatory Commission (FERC or Commission) issue an order by March 18, 2021. A number of shippers will be making supply arrangements for the entire summer season of April through October. Knowing the fuel retention percentages as far in advance of April 1 as possible will assist in their planning and contracting processes.

Summary of Changes to be effective April 1, 2021

A summary of the proposed changes compared to the 2020 PRA filing is as follows:

	<u>April 1, 2020<sup>2</sup></u>	<u>April 1, 2021</u>
Section 1 (Permian)	0.39%	0.59%
Section 2 (Mid-Continent)	1.96%	1.50%
Section 3 (Market Area)	0.57%	0.58%
Storage Fuel	1.14%	1.22%
Storage URR Percentage	N/A	0.32%
UAF	0.13%	0.15%
Electric Compression rate	\$0.0007	\$0.0005

Section 1 (Permian)

The proposed changes in the base and true-up components of the Permian fuel percentage are shown in the following table.

	April 1, 2020	April 1, 2021	Change
Base fuel percentage	0.66%	0.67%	0.01%
True-up percentage	-0.27%	-0.08%	0.19%
Total	0.39%	0.59%	0.20%

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<sup>2</sup> The PRA percentages and rate in effect April 1, 2020 were accepted by FERC in a letter order issued March 13, 2020 in Docket No. RP20-478-000.

Section 2 (Mid-Continent)

The proposed changes in the base and true-up components of the Mid-Continent fuel percentage are shown in the following table.

	April 1, 2020	April 1, 2021	Change
Base fuel percentage	1.70%	1.69%	-0.01%
True-up percentage	0.26%	-0.19%	-0.45%
Total	1.96%	1.50%	-0.46%

Section 3 (Market Area)

The proposed changes in the base and true-up components of the Market Area fuel percentages from April – October, 2020, are shown in the following table.

	April 1, 2020	April 1, 2021	Change
Base fuel percentage	0.82%	0.71%	-0.11%
True-up percentage	-0.25%	-0.13%	0.12%
Total	0.57%	0.58%	0.01%

Storage Fuel

The proposed changes in the base and true-up components of the Storage fuel percentages are shown in the following table.

	April 1, 2020	April 1, 2021	Change
Base fuel percentage	1.20%	1.21%	0.01%
True-up percentage	-0.06%	0.01%	0.07%
Total	1.14%	1.22%	0.08%

Storage URR Percentage

The storage URR Percentage will be 0.32%. Since this is the initial percentage, there is no true-up. Although the tariff sheet showing the URR Percentage is effective April 1, 2021, the URR Percentage applies only to Rate Schedule FDD injections from June 1, 2021 through October 31, 2021.

UAF

The changes in the base and true-up components of the UAF percentage are shown in the following table.

	April 1, 2020	April 1, 2021	Change
Base UAF percentage	0.14%	0.09%	-0.05%
True-up percentage	-0.01%	0.06%	0.07%
Total	0.13%	0.15%	0.02%

Market Area Electric Compression Rate

The Market Area Electric Compression commodity rate is \$0.0005, a decrease of \$0.0002 from \$0.0007. The true-up percentage is \$0.0000.

Supporting Schedules

Supporting information and calculations for the proposed changes are attached hereto in Schedule Nos. 1 - 10.

Waiver

Northern respectfully requests that the Commission grant any and all waivers of its Regulations that it deems necessary to allow the tariff sheets to become effective April 1, 2021, but, as noted above, Northern respectfully requests that the Commission issue an order by March 18, 2021.

Posting

Northern has served an electronic copy of this filing upon its customers and interested state regulatory commissions.

Marked Version

In accordance with Section 154.201 of the Commission's Regulations, Northern has submitted a marked version of the proposed tariff changes highlighting new additions and showing deletions by strikeout.

Motion

In accordance with Sections 154.7(a)(9) and 154.206(c) of the Commission's Regulations, Northern hereby moves to place the tariff sheets referenced herein in effect as of the end of any suspension period ordered by the Commission.

Kimberly D. Bose, Secretary  
February 1, 2021  
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Data Processing Requirements

Northern submits this filing through FERC's electronic tariff filing process in a FERC-approved format.

Communication

It is requested that all correspondence and communications concerning this filing be served upon each of the following:

Bambi Heckerman  
Director, Rates and Tariffs  
Northern Natural Gas Company  
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Respectfully submitted,

/s/ Bambi Heckerman

Bambi Heckerman  
Director, Rates and Tariffs

Attachments

RATE SCHEDULES TF, TFX, GST, TI, & FDD

Fuel Percentages/Electric Compression Rates

	<u>Percentages</u>
FUEL PERCENTAGES:	1/ 7/
Market Area (including Out-of-Balance)	0.58%
Field Area	2/ 3/ 5/ 6/
UNACCOUNTED FOR PERCENTAGE (including Out-of-Balance)	0.15% 4/ 5/ 7/
FDD STORAGE FUEL	1.22%
FDD URR PERCENTAGE	0.32% 1/

  

	<u>Electric Compression</u>
COMMODITY RATES:	1/ 7/
Market Area	\$0.0005
Field Area	\$0.0000

1/ Northern will adjust its Fuel, UAF and URR percentages and electric compression commodity rates in accordance with Sections 53A and 53B, respectively, of the General Terms and Conditions of this Tariff.

2/ Fuel shall be determined by Mileage Indicator Districts (MIDS) for the Field Area.

3/ Fuel charged in the Field and Market Areas for a pooling transaction or for processing plant transactions will not exceed the fuel charged on a unified Field-to-Market transaction having the same initial Field receipt point and ultimate Market delivery point, i.e., the total fuel collected for transactions that go into and out of pooling points or processing plants in either the Field Area or the Market Area will be no greater than the fuel collected on the total path between the original receipt point and the ultimate delivery point, subject to the shipper(s) providing Northern the requisite information.

4/ The Unaccounted For percentage utilizes the most recent twelve-month period ending December 31, 2018. For deliveries subject only to UAF, if the above UAF rate is negative, the UAF rate is zero; provided, however Northern will issue a volume credit on the Shipper's monthly imbalance statement equivalent to the negative UAF percentage for such deliveries during the period in which the UAF rate is less than zero.

5/ Sheet No. 54A identifies the specific transportation transactions exempt from Fuel and UAF retention charges.

6/ The Out-of-Balance Fuel Percentage for deliveries in MIDS 1-7 shall be the applicable Section 1 Transportation Fuel percentage, and for deliveries in MIDS 8-16B shall be the applicable Section 2 Transportation Fuel percentage.

7/ There will be no Fuel, electric compression or UAF charges for transportation from the Ventura pooling point (POI 78623) to the NBPL/NNG Ventura point (POI 192) and from the Ventura pooling point (POI 78623) to the MID 17 pooling point (POI 71458). In addition, there will be no fuel, electric compression or UAF charges for transportation as set forth in Sheet Nos. 141,142C and 147.

In the event facilities have been abandoned, Northern shall have the right to file to reduce the applicable MID fuel percentage(s) on a common basis for all transactions affected by the abandonment to reflect the reduction in use for the remainder of the PRA period. In the event such abandoned facilities (gas compressors) have been replaced with electric compressors installed after October 1, 1998, and Northern reduces the applicable MID fuel percentages, Northern has the right to file to increase the applicable electric compression commodity rate.

MILEAGE INDICATOR DISTRICTS (dollars per mmbtu)  
DELIVERY DISTRICT

RECEIPT DISTRICT	10	11	12	13	14	15	16A	16B	17	
1	TI Apr-Oct	0.5683	0.4589	0.5154	0.5599	0.6396	0.6813	0.6359	0.7138	0.9710
	TI Nov-Mar	0.9851	0.7955	0.8935	0.9706	1.1088	1.1811	1.1024	1.2374	1.8949
	TF	0.0478	0.0386	0.0434	0.0471	0.0538	0.0573	0.0535	0.0601	0.0771
2	TI Apr-Oct	0.4932	0.4079	0.4552	0.4950	0.5757	0.6804	0.5784	0.6433	0.9005
	TI Nov-Mar	0.8549	0.7071	0.7890	0.8581	0.9979	1.1795	1.0028	1.1153	1.7728
	TF	0.0415	0.0343	0.0383	0.0417	0.0484	0.0573	0.0487	0.0541	0.0711
3	TI Apr-Oct	0.5089	0.4357	0.4820	0.5228	0.6239	0.7073	0.5302	0.6498	0.9070
	TI Nov-Mar	0.8822	0.7553	0.8356	0.9063	1.0815	1.2261	0.9192	1.1265	1.7840
	TF	0.0428	0.0367	0.0406	0.0440	0.0525	0.0595	0.0446	0.0547	0.0717
4	TI Apr-Oct	0.4422	0.3866	0.4338	0.4737	0.5590	0.6591	0.5451	0.6378	0.8950
	TI Nov-Mar	0.7665	0.6701	0.7521	0.8212	0.9690	1.1426	0.9449	1.1056	1.7631
	TF	0.0372	0.0325	0.0365	0.0399	0.0470	0.0555	0.0459	0.0537	0.0707
5	TI Apr-Oct	0.4663	0.3625	0.4097	0.4496	0.4932	0.6211	0.5543	0.6090	0.8662
	TI Nov-Mar	0.8083	0.6283	0.7103	0.7794	0.8549	1.0767	0.9610	1.0558	1.7133
	TF	0.0392	0.0305	0.0345	0.0378	0.0415	0.0523	0.0466	0.0512	0.0682
6	TI Apr-Oct	0.4236	0.3272	0.3754	0.4153	0.4978	0.6137	0.4932	0.5905	0.8477
	TI Nov-Mar	0.7344	0.5673	0.6508	0.7199	0.8630	1.0638	0.8549	1.0237	1.6812
	TF	0.0356	0.0275	0.0316	0.0349	0.0419	0.0516	0.0415	0.0497	0.0667
7	TI Apr-Oct	0.2772	0.1780	0.2243	0.2651	0.3495	0.5404	0.3458	0.4292	0.6864
	TI Nov-Mar	0.4805	0.3085	0.3889	0.4596	0.6058	0.9369	0.5994	0.7440	1.4015
	TF	0.0233	0.0150	0.0189	0.0223	0.0294	0.0455	0.0291	0.0361	0.0531
7B	TI Apr-Oct	0.2772	0.1780	0.2243	0.2651	0.3495	0.5404	0.3458	0.4292	0.6864
	TI Nov-Mar	0.4805	0.3085	0.3889	0.4596	0.6058	0.9369	0.5994	0.7440	1.4015
	TF	0.0233	0.0150	0.0189	0.0223	0.0294	0.0455	0.0291	0.0361	0.0531
8	TI Apr-Oct	0.2021	0.1205	0.1539	0.1947	0.2725	0.4116	0.2596	0.3439	0.6011
	TI Nov-Mar	0.3503	0.2089	0.2668	0.3375	0.4725	0.7135	0.4500	0.5962	1.2537
	TF	0.0170	0.0101	0.0129	0.0164	0.0229	0.0346	0.0218	0.0289	0.0459
9	TI Apr-Oct	0.1567	0.0705	0.1530	0.1557	0.2457	0.3764	0.2753	0.3393	0.5965
	TI Nov-Mar	0.2716	0.1221	0.2652	0.2700	0.4259	0.6524	0.4773	0.5882	1.2457
	TF	0.0132	0.0059	0.0129	0.0131	0.0207	0.0317	0.0232	0.0285	0.0455

NOTE: MID 16A represents the 14 county area south of the F/M Demarcation point.  
 MID 16B represents the F/M Demarcation point.  
 MID 17 represents the Market Area.

NOTE: The MID rates include: (1) the appropriate Market Area Commodity rate for deliveries to MID 17; (2) the applicable Market Area Electric Compression commodity rate as set forth in Sheet No. 54 for deliveries to MID 17; and (3) the applicable Field Area Electric Compression commodity rate as set forth in Sheet No. 54 for deliveries to MIDs 1 - 16A.

In addition, Shipper shall pay the ACA unit surcharge as posted on FERC's website at <http://www.ferc.gov> and the Carlton surcharge, if applicable.

MILEAGE INDICATOR DISTRICTS (dollars per mmbtu)  
DELIVERY DISTRICT

RECEIPT DISTRICT	10	11	12	13	14	15	16A	16B	17
10 TI Apr-Oct	0.0111	0.0454	0.1363	0.1743	0.2577	0.3578	0.2123	0.3374	0.5946
10 TI Nov-Mar	0.0193	0.0787	0.2362	0.3021	0.4467	0.6203	0.3680	0.5849	1.2424
10 TF	0.0009	0.0038	0.0115	0.0147	0.0217	0.0301	0.0179	0.0284	0.0454
11 TI Apr-Oct	0.0992	0.0222	0.0408	0.1140	0.1947	0.3161	0.1650	0.2531	0.5103
11 TI Nov-Mar	0.1719	0.0386	0.0707	0.1977	0.3375	0.5480	0.2860	0.4387	1.0962
11 TF	0.0083	0.0019	0.0034	0.0096	0.0164	0.0266	0.0139	0.0213	0.0383
12 TI Apr-Oct	0.1548	0.0760	0.0927	0.1418	0.2345	0.3356	0.2253	0.3161	0.5733
12 TI Nov-Mar	0.2684	0.1318	0.1607	0.2459	0.4066	0.5817	0.3905	0.5480	1.2055
12 TF	0.0130	0.0064	0.0078	0.0119	0.0197	0.0282	0.0190	0.0266	0.0436
13 TI Apr-Oct	0.2030	0.0788	0.1159	0.0519	0.1149	0.2475	0.0936	0.1826	0.4398
13 TI Nov-Mar	0.3519	0.1366	0.2009	0.0900	0.1993	0.4291	0.1623	0.3166	0.9741
13 TF	0.0171	0.0066	0.0098	0.0044	0.0097	0.0208	0.0079	0.0154	0.0324
14 TI Apr-Oct	0.1789	0.2012	0.2512	0.0788	0.0222	0.3170	0.1780	0.2716	0.5288
14 TI Nov-Mar	0.3102	0.3487	0.4355	0.1366	0.0386	0.5496	0.3085	0.4709	1.1284
14 TF	0.0151	0.0169	0.0211	0.0066	0.0019	0.0267	0.0150	0.0229	0.0399
15 TI Apr-Oct	0.4051	0.3254	0.3782	0.2401	0.3291	0.0232	0.1585	0.2429	0.5001
15 TI Nov-Mar	0.7023	0.5641	0.6557	0.4162	0.5705	0.0402	0.2748	0.4210	1.0785
15 TF	0.0341	0.0274	0.0318	0.0202	0.0277	0.0020	0.0133	0.0204	0.0374
16A TI Apr-Oct	0.3068	0.1771	0.2280	0.0936	0.1817	0.1520	0.0158	0.0871	0.3443
16A TI Nov-Mar	0.5319	0.3069	0.3953	0.1623	0.3150	0.2635	0.0273	0.1511	0.8086
16A TF	0.0258	0.0149	0.0192	0.0079	0.0153	0.0128	0.0013	0.0073	0.0243
16B TI Apr-Oct	0.3374	0.2531	0.3161	0.1826	0.2716	0.2429	0.0871	0.0000	0.2572
16B TI Nov-Mar	0.5849	0.4387	0.5480	0.3166	0.4709	0.4210	0.1511	0.0000	0.6575
16B TF	0.0284	0.0213	0.0266	0.0154	0.0229	0.0204	0.0073	0.0000	0.0170
17 TI Apr-Oct	0.6813	0.5822	0.6341	0.4811	0.3430	0.3532	0.2707	0.3893	0.2572
17 TI Nov-Mar	1.1811	1.0092	1.0992	0.8340	0.5946	0.6123	0.4692	0.6749	0.6575
17 TF	0.0573	0.0490	0.0534	0.0405	0.0289	0.0297	0.0228	0.0328	0.0170

NOTE: MID 16A represents the 14 county area south of the F/M Demarcation point.  
 MID 16B represents the F/M Demarcation point.  
 MID 17 represents the Market Area.

NOTE: The MID rates include: (1) the appropriate Market Area Commodity rate for deliveries to MID 17; (2) the applicable Market Area Electric Compression commodity rate as set forth in Sheet No. 54 for deliveries to MID 17; and (3) the applicable Field Area Electric Compression commodity rate as set forth in Sheet No. 54 for deliveries to MIDs 1 - 16A.

In addition, Shipper shall pay the ACA unit surcharge as posted on FERC's website at <http://www.ferc.gov> and the Carlton surcharge, if applicable.



MILEAGE INDICATOR DISTRICTS FUEL PERCENTAGES  
 DELIVERY DISTRICT

RECEIPT DISTRICT		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>7B</u>	<u>8</u>
1	ML Fuel	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.59%	2.24%
2	ML Fuel	0.15%	0.15%	0.74%	0.74%	0.15%	0.15%	0.74%	0.59%	2.24%
3	ML Fuel	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.59%	2.24%
4	ML Fuel	0.74%	0.74%	0.74%	0.74%	0.15%	0.74%	0.74%	0.59%	2.24%
5	ML Fuel	0.74%	0.74%	0.74%	0.74%	0.15%	0.74%	0.74%	0.59%	2.24%
6	ML Fuel	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.59%	2.24%
7	ML Fuel	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.59%	2.24%
7B	ML Fuel	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.00%	1.65%
8	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	1.50%	1.65%
9	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	1.50%	1.65%
10	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	1.50%	1.65%
11	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	1.50%	1.65%
12	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	1.50%	1.65%
13	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	1.50%	1.65%
14	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	1.50%	1.65%
15	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	1.50%	1.65%
16A	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	1.50%	1.65%
16B	ML Fuel	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.00%	1.65%
17	ML Fuel	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.00%	1.65%

Note:Transportation Fuel percentages include the UAF percent as set forth in Sheet No. 54.

Northern will adjust its Fuel percentages in accordance with Section 53 of the General Terms and Conditions of this Tariff.

MILEAGE INDICATOR DISTRICTS FUEL PERCENTAGES  
 DELIVERY DISTRICT

RECEIPT DISTRICT	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16A</u>	<u>16B</u>	<u>17</u>
1 ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.09%	2.82%
2 ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.09%	2.82%
3 ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.09%	2.82%
4 ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.09%	2.82%
5 ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.09%	2.82%
6 ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.09%	2.82%
7 ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.09%	2.82%
7B ML Fuel	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.50%	2.23%
8 ML Fuel	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.50%	2.23%
9 ML Fuel	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.50%	2.23%
10 ML Fuel	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.50%	2.23%
11 ML Fuel	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.50%	2.23%
12 ML Fuel	1.65%	1.65%	1.65%	0.15%	1.65%	0.15%	1.65%	1.65%	1.50%	2.23%
13 ML Fuel	1.65%	1.65%	1.65%	0.15%	1.65%	0.15%	1.65%	1.65%	1.50%	2.23%
14 ML Fuel	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.50%	2.23%
15 ML Fuel	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.50%	2.23%
16A ML Fuel	1.65%	1.65%	1.65%	0.15%	0.15%	0.15%	0.15%	0.15%	1.50%	2.23%
16B ML Fuel	1.65%	1.65%	1.65%	0.15%	0.15%	0.15%	0.15%	0.15%	0.00%	0.73%
17 ML Fuel	1.65%	1.65%	1.65%	0.15%	0.15%	0.15%	0.15%	0.15%	0.00%	0.73%

Note:Transportation Fuel percentages include the UAF percent as set forth in Sheet No. 54.

Northern will adjust its Fuel percentages in accordance with Section 53 of the General Terms and Conditions of this Tariff.

RATE SCHEDULES TF, TFX, GST, TI, & FDD

Fuel Percentages/Electric Compression Rates

	<u>Percentages</u>
FUEL PERCENTAGES:	1/ 7/
Market Area (including Out-of-Balance)	<del>1.06</del> <u>0.58</u> %
Field Area	2/ 3/ 5/ 6/
UNACCOUNTED FOR PERCENTAGE (including Out-of-Balance)	0.13 <del>5</del> <u>5</u> % 4/ 5/ 7/
FDD STORAGE FUEL	1.14 <del>2</del> <u>22</u> %
FDD URR PERCENTAGE	0.00 <del>3</del> <u>32</u> % 1/
	<u>Electric Compression</u>
COMMODITY RATES:	1/ 7/
Market Area	\$0.000 <del>7</del> <u>75</u>
Field Area	\$0.0000

1/ Northern will adjust its Fuel, UAF and URR percentages and electric compression commodity rates in accordance with Sections 53A and 53B, respectively, of the General Terms and Conditions of this Tariff.

2/ Fuel shall be determined by Mileage Indicator Districts (MIDS) for the Field Area.

3/ Fuel charged in the Field and Market Areas for a pooling transaction or for processing plant transactions will not exceed the fuel charged on a unified Field-to-Market transaction having the same initial Field receipt point and ultimate Market delivery point, i.e., the total fuel collected for transactions that go into and out of pooling points or processing plants in either the Field Area or the Market Area will be no greater than the fuel collected on the total path between the original receipt point and the ultimate delivery point, subject to the shipper(s) providing Northern the requisite information.

4/ The Unaccounted For percentage utilizes the most recent twelve-month period ending December 31, 2018. For deliveries subject only to UAF, if the above UAF rate is negative, the UAF rate is zero; provided, however Northern will issue a volume credit on the Shipper's monthly imbalance statement equivalent to the negative UAF percentage for such deliveries during the period in which the UAF rate is less than zero.

5/ Sheet No. 54A identifies the specific transportation transactions exempt from Fuel and UAF retention charges.

6/ The Out-of-Balance Fuel Percentage for deliveries in MIDS 1-7 shall be the applicable Section 1 Transportation Fuel percentage, and for deliveries in MIDS 8-16B shall be the applicable Section 2 Transportation Fuel percentage.

7/ There will be no Fuel, electric compression or UAF charges for transportation from the Ventura pooling point (POI 78623) to the NBPL/NNG Ventura point (POI 192) and from the Ventura pooling point (POI 78623) to the MID 17 pooling point (POI 71458). In addition, there will be no fuel, electric compression or UAF charges for transportation as set forth in Sheet Nos. 141,142C and 147.

In the event facilities have been abandoned, Northern shall have the right to file to reduce the applicable MID fuel percentage(s) on a common basis for all transactions affected by the abandonment to reflect the reduction in use for the remainder of the PRA period. In the event such abandoned facilities (gas compressors) have been replaced with electric compressors installed after October 1, 1998, and Northern reduces the applicable MID fuel percentages, Northern has the right to file to increase the applicable electric compression commodity rate.

MILEAGE INDICATOR DISTRICTS (dollars per mmbtu)  
 DELIVERY DISTRICT

RECEIPT DISTRICT	10	11	12	13	14	15	16A	16B	17
<del>TI Apr-Oct</del>	<del>0.5683</del>	<del>0.4589</del>	<del>0.5154</del>	<del>0.5599</del>	<del>0.6396</del>	<del>0.6813</del>	<del>0.6359</del>	<del>0.7138</del>	<del>0.9712</del>
<del>1 TI Nov-Mar</del>	<del>0.9851</del>	<del>0.7955</del>	<del>0.8935</del>	<del>0.9706</del>	<del>1.1088</del>	<del>1.1811</del>	<del>1.1024</del>	<del>1.2374</del>	<del>1.8951</del>
<del>TF</del>	<del>0.0478</del>	<del>0.0386</del>	<del>0.0434</del>	<del>0.0471</del>	<del>0.0538</del>	<del>0.0573</del>	<del>0.0535</del>	<del>0.0601</del>	<del>0.0773</del>
<del>TI Apr-Oct</del>	<del>0.4932</del>	<del>0.4079</del>	<del>0.4552</del>	<del>0.4950</del>	<del>0.5757</del>	<del>0.6804</del>	<del>0.5784</del>	<del>0.6433</del>	<del>0.9007</del>
<del>2 TI Nov-Mar</del>	<del>0.8549</del>	<del>0.7071</del>	<del>0.7890</del>	<del>0.8581</del>	<del>0.9979</del>	<del>1.1795</del>	<del>1.0028</del>	<del>1.1153</del>	<del>1.7730</del>
<del>TF</del>	<del>0.0415</del>	<del>0.0343</del>	<del>0.0383</del>	<del>0.0417</del>	<del>0.0484</del>	<del>0.0573</del>	<del>0.0487</del>	<del>0.0541</del>	<del>0.0713</del>
<del>TI Apr-Oct</del>	<del>0.5089</del>	<del>0.4357</del>	<del>0.4820</del>	<del>0.5228</del>	<del>0.6239</del>	<del>0.7073</del>	<del>0.5302</del>	<del>0.6498</del>	<del>0.9072</del>
<del>3 TI Nov-Mar</del>	<del>0.8822</del>	<del>0.7553</del>	<del>0.8356</del>	<del>0.9063</del>	<del>1.0815</del>	<del>1.2261</del>	<del>0.9192</del>	<del>1.1265</del>	<del>1.7842</del>
<del>TF</del>	<del>0.0428</del>	<del>0.0367</del>	<del>0.0406</del>	<del>0.0440</del>	<del>0.0525</del>	<del>0.0595</del>	<del>0.0446</del>	<del>0.0547</del>	<del>0.0719</del>
<del>TI Apr-Oct</del>	<del>0.4422</del>	<del>0.3866</del>	<del>0.4338</del>	<del>0.4737</del>	<del>0.5590</del>	<del>0.6591</del>	<del>0.5451</del>	<del>0.6378</del>	<del>0.8952</del>
<del>4 TI Nov-Mar</del>	<del>0.7665</del>	<del>0.6701</del>	<del>0.7521</del>	<del>0.8212</del>	<del>0.9690</del>	<del>1.1426</del>	<del>0.9449</del>	<del>1.1056</del>	<del>1.7633</del>
<del>TF</del>	<del>0.0372</del>	<del>0.0325</del>	<del>0.0365</del>	<del>0.0399</del>	<del>0.0470</del>	<del>0.0555</del>	<del>0.0459</del>	<del>0.0537</del>	<del>0.0709</del>
<del>TI Apr-Oct</del>	<del>0.4663</del>	<del>0.3625</del>	<del>0.4097</del>	<del>0.4496</del>	<del>0.4932</del>	<del>0.6211</del>	<del>0.5543</del>	<del>0.6090</del>	<del>0.8664</del>
<del>5 TI Nov-Mar</del>	<del>0.8083</del>	<del>0.6283</del>	<del>0.7103</del>	<del>0.7794</del>	<del>0.8549</del>	<del>1.0767</del>	<del>0.9610</del>	<del>1.0558</del>	<del>1.7135</del>
<del>TF</del>	<del>0.0392</del>	<del>0.0305</del>	<del>0.0345</del>	<del>0.0378</del>	<del>0.0415</del>	<del>0.0523</del>	<del>0.0466</del>	<del>0.0512</del>	<del>0.0684</del>
<del>TI Apr-Oct</del>	<del>0.4236</del>	<del>0.3272</del>	<del>0.3754</del>	<del>0.4153</del>	<del>0.4978</del>	<del>0.6137</del>	<del>0.4932</del>	<del>0.5905</del>	<del>0.8479</del>
<del>6 TI Nov-Mar</del>	<del>0.7344</del>	<del>0.5673</del>	<del>0.6508</del>	<del>0.7199</del>	<del>0.8630</del>	<del>1.0638</del>	<del>0.8549</del>	<del>1.0237</del>	<del>1.6814</del>
<del>TF</del>	<del>0.0356</del>	<del>0.0275</del>	<del>0.0316</del>	<del>0.0349</del>	<del>0.0419</del>	<del>0.0516</del>	<del>0.0415</del>	<del>0.0497</del>	<del>0.0669</del>
<del>TI Apr-Oct</del>	<del>0.2772</del>	<del>0.1780</del>	<del>0.2243</del>	<del>0.2651</del>	<del>0.3495</del>	<del>0.5404</del>	<del>0.3458</del>	<del>0.4292</del>	<del>0.6866</del>
<del>7 TI Nov-Mar</del>	<del>0.4805</del>	<del>0.3085</del>	<del>0.3889</del>	<del>0.4596</del>	<del>0.6058</del>	<del>0.9369</del>	<del>0.5994</del>	<del>0.7440</del>	<del>1.4017</del>
<del>TF</del>	<del>0.0233</del>	<del>0.0150</del>	<del>0.0189</del>	<del>0.0223</del>	<del>0.0294</del>	<del>0.0455</del>	<del>0.0291</del>	<del>0.0361</del>	<del>0.0533</del>
<del>TI Apr-Oct</del>	<del>0.2772</del>	<del>0.1780</del>	<del>0.2243</del>	<del>0.2651</del>	<del>0.3495</del>	<del>0.5404</del>	<del>0.3458</del>	<del>0.4292</del>	<del>0.6866</del>
<del>7B TI Nov-Mar</del>	<del>0.4805</del>	<del>0.3085</del>	<del>0.3889</del>	<del>0.4596</del>	<del>0.6058</del>	<del>0.9369</del>	<del>0.5994</del>	<del>0.7440</del>	<del>1.4017</del>
<del>TF</del>	<del>0.0233</del>	<del>0.0150</del>	<del>0.0189</del>	<del>0.0223</del>	<del>0.0294</del>	<del>0.0455</del>	<del>0.0291</del>	<del>0.0361</del>	<del>0.0533</del>
<del>TI Apr-Oct</del>	<del>0.2021</del>	<del>0.1205</del>	<del>0.1539</del>	<del>0.1947</del>	<del>0.2725</del>	<del>0.4116</del>	<del>0.2596</del>	<del>0.3439</del>	<del>0.6013</del>
<del>8 TI Nov-Mar</del>	<del>0.3503</del>	<del>0.2089</del>	<del>0.2668</del>	<del>0.3375</del>	<del>0.4725</del>	<del>0.7135</del>	<del>0.4500</del>	<del>0.5962</del>	<del>1.2539</del>
<del>TF</del>	<del>0.0170</del>	<del>0.0101</del>	<del>0.0129</del>	<del>0.0164</del>	<del>0.0229</del>	<del>0.0346</del>	<del>0.0218</del>	<del>0.0289</del>	<del>0.0461</del>
<del>TI Apr-Oct</del>	<del>0.1567</del>	<del>0.0705</del>	<del>0.1530</del>	<del>0.1557</del>	<del>0.2457</del>	<del>0.3764</del>	<del>0.2753</del>	<del>0.3393</del>	<del>0.5967</del>
<del>9 TI Nov-Mar</del>	<del>0.2716</del>	<del>0.1221</del>	<del>0.2652</del>	<del>0.2700</del>	<del>0.4259</del>	<del>0.6524</del>	<del>0.4773</del>	<del>0.5882</del>	<del>1.2459</del>
<del>TF</del>	<del>0.0132</del>	<del>0.0059</del>	<del>0.0129</del>	<del>0.0131</del>	<del>0.0207</del>	<del>0.0317</del>	<del>0.0232</del>	<del>0.0285</del>	<del>0.0457</del>
TI Apr-Oct	0.5683	0.4589	0.5154	0.5599	0.6396	0.6813	0.6359	0.7138	0.9710
1 TI Nov-Mar	0.9851	0.7955	0.8935	0.9706	1.1088	1.1811	1.1024	1.2374	1.8949
TF	0.0478	0.0386	0.0434	0.0471	0.0538	0.0573	0.0535	0.0601	0.0771
TI Apr-Oct	0.4932	0.4079	0.4552	0.4950	0.5757	0.6804	0.5784	0.6433	0.9005
2 TI Nov-Mar	0.8549	0.7071	0.7890	0.8581	0.9979	1.1795	1.0028	1.1153	1.7728
TF	0.0415	0.0343	0.0383	0.0417	0.0484	0.0573	0.0487	0.0541	0.0711
TI Apr-Oct	0.5089	0.4357	0.4820	0.5228	0.6239	0.7073	0.5302	0.6498	0.9070
3 TI Nov-Mar	0.8822	0.7553	0.8356	0.9063	1.0815	1.2261	0.9192	1.1265	1.7840
TF	0.0428	0.0367	0.0406	0.0440	0.0525	0.0595	0.0446	0.0547	0.0717
TI Apr-Oct	0.4422	0.3866	0.4338	0.4737	0.5590	0.6591	0.5451	0.6378	0.8950
4 TI Nov-Mar	0.7665	0.6701	0.7521	0.8212	0.9690	1.1426	0.9449	1.1056	1.7631
TF	0.0372	0.0325	0.0365	0.0399	0.0470	0.0555	0.0459	0.0537	0.0707
TI Apr-Oct	0.4663	0.3625	0.4097	0.4496	0.4932	0.6211	0.5543	0.6090	0.8662
5 TI Nov-Mar	0.8083	0.6283	0.7103	0.7794	0.8549	1.0767	0.9610	1.0558	1.7133
TF	0.0392	0.0305	0.0345	0.0378	0.0415	0.0523	0.0466	0.0512	0.0682
TI Apr-Oct	0.4236	0.3272	0.3754	0.4153	0.4978	0.6137	0.4932	0.5905	0.8477
6 TI Nov-Mar	0.7344	0.5673	0.6508	0.7199	0.8630	1.0638	0.8549	1.0237	1.6812
TF	0.0356	0.0275	0.0316	0.0349	0.0419	0.0516	0.0415	0.0497	0.0667

	TI Apr-Oct	0.2772	0.1780	0.2243	0.2651	0.3495	0.5404	0.3458	0.4292	0.6864
7	TI Nov-Mar	0.4805	0.3085	0.3889	0.4596	0.6058	0.9369	0.5994	0.7440	1.4015
	TF	0.0233	0.0150	0.0189	0.0223	0.0294	0.0455	0.0291	0.0361	0.0531
	TI Apr-Oct	0.2772	0.1780	0.2243	0.2651	0.3495	0.5404	0.3458	0.4292	0.6864
7B	TI Nov-Mar	0.4805	0.3085	0.3889	0.4596	0.6058	0.9369	0.5994	0.7440	1.4015
	TF	0.0233	0.0150	0.0189	0.0223	0.0294	0.0455	0.0291	0.0361	0.0531
	TI Apr-Oct	0.2021	0.1205	0.1539	0.1947	0.2725	0.4116	0.2596	0.3439	0.6011
8	TI Nov-Mar	0.3503	0.2089	0.2668	0.3375	0.4725	0.7135	0.4500	0.5962	1.2537
	TF	0.0170	0.0101	0.0129	0.0164	0.0229	0.0346	0.0218	0.0289	0.0459
	TI Apr-Oct	0.1567	0.0705	0.1530	0.1557	0.2457	0.3764	0.2753	0.3393	0.5965
9	TI Nov-Mar	0.2716	0.1221	0.2652	0.2700	0.4259	0.6524	0.4773	0.5882	1.2457
	TF	0.0132	0.0059	0.0129	0.0131	0.0207	0.0317	0.0232	0.0285	0.0455

NOTE: MID 16A represents the 14 county area south of the F/M Demarcation point.  
 MID 16B represents the F/M Demarcation point.  
 MID 17 represents the Market Area.

NOTE: The MID rates include: (1) the appropriate Market Area Commodity rate for deliveries to MID 17; (2) the applicable Market Area Electric Compression commodity rate as set forth in Sheet No. 54 for deliveries to MID 17; and (3) the applicable Field Area Electric Compression commodity rate as set forth in Sheet No. 54 for deliveries to MIDs 1 - 16A.

In addition, Shipper shall pay the ACA unit surcharge as posted on FERC's website at <http://www.ferc.gov> and the Carlton surcharge, if applicable.

MILEAGE INDICATOR DISTRICTS (dollars per mmbtu)  
 DELIVERY DISTRICT

RECEIPT DISTRICT	10	11	12	13	14	15	16A	16B	17
<del>TI Apr-Oct</del>	<del>0.0111</del>	<del>0.0454</del>	<del>0.1363</del>	<del>0.1743</del>	<del>0.2577</del>	<del>0.3578</del>	<del>0.2123</del>	<del>0.3374</del>	<del>0.5948</del>
<del>10 TI Nov-Mar</del>	<del>0.0193</del>	<del>0.0787</del>	<del>0.2362</del>	<del>0.3021</del>	<del>0.4467</del>	<del>0.6203</del>	<del>0.3680</del>	<del>0.5849</del>	<del>1.2426</del>
<del>TF</del>	<del>0.0009</del>	<del>0.0038</del>	<del>0.0115</del>	<del>0.0147</del>	<del>0.0217</del>	<del>0.0301</del>	<del>0.0179</del>	<del>0.0284</del>	<del>0.0456</del>
<del>TI Apr-Oct</del>	<del>0.0992</del>	<del>0.0222</del>	<del>0.0408</del>	<del>0.1140</del>	<del>0.1947</del>	<del>0.3161</del>	<del>0.1650</del>	<del>0.2531</del>	<del>0.5105</del>
<del>11 TI Nov-Mar</del>	<del>0.1719</del>	<del>0.0386</del>	<del>0.0707</del>	<del>0.1977</del>	<del>0.3375</del>	<del>0.5480</del>	<del>0.2860</del>	<del>0.4387</del>	<del>1.0964</del>
<del>TF</del>	<del>0.0083</del>	<del>0.0019</del>	<del>0.0034</del>	<del>0.0096</del>	<del>0.0164</del>	<del>0.0266</del>	<del>0.0139</del>	<del>0.0213</del>	<del>0.0385</del>
<del>TI Apr-Oct</del>	<del>0.1548</del>	<del>0.0760</del>	<del>0.0927</del>	<del>0.1418</del>	<del>0.2345</del>	<del>0.3356</del>	<del>0.2253</del>	<del>0.3161</del>	<del>0.5735</del>
<del>12 TI Nov-Mar</del>	<del>0.2684</del>	<del>0.1318</del>	<del>0.1607</del>	<del>0.2459</del>	<del>0.4066</del>	<del>0.5817</del>	<del>0.3905</del>	<del>0.5480</del>	<del>1.2057</del>
<del>TF</del>	<del>0.0130</del>	<del>0.0064</del>	<del>0.0078</del>	<del>0.0119</del>	<del>0.0197</del>	<del>0.0282</del>	<del>0.0190</del>	<del>0.0266</del>	<del>0.0438</del>
<del>TI Apr-Oct</del>	<del>0.2030</del>	<del>0.0788</del>	<del>0.1159</del>	<del>0.0519</del>	<del>0.1149</del>	<del>0.2475</del>	<del>0.0936</del>	<del>0.1826</del>	<del>0.4400</del>
<del>13 TI Nov-Mar</del>	<del>0.3519</del>	<del>0.1366</del>	<del>0.2009</del>	<del>0.0900</del>	<del>0.1993</del>	<del>0.4291</del>	<del>0.1623</del>	<del>0.3166</del>	<del>0.9743</del>
<del>TF</del>	<del>0.0171</del>	<del>0.0066</del>	<del>0.0098</del>	<del>0.0044</del>	<del>0.0097</del>	<del>0.0208</del>	<del>0.0079</del>	<del>0.0154</del>	<del>0.0326</del>
<del>TI Apr-Oct</del>	<del>0.1789</del>	<del>0.2012</del>	<del>0.2512</del>	<del>0.0788</del>	<del>0.0222</del>	<del>0.3170</del>	<del>0.1780</del>	<del>0.2716</del>	<del>0.5290</del>
<del>14 TI Nov-Mar</del>	<del>0.3102</del>	<del>0.3487</del>	<del>0.4355</del>	<del>0.1366</del>	<del>0.0386</del>	<del>0.5496</del>	<del>0.3085</del>	<del>0.4709</del>	<del>1.1286</del>
<del>TF</del>	<del>0.0151</del>	<del>0.0169</del>	<del>0.0211</del>	<del>0.0066</del>	<del>0.0019</del>	<del>0.0267</del>	<del>0.0150</del>	<del>0.0229</del>	<del>0.0401</del>
<del>TI Apr-Oct</del>	<del>0.4051</del>	<del>0.3254</del>	<del>0.3782</del>	<del>0.2401</del>	<del>0.3291</del>	<del>0.0232</del>	<del>0.1585</del>	<del>0.2429</del>	<del>0.5003</del>
<del>15 TI Nov-Mar</del>	<del>0.7023</del>	<del>0.5641</del>	<del>0.6557</del>	<del>0.4162</del>	<del>0.5705</del>	<del>0.0402</del>	<del>0.2748</del>	<del>0.4210</del>	<del>1.0787</del>
<del>TF</del>	<del>0.0341</del>	<del>0.0274</del>	<del>0.0318</del>	<del>0.0202</del>	<del>0.0277</del>	<del>0.0020</del>	<del>0.0133</del>	<del>0.0204</del>	<del>0.0376</del>
<del>TI Apr-Oct</del>	<del>0.3068</del>	<del>0.1771</del>	<del>0.2280</del>	<del>0.0936</del>	<del>0.1817</del>	<del>0.1520</del>	<del>0.0158</del>	<del>0.0871</del>	<del>0.3445</del>
<del>16A TI Nov-Mar</del>	<del>0.5319</del>	<del>0.3069</del>	<del>0.3953</del>	<del>0.1623</del>	<del>0.3150</del>	<del>0.2635</del>	<del>0.0273</del>	<del>0.1511</del>	<del>0.8088</del>
<del>TF</del>	<del>0.0258</del>	<del>0.0149</del>	<del>0.0192</del>	<del>0.0079</del>	<del>0.0153</del>	<del>0.0128</del>	<del>0.0013</del>	<del>0.0073</del>	<del>0.0245</del>
<del>TI Apr-Oct</del>	<del>0.3374</del>	<del>0.2531</del>	<del>0.3161</del>	<del>0.1826</del>	<del>0.2716</del>	<del>0.2429</del>	<del>0.0871</del>	<del>0.0000</del>	<del>0.2574</del>
<del>16B TI Nov-Mar</del>	<del>0.5849</del>	<del>0.4387</del>	<del>0.5480</del>	<del>0.3166</del>	<del>0.4709</del>	<del>0.4210</del>	<del>0.1511</del>	<del>0.0000</del>	<del>0.6577</del>
<del>TF</del>	<del>0.0284</del>	<del>0.0213</del>	<del>0.0266</del>	<del>0.0154</del>	<del>0.0229</del>	<del>0.0204</del>	<del>0.0073</del>	<del>0.0000</del>	<del>0.0172</del>
<del>TI Apr-Oct</del>	<del>0.6813</del>	<del>0.5822</del>	<del>0.6341</del>	<del>0.4811</del>	<del>0.3430</del>	<del>0.3532</del>	<del>0.2707</del>	<del>0.3893</del>	<del>0.2574</del>
<del>17 TI Nov-Mar</del>	<del>1.1811</del>	<del>1.0092</del>	<del>1.0992</del>	<del>0.8340</del>	<del>0.5946</del>	<del>0.6123</del>	<del>0.4692</del>	<del>0.6749</del>	<del>0.6577</del>
<del>TF</del>	<del>0.0573</del>	<del>0.0490</del>	<del>0.0534</del>	<del>0.0405</del>	<del>0.0289</del>	<del>0.0297</del>	<del>0.0228</del>	<del>0.0328</del>	<del>0.0172</del>
TI Apr-Oct	0.0111	0.0454	0.1363	0.1743	0.2577	0.3578	0.2123	0.3374	0.5946
10 TI Nov-Mar	0.0193	0.0787	0.2362	0.3021	0.4467	0.6203	0.3680	0.5849	1.2424
TF	0.0009	0.0038	0.0115	0.0147	0.0217	0.0301	0.0179	0.0284	0.0454
TI Apr-Oct	0.0992	0.0222	0.0408	0.1140	0.1947	0.3161	0.1650	0.2531	0.5103
11 TI Nov-Mar	0.1719	0.0386	0.0707	0.1977	0.3375	0.5480	0.2860	0.4387	1.0962
TF	0.0083	0.0019	0.0034	0.0096	0.0164	0.0266	0.0139	0.0213	0.0383
TI Apr-Oct	0.1548	0.0760	0.0927	0.1418	0.2345	0.3356	0.2253	0.3161	0.5733
12 TI Nov-Mar	0.2684	0.1318	0.1607	0.2459	0.4066	0.5817	0.3905	0.5480	1.2055
TF	0.0130	0.0064	0.0078	0.0119	0.0197	0.0282	0.0190	0.0266	0.0436
TI Apr-Oct	0.2030	0.0788	0.1159	0.0519	0.1149	0.2475	0.0936	0.1826	0.4398
13 TI Nov-Mar	0.3519	0.1366	0.2009	0.0900	0.1993	0.4291	0.1623	0.3166	0.9741
TF	0.0171	0.0066	0.0098	0.0044	0.0097	0.0208	0.0079	0.0154	0.0324
TI Apr-Oct	0.1789	0.2012	0.2512	0.0788	0.0222	0.3170	0.1780	0.2716	0.5288
14 TI Nov-Mar	0.3102	0.3487	0.4355	0.1366	0.0386	0.5496	0.3085	0.4709	1.1284
TF	0.0151	0.0169	0.0211	0.0066	0.0019	0.0267	0.0150	0.0229	0.0399
TI Apr-Oct	0.4051	0.3254	0.3782	0.2401	0.3291	0.0232	0.1585	0.2429	0.5001
15 TI Nov-Mar	0.7023	0.5641	0.6557	0.4162	0.5705	0.0402	0.2748	0.4210	1.0785
TF	0.0341	0.0274	0.0318	0.0202	0.0277	0.0020	0.0133	0.0204	0.0374
TI Apr-Oct	0.3068	0.1771	0.2280	0.0936	0.1817	0.1520	0.0158	0.0871	0.3443
16A TI Nov-Mar	0.5319	0.3069	0.3953	0.1623	0.3150	0.2635	0.0273	0.1511	0.8086
TF	0.0258	0.0149	0.0192	0.0079	0.0153	0.0128	0.0013	0.0073	0.0243
TI Apr-Oct	0.3374	0.2531	0.3161	0.1826	0.2716	0.2429	0.0871	0.0000	0.2572
16B TI Nov-Mar	0.5849	0.4387	0.5480	0.3166	0.4709	0.4210	0.1511	0.0000	0.6575
TF	0.0284	0.0213	0.0266	0.0154	0.0229	0.0204	0.0073	0.0000	0.0170

	TI Apr-Oct	0.6813	0.5822	0.6341	0.4811	0.3430	0.3532	0.2707	0.3893	0.2572
17	TI Nov-Mar	1.1811	1.0092	1.0992	0.8340	0.5946	0.6123	0.4692	0.6749	0.6575
	TF	0.0573	0.0490	0.0534	0.0405	0.0289	0.0297	0.0228	0.0328	0.0170

NOTE: MID 16A represents the 14 county area south of the F/M Demarcation point.  
MID 16B represents the F/M Demarcation point.  
MID 17 represents the Market Area.

NOTE: The MID rates include: (1) the appropriate Market Area Commodity rate for deliveries to MID 17; (2) the applicable Market Area Electric Compression commodity rate as set forth in Sheet No. 54 for deliveries to MID 17; and (3) the applicable Field Area Electric Compression commodity rate as set forth in Sheet No. 54 for deliveries to MIDs 1 - 16A.

In addition, Shipper shall pay the ACA unit surcharge as posted on FERC's website at <http://www.ferc.gov> and the Carlton surcharge, if applicable.

MILEAGE INDICATOR DISTRICTS FUEL PERCENTAGES  
 DELIVERY DISTRICT

RECEIPT DISTRICT		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>7B</u>	<u>8</u>
<del>1</del>	<del>ML Fuel</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.39%</del>	<del>2.48%</del>
<del>2</del>	<del>ML Fuel</del>	<del>0.13%</del>	<del>0.13%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.13%</del>	<del>0.13%</del>	<del>0.52%</del>	<del>0.39%</del>	<del>2.48%</del>
<del>3</del>	<del>ML Fuel</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.39%</del>	<del>2.48%</del>
<del>4</del>	<del>ML Fuel</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.13%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.39%</del>	<del>2.48%</del>
<del>5</del>	<del>ML Fuel</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.13%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.39%</del>	<del>2.48%</del>
<del>6</del>	<del>ML Fuel</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.39%</del>	<del>2.48%</del>
<del>7</del>	<del>ML Fuel</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.39%</del>	<del>2.48%</del>
<del>7B</del>	<del>ML Fuel</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.00%</del>	<del>2.09%</del>
<del>8</del>	<del>ML Fuel</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>1.96%</del>	<del>2.09%</del>
<del>9</del>	<del>ML Fuel</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>1.96%</del>	<del>2.09%</del>
<del>10</del>	<del>ML Fuel</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>1.96%</del>	<del>2.09%</del>
<del>11</del>	<del>ML Fuel</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>1.96%</del>	<del>2.09%</del>
<del>12</del>	<del>ML Fuel</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>1.96%</del>	<del>2.09%</del>
<del>13</del>	<del>ML Fuel</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>1.96%</del>	<del>2.09%</del>
<del>14</del>	<del>ML Fuel</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>1.96%</del>	<del>2.09%</del>
<del>15</del>	<del>ML Fuel</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>1.96%</del>	<del>2.09%</del>
<del>16A</del>	<del>ML Fuel</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>1.96%</del>	<del>2.09%</del>
<del>16B</del>	<del>ML Fuel</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.00%</del>	<del>2.09%</del>
<del>17</del>	<del>ML Fuel</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.52%</del>	<del>0.00%</del>	<del>2.09%</del>
1	ML Fuel	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.59%	2.24%
2	ML Fuel	0.15%	0.15%	0.74%	0.74%	0.15%	0.15%	0.74%	0.59%	2.24%
3	ML Fuel	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.59%	2.24%
4	ML Fuel	0.74%	0.74%	0.74%	0.74%	0.15%	0.74%	0.74%	0.59%	2.24%
5	ML Fuel	0.74%	0.74%	0.74%	0.74%	0.15%	0.74%	0.74%	0.59%	2.24%
6	ML Fuel	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.59%	2.24%
7	ML Fuel	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.59%	2.24%
7B	ML Fuel	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.00%	1.65%
8	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	1.50%	1.65%
9	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	1.50%	1.65%
10	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	1.50%	1.65%
11	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	1.50%	1.65%
12	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	1.50%	1.65%
13	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	1.50%	1.65%



14	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	1.50%	1.65%
15	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	1.50%	1.65%
16A	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	1.50%	1.65%
16B	ML Fuel	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.00%	1.65%
17	ML Fuel	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.74%	0.00%	1.65%

Note:Transportation Fuel percentages include the UAF percent as set forth in Sheet No. 54.

Northern will adjust its Fuel percentages in accordance with Section 53  
of the General Terms and Conditions of this Tariff.

MILEAGE INDICATOR DISTRICTS FUEL PERCENTAGES  
 DELIVERY DISTRICT

RECEIPT DISTRICT		<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16A</u>	<u>16B</u>	<u>17</u>
<del>1</del>	<del>ML Fuel</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.35%</del>	<del>3.54%</del>
<del>2</del>	<del>ML Fuel</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.35%</del>	<del>3.54%</del>
<del>3</del>	<del>ML Fuel</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.35%</del>	<del>3.54%</del>
<del>4</del>	<del>ML Fuel</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.35%</del>	<del>3.54%</del>
<del>5</del>	<del>ML Fuel</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.35%</del>	<del>3.54%</del>
<del>6</del>	<del>ML Fuel</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.35%</del>	<del>3.54%</del>
<del>7</del>	<del>ML Fuel</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.48%</del>	<del>2.35%</del>	<del>3.54%</del>
<del>7B</del>	<del>ML Fuel</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>1.96%</del>	<del>3.15%</del>
<del>8</del>	<del>ML Fuel</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>1.96%</del>	<del>3.15%</del>
<del>9</del>	<del>ML Fuel</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>1.96%</del>	<del>3.15%</del>
<del>10</del>	<del>ML Fuel</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>1.96%</del>	<del>3.15%</del>
<del>11</del>	<del>ML Fuel</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>1.96%</del>	<del>3.15%</del>
<del>12</del>	<del>ML Fuel</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>0.13%</del>	<del>2.09%</del>	<del>0.13%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>1.96%</del>	<del>3.15%</del>
<del>13</del>	<del>ML Fuel</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>0.13%</del>	<del>2.09%</del>	<del>0.13%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>1.96%</del>	<del>3.15%</del>
<del>14</del>	<del>ML Fuel</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>1.96%</del>	<del>3.15%</del>
<del>15</del>	<del>ML Fuel</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>1.96%</del>	<del>3.15%</del>
<del>16A</del>	<del>ML Fuel</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>0.13%</del>	<del>0.13%</del>	<del>0.13%</del>	<del>0.13%</del>	<del>0.13%</del>	<del>1.96%</del>	<del>3.15%</del>
<del>16B</del>	<del>ML Fuel</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>0.13%</del>	<del>0.13%</del>	<del>0.13%</del>	<del>0.13%</del>	<del>0.13%</del>	<del>0.00%</del>	<del>1.19%</del>
<del>17</del>	<del>ML Fuel</del>	<del>2.09%</del>	<del>2.09%</del>	<del>2.09%</del>	<del>0.13%</del>	<del>0.13%</del>	<del>0.13%</del>	<del>0.13%</del>	<del>0.13%</del>	<del>0.00%</del>	<del>1.19%</del>
1	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.09%	2.82%
2	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.09%	2.82%
3	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.09%	2.82%
4	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.09%	2.82%
5	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.09%	2.82%
6	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.09%	2.82%
7	ML Fuel	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.24%	2.09%	2.82%
7B	ML Fuel	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.50%	2.23%
8	ML Fuel	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.50%	2.23%
9	ML Fuel	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.50%	2.23%
10	ML Fuel	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.50%	2.23%
11	ML Fuel	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.50%	2.23%
12	ML Fuel	1.65%	1.65%	1.65%	0.15%	1.65%	0.15%	1.65%	1.65%	1.50%	2.23%
13	ML Fuel	1.65%	1.65%	1.65%	0.15%	1.65%	0.15%	1.65%	1.65%	1.50%	2.23%

14	ML Fuel	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.50%	2.23%
15	ML Fuel	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.65%	1.50%	2.23%
16A	ML Fuel	1.65%	1.65%	1.65%	0.15%	0.15%	0.15%	0.15%	0.15%	1.50%	2.23%
16B	ML Fuel	1.65%	1.65%	1.65%	0.15%	0.15%	0.15%	0.15%	0.15%	0.00%	0.73%
17	ML Fuel	1.65%	1.65%	1.65%	0.15%	0.15%	0.15%	0.15%	0.15%	0.00%	0.73%

Note:Transportation Fuel percentages include the UAF percent as set forth in Sheet No. 54.

Northern will adjust its Fuel percentages in accordance with Section 53  
of the General Terms and Conditions of this Tariff.

NORTHERN NATURAL GAS COMPANY  
 PERIODIC RATE ADJUSTMENTS FOR FUEL  
 FUEL CONSUMED DATA - TRANSPORTATION AND STORAGE  
 JANUARY, 2020 - DECEMBER, 2020

SCHEDULE 1

Sec/1	MID Zone	Station Number	Station Name	Source: Measurement Data warehouse												Annual
				Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	
S1	MID 2	990003	PLYMOUTH SPRABERRY UNMETERED	4	4		4	4	177	4	4	4	4	6,292	4	6,505
S1	MID 2	990031	PLYMOUTH BLOW AND PURGE	2	2		2	2	2	2	2	2	2	2	2	22
S1	MID 3	961206	BAKERSFIELD COMPRESSOR STATION FUEL	41,637	38,948	39,999	38,145	37,974	34,987	39,730	40,966	40,294	41,738	40,522	41,131	476,071
S1	MID 3	961341	SPRABERRY COMPRESSOR TRANS	13,907	11,438	12,073	13,610	13,733	11,508	14,072	14,359	12,990	12,452	13,344	9,574	153,060
S1	MID 3	961342	SPRABERRY RECOMP STA TRANS	11,211	9,571	12,935	10,109	9,362	9,012	10,488	9,542	10,232	9,764	9,087	7,835	119,148
S1	MID 3	961601	SPRAYBERRY OFFICE FUEL	83	84	38	44	151	12	-157	12	64	268	302	1,067	1,968
S1	MID 3	990004	SPRABERRY AND HOBBS PLAINS UNMETERED	14	181	678	1,290	14	14	14	1,535	14	14	14	99	3,881
S1	MID 3	990006	COYANOSA TO KERMIT 30 BLOW PURGE					2,509			16,184			114		18,807
S1	MID 3	990022	MITCHELL TO PLY TM BLOW AND PURGE	47	47	47	47	47	53	48	48	48	48	48	48	576
S1	MID 3	990034	SPRABERRY BLOW AND PURGE	117	102	86	87	88	813	136	90	219	321	137	169	2,365
S1	MID 3	990109	BAKERSFIELD COMPRESSOR UNMETERED	2	218	2	2	2	243	2	2	2	131	2	1,152	1,760
S1	MID 4	961571	KERMIT COMPRESSOR STATION			2										45,117
S1	MID 4	990106	KERMIT TURBINE STATION UNS				1									1
S1	MID 5	990043	HOBBS TO PLAINS 26 BLOW PURGE						94		-94					5
S1	MID 6	960482	GAINES COUNTY CROSSOVER COMPRESSOR FUEL	44,961	43,577	61,657	51,600	43,675	45,848	55,434	62,094	42,572	54,171	46,358	41,469	593,416
S1	MID 6	961421	SEMINOLE COMP STA.TRAN.	3	3,603	11,213	8,411				32,150	54,325	54,646	52,949	15	217,315
S1	MID 6	961451	BROWNFIELD COMP.STA.-TRANS.	79,369	76,119	80,236	73,729	67,897	63,082	70,859	75,438	70,642	74,911	69,688	50,296	852,266
S1	MID 6	962145	PLAINS COMPRESSOR FUEL	18	177	2	492	1	1	1	1	1	1	1	4	706
S1	MID 6	990005	BROWNFIELD TO PLAINVIEW UNMETERED	229	229	29	511	447	425	428	230	29	446	29	29	3,061
S1	MID 6	990008	PLAINS 26 UNMETERED	18	37	9	100	9	9	9	9	20	9	9	20	258
S1	MID 6	990107	PLAINVIEW UNMETERED	443	298	1,184	1,157	1,518	1,999	2,943	3,256	1,919	437	1,218	293	16,665
S1	MID 6	990108	GAINES COUNTY CROSSOVER COMPRESSOR UNS	26	565	45	712	44	87	178	118	122	321	99	24	2,341
S1	MID 7	961401	PLAINVIEW COMP.STA.-TRANS.	53,570	52,782	51,285	48,378	35,411	33,423	31,425	34,747	38,201	55,554	44,411	8,251	487,438
S1	MID 7	961431	CLAUDE TURBINE FUEL	62,676	64,084	67,563	59,291	51,607	44,107	30,475	49,765	55,540	66,223	63,032	8,488	622,851
S1	MID 7	990028	CLAUDE UNMETERED	533	386	530	672	1,240	1,945	2,108	2,545	1,660	525	521	1,147	13,812
<b>S1 Total</b>				308,870	302,452	339,613	308,394	263,226	250,350	258,199	343,003	328,906	371,986	348,179	216,239	3,639,417
S2	MID 10	961201	SUNRAY FUEL COMP AUX BLDG	52,202	40,651	45,149	35,954	30,823	31,299	31,802	24,307	38,353	39,051	32,689	23,993	426,273
S2	MID 10	990019	SUNRAY C LINE UNMETERED				45	47	45	46	6,998	3,983	79	54	43	11,340
S2	MID 10	990030	SUNRAY UNMETERED	224	236	233	269	232	921	234	224	238	220	225	211	3,467
S2	MID 10	990038	C LINE UNMETERED	45	45	46	3,468									3,604
S2	MID 11	960448	BEAVER WAREHOUSE #3	50	42	34	22	16	2			10	24	36	199	435
S2	MID 11	960449	BEAVER EMPLOYEE BLDG.	326	298	236	118	63	6		4	67	147	226	413	1,904
S2	MID 11	960450	BEAVER OFFICE/TECH	469	321	308	220	68	32	28	28	36	100	352	380	2,342
S2	MID 11	960466	BEAVER PLANT BOILER FUEL	48	33	24	15	69	78	81	93	60	174	216	504	1,395
S2	MID 11	961020	BEAVER PLANT BLDG 1 ENGINES 14-18	11,805	12,186	17,803	15,256	19,320	15,764	17,443	13,526	16,794	6,421	6,200	1,678	154,196
S2	MID 11	961022	BEAVER PLANT BLDG 2	81,291	57,374	75,742	58,099	37,471	24,339	31,505	39,438	39,777	61,315	53,396	4,040	563,787
S2	MID 11	961049	BEAVER PLANT AUX BU GEN FUEL	10				21			16	1				48
S2	MID 11	961519	BEAVER PLANT BUILDING 1 HEATER FUEL	803	577	702	303	116					306	842	952	4,601
S2	MID 11	961520	BEAVER PLANT BUILDING 2 HEATER FUEL	266	230	297	182	1				10	50	158	203	1,397
S2	MID 11	990012	BEAVER PLANT UNMETERED	3,590	2,232	2,176	2,026	2,143	2,349	7,685	22,335	2,817	2,666	2,076	2,024	54,119
S2	MID 13	961115	PLAINS TBS HEATER FUEL				498		18							516
S2	MID 13	961116	FOWLER TBS HEATER FUEL				4									4
S2	MID 13	961117	CUT STATION HEATER	4	68	46	40							10	56	274
S2	MID 13	961118	MULLINVILLE UNIT 27 FUEL	83,634	73,652	85,261	77,651	48,626	64,791	70,548	36,615	74,881	75,870	75,384	701	767,614
S2	MID 13	961119	MULLINVILLE PLANT HEATER FUEL						8	22	77	63	6	6	16	198
S2	MID 13	961120	MULLINVILLE DOMESTIC FUEL	124	56	54	44	42	38	30	18	18	26	28	42	520
S2	MID 13	961122	MULL#2 MEAS STA-#2 STA FU	35,355	26,275	36,171	27,724	19,537	6,749	4,854	35,111	5,335	11,531	7,160	33,841	249,643
S2	MID 13	961123	MULL#3-AUX&BOILER FUEL	4,435	4,336	3,617	2,256						2,552	3,769	2,048	23,013
S2	MID 13	961126	DODGE CITY TBS HEATER FUEL	822	735	689	552	486	400	333	263	388	516	693	743	6,620
S2	MID 13	961317	CORNELSON DEHY FUEL				321		8							329
S2	MID 13	990010	MULLINVILLE UNMETERED	473	554	556	687	2,025	623	511	498	451	451	636	649	8,114
S2	MID 13	990023	MULLINVILLE TRANS PURGE VENT	82	10,328	63	62	94	60	59	56	7,750	69	55	53	18,731
S2	MID 14	961582	SUBLETTE DOMESTIC FUEL GAS		126	140	77	19	4	3	3	10	46	82	148	658
S2	MID 14	990009	SUBLETTE UNMETERED	2,473	147	32	6,942	35	540	79	32	31	31	34	31	10,407
S2	MID 15	901523	GARDEN CITY KS 1C HEATER FUEL	470	470	429	314	234	140	92	32	96	165	286	414	3,142
S2	MID 15	961072	HOLCOMB DOMESTIC FUEL	141	17	210	65	22	2			2	49	80	150	738
S2	MID 15	961114	COPELAND TBS HEATER FUEL				54		2							56
S2	MID 15	990035	HOLCOMB PLANT TRANS LINE EAST	16	16	16	11	11	11	11	22	16	16	15	11	188
S2	MID 16 A	661225	TESCOTT FUEL DEDUCT	27,346												27,346
S2	MID 16 A	961039	BUSHTON COMP STA UNIT 33												8,453	8,746
S2	MID 16 A	961040	BUSHTON AUX FUEL #2 3 4 & 5	2	1	1	17	1	1	1	1	1	1	1	1	29

NORTHERN NATURAL GAS COMPANY  
 PERIODIC RATE ADJUSTMENTS FOR FUEL  
 FUEL CONSUMED DATA - TRANSPORTATION AND STORAGE  
 JANUARY, 2020 - DECEMBER, 2020

SCHEDULE 1

Sec/1	MID Zone	Station Number	Station Name	Source: Measurement Data warehouse												
				Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Annual
S2	MID 16 A	961042	BUSHTON ENGINE ROOM 2 ENG 23 24 25	9,291	12,256	9,648	7,674	10,726	10,402	16,531	23,705	21,387	12,611	7,587	3,709	145,527
S2	MID 16 A	961043	BUSHTON COMP#3 FUEL STATION	21,071	32,959	32,877	31,255	46,664	12,748	23,256	37,087	33,967	38,833	32,668	35,751	379,136
S2	MID 16 A	961044	BUSHTON 4 FUEL COMPRESSOR STATION	98,467	90,888	91,595	51,969									332,919
S2	MID 16 A	961107	MACKSVILLE UNIT 1 STA FUEL					3,829	15,285		749	8,722	16,332	13,171		58,088
S2	MID 16 A	961108	MACKSVILLE UNIT 2 STA FUEL	24,095	33,137	37,635	16,315	1,458			7	33	5,475		1,515	119,670
S2	MID 16 A	961109	MACKSVILLE UNIT 3 STA FUEL	31,310	42,361	47,422	22,175	1,533		4,523	1	57	6,973		1,156	157,511
S2	MID 16 A	961110	MACKSVILLE UNIT 4 STA FUEL	29,155	40,206	45,723	21,722	431		4,096	1	79	6,565		1,061	149,039
S2	MID 16 A	961112	MACKSVILLE UNIT 5 STA FUEL	16,212			10	9,400	26,807	55,432	20,164	11,968	1,227	1,113	712	143,045
S2	MID 16 A	961224	TESCOTT BLDG 2 DOMESTIC FUEL	1,978	1,438	954	609							1,257	1,199	7,435
S2	MID 16 A	961225	TESCOTT UNIT 5 FUEL	44,463	49,008	28,570	21,865							2,049	8	145,963
S2	MID 16 A	961627	TESCOTT UNIT 6 COMP FUEL											4,780	1,532	6,312
S2	MID 16 A	961966	MACKSVILLE TBS HEATER FUEL	36	34	20	12	6					14	22	24	168
S2	MID 16 A	962072	JETMORE TBS (HEATER FUEL)	36	36	32	26					8	22	34	26	220
S2	MID 16 A	962392	BUSHTON TREATER PLT. FUEL	13,603	12,107	10,926	8,972	8,671	7,694					8,746	12,321	83,040
S2	MID 16 A	990014	BUSHTON BLOWDOWN PURGE COMPRESSOR	-3,939	8,248	3,566	2,242	1,403	2,037	11,114	2,697	2,439	8,269	7,809	8,918	54,803
S2	MID 16 A	990025	TESCOTT DIST TRANS OP	116	68	122	70	119	380	362			231		86	1,554
S2	MID 16 A	990027	MACKSVILLE UNMETERED PLT	3,360	3,190	2,604	2,876	1,723	2,016	1,712	1,550	1,466	2,829	3,141	3,681	30,148
S2	MID 16 A	991002	MACKSVILLE FLARE FROM CONDENSATE TANK	265	471	363	473	310	69	204	34	73	99	235	319	2,915
S2	MID 16 A	991003	MACKSVILLE FUEL GAS HEATER	309	356	327	170	64	36				24	76	40	1,402
S2	MID 8	961441	PAMPA TURBINE (KB) FUEL	69,336	69,902	77,717	46,811	42,446	50,890	45,475	54,010	65,000	73,859	68,689	17,294	681,429
S2	MID 8	990029	PAMPA TURBINE	516	658	513	1,067	1,223	1,013	889	1,230	938	653	645	866	10,211
S2	MID 9	990013	N02 06 UNMETERED		73	65	66	62	161	72	60	65	65	63	40	792
S2	MID 9	990015	ROGER MILLS CO TRANSMISSION 4130	446	438	450	455	457	462	502	447	442	465	470	452	5,486
<b>S2 Total</b>				666,632	628,840	661,164	470,130	292,026	278,251	329,546	321,433	337,832	376,437	345,759	173,010	4,881,060
S3	MID 17	950901	Wrenshall VAPORIZER FUEL-FUEL GAS	2,334	133	1,548	434						2,028		266	6,743
S3	MID 17	950902	Wrenshall A TURBINE FUEL GAS	16,762	20,234	1,894							22,067	16,176		77,133
S3	MID 17	950903	Wrenshall B TURBINE FUEL GAS	23,423	20,107	1,839							21,204	15,602		82,175
S3	MID 17	951901	GARNER LNG	5,158	6,076	1,528	1,713	256	76	73	71	749	5,006	1,565	4366	26,637
S3	MID 17	960036	MINNEAPOLIS 1D HEATER	6,621	6,515	5,015	4,137	1,364	1,735	1,562	1,421	1,919	3,525	2,507	3,524	39,845
S3	MID 17	960479	ALBERT LEA COMPRESSOR STATION FUEL	75,720	68,793	11,764	7		4		195	421	18,384		38,207	213,495
S3	MID 17	960480	ALBERT LEA COMPRESSOR BUILDING HEAT	208	184	136	80						160	208	264	1,240
S3	MID 17	960481	ALBERT LEA COMP FUEL GAS METER	1,680	1,421	232	5	2			1		336	13	1042	4,732
S3	MID 17	960483	LAKE MILLS COMPRESSOR STATION FUEL	11,899	933	44	12	12	31	18	40	30	2,361	194	2,804	18,378
S3	MID 17	961010	BEATRICE 3-28 TURBINE FUEL	43,561	54,515	58,296	49,375	5,429	26,897	27,314		19,531	49,992	24,373	10,557	369,840
S3	MID 17	961012	BEATRICE # 2 UNITS 19-25 PLANT	79,545	73,312	73,646	25,572	26,885	3,024	25,474	28,530	33,247	30,151	7,856	6,566	413,808
S3	MID 17	961017	BEATRICE PLANT #1&#2 BOILER FUEL	4,040	3,523	5,240	2,691	1,947					2,630	4,004	5,226	29,301
S3	MID 17	961018	BEATRICE PLANT DOMESTIC GAS	181	139	81	46	64	1	2	2	4	46	71	155	792
S3	MID 17	961023	SOUTH OMAHA HEATER FUEL	225	189	126	90	24	6	6	6	6	48	111	177	1,014
S3	MID 17	961051	CLIFTON COMP FUEL UNIT 27	1,573	2,945	2,562							2,318	147	27	9,572
S3	MID 17	961054	CLIFTON AUX AND DOMESTIC	1,014	860	578	382	157	44	30	22	74	395	768	1,055	5,379
S3	MID 17	961056	CLIFTON TURB. BOILER	1,206	1,160	1,216	654						354	1,022	1,477	7,089
S3	MID 17	961057	CLIFTON BOILER BLDG. #3 (RC 4031)	1,475	1,343	1,346	660						338	960	1,455	7,577
S3	MID 17	961059	CLIFTON COMP FUEL UNIT 28	2,275	3,677	2,866	609	2,713	174	83		926	529	5	231	14,088
S3	MID 17	961060	CLIFTON COMP FUEL UNIT 29	2,839	3,446	2,357	542	2,493	1,316	324		74	785	158	71	14,405
S3	MID 17	961061	CLIFTON COMP FUEL UNIT 30	41,362	53,255	51,907	21,968	1,061	5,383	21,547	14,354	27,193	16,003	11,072	12,827	277,932
S3	MID 17	961062	CLIFTON COMP FUEL UNIT 31	73,967	64,943	55,305	45,725	18,134	4,324	5,317	1,996	4,382	37,589	24,171	5,824	341,677
S3	MID 17	961133	OAKLAND COMP #3 ENGINE FUEL	36,540	34,016	35,800	10,215	11,192	817	3,567	1,985	7,723	13,046	542	1,384	156,827
S3	MID 17	961134	OAKLAND COMP STA AUX FUEL	2	2	2	7	2	2	2	2	2	2	2	3	28
S3	MID 17	961135	OAKLAND #1 DOMESTIC FUEL	110	84	58	40	28	10			20	48	54	106	558
S3	MID 17	961136	OAKLAND #2 PIPELINE FUEL	370	300	228	171	78	6			72	192	415	1,832	
S3	MID 17	961137	OAKLAND #3 DOMESTIC FUEL	1,754	1,362	1,128	628					3	919	1,869	2,609	10,275
S3	MID 17	961138	GUTHRIE CENTER COMP FUEL	24,309	25,345	32,864	20,357	3,752	4,253	14,879	9,165	12,816	27,084	10,446	2,305	187,575
S3	MID 17	961139	OAKLAND UNIT #20 BLDG 4	23,138	33,068	31,558	18,624	736	7				16,573	8,573	4,369	136,646
S3	MID 17	961141	OGDEN AUXILIARY FUEL	4,350	4,287	3,395	2,764	934					1,575	2,744	3,766	23,815
S3	MID 17	961142	OGDEN PLANT 2 FUEL	29,385	25,031	19,870	15,855	15,146	12,525	20,906	23,084	25,039	29,375	31,729	23,643	271,588
S3	MID 17	961143	OGDEN PLANT 3 FUEL	45,066	44,391	43,058	40,401	36,743	40,442	30,528	36,793	38,842	55,373	42,655	39,587	493,879
S3	MID 17	961152	PALMYRA COMPRESSOR BLDG Unit 18	10799	5493	8190	5885	3188	866	4544	2,983	3,370	2,000	9,685	1,046	58,049
S3	MID 17	961153	PALMYRA COMPRESSOR BLDG Unit 19	1,215	5,448	3,204	1,560	7,172	3,360	1,107	4,015	87	881		9,364	37,413
S3	MID 17	961154	PALMYRA COMPRESSOR BLDG Unit 20		2,832	2,379	6,070	43	723	5,649	3,770	4,127	4,225			29,818
S3	MID 17	961156	PALMYRA #1 BOILER FUEL	2,337	1,801	1,370	806						869	1,354	1,916	10,453
S3	MID 17	961158	PALMYRA OFFICE FUEL	22	18	12	8	2			2		8	12	8	94

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SCHEDULE 1

Sec/1	MID Zone	Station Number	Station Name	Source: Measurement Data warehouse														
				Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Annual		
S3	MID 17	961159	PALMYRA WAREHOUSE FUEL	151	86	77	60	12							89	168	257	900
S3	MID 17	961160	PALMYRA FUEL - WORKSHOP BLDG.	26	139	256	208	73	10					40	117	34	60	963
S3	MID 17	961161	PAULLINA COMP.STA.-TRANS	4,815	1,996	529	369	160	417	2		3	88	787	439	1,407	11,012	
S3	MID 17	961162	PALMYRA FUEL - WELDING SHOP	42	38	18	12	2						16	20	30	178	
S3	MID 17	961163	PALMYRA FUEL - EQUIPMENT BLDG.	28	22	12	2							20		82	166	
S3	MID 17	961165	PALMYRA COMPRESSOR BLDG Unit 21	1,163	3,066	1,527	5,899	5,387	2,817	7,827	5,390	6,687	5,704	4,839	6,768	57,074		
S3	MID 17	961166	PALMYRA COMPRESSOR BLDG Unit 22	5,009	1,699	2,784	4,689	5,031	3,504	3,437	3,820	5,413	4,146	4,871	2,118	46,521		
S3	MID 17	961167	PALMYRA COMPRESSOR BLDG Unit 23	4,318	5,444	4,049	6,483	3,849	3,156	4,840	3,289	4,464	3,854	4,956	6,603	55,305		
S3	MID 17	961168	PALMYRA COMPRESSOR BLDG Unit 24	6,820	8,419	9,004	2,558		368	3,755	3,828	1,700	5,300	1,948	1,672	45,372		
S3	MID 17	961169	PALMYRA COMPRESSOR BLDG Unit 25	8,430	3,007	3,842	5,882	7,908	2,214	5,041	8,273	8,156	7,630	4,061	7,744	72,188		
S3	MID 17	961170	PALMYRA COMPRESSOR BLDG Unit 26	87,625	79,871	80,140	10,006	16,241		641	8,167	1,679			7,937	292,307		
S3	MID 17	961171	PALMYRA COMPRESSOR BLDG Unit 27	113	345	580	7,009	127	221	5,968	4,666	4,287	1,002	2,680	1,272	28,270		
S3	MID 17	961172	PALMYRA COMPRESSOR BLDG Unit 28	8,263	7,907	8,419	4,663	8,063	3,848	1,703	3,083	1,802	6,264	5,007	6,724	65,746		
S3	MID 17	961175	PALMYRA COMPRESSOR BLDG Unit 29	12,716	7,699	10,112	26,581	21,918	12,881	24,786	18,187	14,890	29,562	25,266	5,909	210,507		
S3	MID 17	961176	HOMER COMPRESSOR STATION FUEL	23,210	18,716	24,122	16,528	16,594	11,911	17,384	18,028	17,190	19,387	18,910	19,490	221,470		
S3	MID 17	961177	FREMONT COMPRESSOR STATION FUEL	26,623	25,552	17,886	66	7	2		493	10	5,996	151	6,320	83,106		
S3	MID 17	961178	WILLOW LAKE COMPRESSOR STATION	6,986	5,190	1,345	1,305	3,012	173	2,021	1,290	1,134	3,809	5,478	7,467	39,210		
S3	MID 17	961179	LA CRESCENT COMPRESSOR HEATER FUEL	62	58	62	42						23	60	62	369		
S3	MID 17	961180	PAULLINA COMPRESSOR BUILDING FUEL	20	16	12	8	6				4	8	10	20	104		
S3	MID 17	961181	SO SIOUX CITY COMP STA-TRANS	215	127	107	61	18		2		2	56	77	191	856		
S3	MID 17	961230	VENTURA DOMESTIC FUEL	369	344	227	144	20	4			20	104	220	302	1,758		
S3	MID 17	961231	VENTURA COMPRESSOR STA TRANS 11	4,020	3,000	1,810	921	38		2	1,104	2,211	285	10	60	13,501		
S3	MID 17	961232	VENTURA COMPRESSOR STA TRANS 12	3,579	1,937	2,390	335			487	3	14	14	10	39	8,808		
S3	MID 17	961233	VENTURA COMPRESSOR STA TRANS 13	3,570	3,722	3,026	1,310	967	336	598	5	14	255	10	244	14,057		
S3	MID 17	961234	VENTURA COMPRESSOR STA TRANS 14	21,724	23,899	23,227	9,301	4,069	577	3,476			2,044	9	12	88,338		
S3	MID 17	961235	VENTURA COMPRESSOR STA TRANS 15	27,927	19,508	21,458	14,023	8,936		4,079			3,843	3	1,255	101,032		
S3	MID 17	961236	VENTURA COMPRESSOR STA TRANS BF 16	3,329	3,145	2,430	1,572	641					1,892	2,296	3,251	18,556		
S3	MID 17	961237	VENTURA A LINE HEATER FUEL	1,504	1,478	1,134	1,090	549	390	259			362	889	810	1,081	9,546	
S3	MID 17	961243	WATERLOO COMPRESSOR FUEL	38,496	30,468	30,585	33,732	22,345	15,864	21,217	12,347	21,951	37,622	22,900	32,320	319,847		
S3	MID 17	961246	EARLVILLE CSO STATION EAST LEG	279			53	3,005	1,556						70	4,963		
S3	MID 17	961248	FARIBAULT MN COMPRESSOR STATION	97,482	92,704	75,071	48,434	128	2,006	35	42	887	35,269	53,953	80,592	486,603		
S3	MID 17	961251	FARMINGTON COMP FUEL UNITS 1-7	31,591	22,854	25,677	20,776	15,987	18,597	24,922	16,921	17,567	22,130	10,883	13,250	241,155		
S3	MID 17	961252	CARVER COMPRESSOR STATION FUEL		9,112		87	99	157	131	86	133	109	140	316	10,370		
S3	MID 17	961261	WATERLOO COMP.STA.-TRANS.	150	138	90	72	30	6	6		6	60	78	156	792		
S3	MID 17	961268	GARNER CONTROLLER GAS	399	477	415	529	421	325	172	131	234	261	261	671	4,296		
S3	MID 17	961381	NO.BRANCH COMP.STA.-TRANS	13,996	11,107	15,154	15,779	7,473	5,160	6,592	1,747	4,432	11,782	14,438	20,222	127,882		
S3	MID 17	961382	HUGO COMP FUEL	18,561	19,337	6,438	5,684				2	12	87	851		50,972		
S3	MID 17	961461	CARLTON COMP ENGINE FUEL 1&2	19,567	16,741	15,291	1,467	13	10				6,125	10,996	16,344	86,554		
S3	MID 17	961471	OWATONNA COMP STA TRANS	59,957	2,388	4,507	108	99	22,173	21,418	4,253	20,756	22,964	1,664	11,407	171,694		
S3	MID 17	961561	GALENA COMPRESSOR STATION	24,537	22,729	11,136	22,301	14,161	5,681	7,179		1,346	17,536	371	8,145	135,122		
S3	MID 17	961562	GALENA COMP. AUXILIARY	503	468	449	235	192	60	60	62	129	384	443	496	3,481		
S3	MID 17	961565	BELLVILLE COMPRESSOR PLANT	736	483	11,921	19,282	18,004	17,870	14,669	19,224	21,159	15,758	3,572	7,621	150,299		
S3	MID 17	961610	EAST WAKEFIELD COMPRESSOR STATION FUEL	5,299	10,769	2,723	4,971		5	431	7,589	8,801	7,037	4,563	8,086	60,274		
S3	MID 17	961961	CARLTON WHSE FUEL	36	36	20	196	96				65	211	765	883	2,308		
S3	MID 17	969044	REDFIELD FUEL UNIT 7	5,714	3,517	5,574	4,692	3,424	2,228		93		133	3,239	70	28,684		
S3	MID 17	990017	HUBBARD COMPRESSOR UNMETERED	489	174	424	187	27			39	474		78	450	2,342		
S3	MID 17	990018	EARLVILLE COMPRESSOR UNMETERED	462	367	283	500	156	106		313		1,024	679	3,890			
S3	MID 17	990024	CLIFTON DIST TRANSMISSION	33	32	35	2073	5086	5481	32	6699	31	31	34	54	19,621		
S3	MID 17	990032	GARNER LNG	198	658	154	127	122	261	11,232	14,555	1,802	81	172	148	29,510		
S3	MID 17	990037	CLIFTON DISTRICT TRANS SOUTH	3,361	3,984	4,324	5,369	2,401	1,865	2,893	9,476	2,675	4,184	2,686	2,955	46,173		
S3	MID 17	990046	ALBERT LEA COMPRESSOR UNM GAS LOSS	4	4	175	4	4	4	4	123	224	109	4	111	770		
S3	MID 17	990052	CARLTON GAS UNMETERED	3,484	3,700	3,288	2,461	1,831	920	1,681	2,124	3,226	2,837	2,893	3,448	31,893		
S3	MID 17	990053	WRENSHALL UNMETERE 504	7,341	9,138	3,265	3,057	216	230	201	191	312	4,393	463	313	29,120		
S3	MID 17	990054	OWATONNA UNMETERED VENT 504	24,248	21,952	8,681	5,133	3,990	11,201	2,506	2,852	13,718	8,728	8,424	9,444	120,877		
S3	MID 17	990055	FARIBAULT COMPRESSOR UNM	54	54	56	54	54	54	55	54	55	55	56	54	655		
S3	MID 17	990056	SOUTH OMAHA UNMETERED T	1,037	1,035	1,056	1,065	1,064	1,039	1,054	1,031	1,074	1,033	1,028	1,063	12,579		
S3	MID 17	990057	OAKLAND UNMETERED GAS	4671	5026	4312	4379	3026	2282	9826	4,510	2,526	3,976	3,672	3,687	51,893		
S3	MID 17	990058	SO SIOUX CITY UNMETERED	9,758	2,570	2,317	1,827	747	3,368	333	826	2,580	1,051	2,070	88,120	115,567		
S3	MID 17	990059	VENTURA SOUTH UNMETERED	1,629	1,522	1,353	1,029	834	683	2,083	720	832	1,114	1,141	1,478	14,418		
S3	MID 17	990060	NEGUANEE UNMETERED HTR AUX FUEL 5	3,874	4,230	3,526	2,915	1,326	1,900	2,232	2,447	2,418	3,166	5,344	5,086	38,464		
S3	MID 17	990061	WATERLOO DOWNSTREAM HEATER FUEL	1,836	1,677	674	884	507	242	496	526	363	1,030	1,581	1,674	11,490		

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Sec /1	MID Zone	Station Number	Station Name	Source: Measurement Data warehouse												Annual
				Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	
S3	MID 17	990062	FARMINGTON UNMETERED VENT RC 4008	20,502	12,283	11,100	2,515	6,789	5,835	7,471	5,765	5,546	2,394	9,850	13,178	103,228
S3	MID 17	990063	NORTH BRANCH HEAT AUX FUEL RC 4004	581	685	428	337	64	54	54	60	62	90	534	674	3,623
S3	MID 17	990064	NORTH BRANCH UNMETERED VENT RC4004	1,603	1,448	1,264	1,701	1,333	1,739	2,280	1,457	395	995	1,014	966	16,195
S3	MID 17	990065	NORTH BRANCH UNMETERED HEAT AUX RC40	29,245	13,825	18,524	714	5,851	3,434	3,304	3,216	4,197	13,511	17,199	25,389	138,409
S3	MID 17	990066	POPPLE CREEK UNMETERED	218	166	87	86	4			122	49	18	159	79	988
S3	MID 17	990067	VENTURA NORTH UNMETERED	4,962	4,771	4,687	3,462	3,368	2,999	3,116	11,378	3,390	5,284	5,310	4,750	57,477
S3	MID 17	990068	PLATTEVILLE UNMETERED	4,742	4,054	2,872	2,931	2,494	2,496	2,128	1,906	1,835	3,358	3,235	4,721	36,772
S3	MID 17	990069	CLARK SD UNMETERED	2,382	2,231	2,151	1,807	1,220	998	1,004	924	820	1,511	1,809	2,510	19,367
S3	MID 17	990071	OGDEN GAS UNMETERED 504 RC4010	4,012	2,378	1,850	1,926	1,542	1,696	2,497	1,116	1,297	1,321	1,410	1,151	22,196
S3	MID 17	990072	OGDEN UNMETERED DETAIL 547 RC4010	5,505	673	530	340	367	215	200	212	239	525	625	620	10,051
S3	MID 17	990073	WATERLOO DOWNSTREAM PIPELINE GAS LO	1,336	1,331	1,334	1,356	1,856	1,360	1,360	1,426	2,540	1,357	1,441	1,383	18,080
S3	MID 17	990074	LACROSSE BRANCHLINE COMPRESSOR	110	156	111	85	83	83	84	85	108	179	137	187	1,408
S3	MID 17	990076	HUGO MN COMP BLOW DOWN	3,275	3,067	3,054	1,660	1	26	1	512	272	762	738	28	13,396
S3	MID 17	990077	BEATRICE UNMETERED	1,848	1,878	1,800	1,414	12,757	1,610	12,657	1,722	1,489	3,890	1,721	1,731	44,517
S3	MID 17	990078	OAKLAND UNMETERED GAS USES	1,267	1,154	942	789	683	564	610	645	650	816	955	1,205	10,280
S3	MID 17	990079	WATERLOO COMPRESSOR UNMETERED	1,616	912	795	741	1,169	992	893	649	640	735	419	1,326	10,887
S3	MID 17	990080	WELCOMO NORTH UNMETERED GAS VENTED	4,078	4,090	2,929	2,278	1,570	2,180	952	1,300	5,733	1,598	2,709	2,024	31,441
S3	MID 17	990081	NORTH BRANCH UNMETERED VENTED RC400	400	402	400	415	1,852	2,298	540	605	445	379	391	391	8,518
S3	MID 17	990082	WILLMAR UNMETERED	9,850	9,029	7,434	5,445	3,811	3,686	3,723	4,025	4,274	6,711	7,334	8,956	74,278
S3	MID 17	990083	PAULLINA UNMETERED VENTED GAS RC 42	1,651	5,266	4,203	3,031	2,819	2,620	2,660	2,731	2,832	3,643	3,857	4,618	39,931
S3	MID 17	990084	PALMYRA UNMETERED PIPELINE RC4024	2,180	2,501	2,653	1,927	841	1,026	2,304	2,403	8,220	4,734	1,851	2,127	32,767
S3	MID 17	990085	OGDEN UNMETERED VENTED RC4012	2,075	2,188	2,219	8,851	2,195	2,191	5,134	12,402	8,752	2,267	2,603	2,284	53,161
S3	MID 17	990086	HARRISBURG UNMETERED	6,707	5,574	4,628	3,138	2,204	1,837	1,098	769	2,223	3,804	4,497	5,677	42,156
S3	MID 17	990087	PLATTEVILLE COMPRESSOR UNMETERED	1,998	1,958	1,986	2,031	2,024	2,044	2,478	12,107	1,884	1,988	2,035	2,082	34,615
S3	MID 17	990088	PALMYRA UNMETERED PIPELINE RC4029	490	627	389	428	516	801	340	642	44	234	141	971	5,623
S3	MID 17	990089	WELCOME MEAS STA 1 NB INTER UNS	33	33	33	33	66	33	33	33	34	33	33	33	430
S3	MID 17	990090	LACROSSE SYSTEM ZONE 5 UNMETERED	2282	2136	1732	1328	988	823	839	828	874	1,339	1,481	2,028	16,678
S3	MID 17	990091	MAINLINE HOOPER SOUTH	1,226	1,242	971	235	170	172	172	168	166	187	840	876	6,425
S3	MID 17	990092	WATERLOO UPSTREAM HEATER FUEL	2,064	1,902	1,558	1,204	1,150	984	967	955	1,041	1,216	1,220	1,938	16,199
S3	MID 17	990093	WELCOME SOUTH UNS SECTION 3 SEG 2	2,344	2,336	1,522	1,289	1,551	1,612	1,331	1,178	1,315	2,519	1,823	3,531	22,351
S3	MID 17	990097	PIERZ COMPRESSOR UNMETERED	95	103	63	94	66	120	155	182	96	155	123	196	1,448
S3	MID 17	990098	ALEXANDRIA COMPRESSOR UNMETERED	47	21	33	42	12	1	2	24	1	66	85	43	377
S3	MID 17	990099	ST CLOUD PIPELINE UNMETERED	8,117	7,194	5,154	3,589	1,971	1,162	1,167	1,217	3,026	5,033	4,961	6,808	49,399
S3	MID 17	990100	OGDEN UNMETERED TBS HEATERS RC4012	5,286	5,203	3,943	2,443	3,068	1,418	1,400	1,247	1,551	4,163	3,859	5,310	38,891
S3	MID 17	990101	WATERLOO UPSTREAM PIPELINE UNS	2,144	1,123	1,137	1,143	1,155	1,148	1,148	1,221	1,191	1,144	1,412	1,167	15,133
S3	MID 17	990103	HOMER COMPRESSOR STATION UNS					33		60	114	124	42		106	479
S3	MID 17	990104	FREMONT COMPRESSOR STATION UNS								44	16			60	
S3	MID 17	961306	CUNNINGHAM UGS LIQ.PLT FU*	84	90	82	65	55	73	127	124	146	187	248	324	1,605
S3	MID 17	964096	CUNN STORAGE COMP.UNIT #8 FUEL	1,281	586	1,751	3,174	1,455	3,832	2,651	2,191	3,224	988	3,041	2,559	26,733
S3	MID 17	964097	CUNN STORAGE COMP.UNIT #9 FUEL	721	593	2,157	3,333	2,841	4,231	1,799	1,267	2,476	1,473	3,527	3,026	27,444
S3	MID 17	964101	CUNNINGHAM UGS - PLANT	1,628	1,734	1,661	1,152	953	647	1,038	655	590	1,059	1,222	1,410	13,749
S3	MID 17	990000	CUNNINGHAM UGS FIELD SEPARATORS	8	11	7	6		1	2	2	1	7	4		49
S3	MID 17	990011	CUNNINGHAM UNMETERED GATH	1,311	1,202	390	3,143	193	2,948	421	562	1,146	498	718		12,532
S3	MID 17	990021	CUNN UNMETERED TRANS	263	1186	249	629	436	437	6261	351	659	787	378		11,636
<b>S3 Total</b>				1,360,471	1,197,292	1,032,126	680,992	423,629	332,618	456,562	390,065	462,627	765,346	559,919	712,815	8,374,462
ST	MID 17	961306	CUNNINGHAM UGS LIQ.PLT FU	104	112	102	82	69	90	159	154	181	234	310	403	2,000
ST	MID 17	964096	CUNN STORAGE COMP.UNIT #8 FUEL	1,597	731	2,184	3,958	1,814	4,779	3,307	2,732	4,022	1,233	3,792	3,191	33,340
ST	MID 17	964097	CUNN STORAGE COMP.UNIT #9 FUEL	900	739	2,690	4,158	3,544	5,277	2,244	1,580	3,087	1,837	4,398	3,773	34,227
ST	MID 17	964101	CUNNINGHAM UGS - PLANT	2,031	2,163	2,071	1,437	1,189	808	1,294	818	735	1,320	1,525	1,758	17,149
ST	MID 17	990000	CUNNINGHAM UGS FIELD SEPARATORS	11	14	9	7	1	1	3	3	1	9	6		65
ST	MID 17	990011	CUNNINGHAM UNMETERED GATH	1,636	1,500	487	3,921	241	3,677	526	700	1,429	621	895		15,633
ST	MID 17	990021	CUNN UNMETERED TRANS	327	1,479	310	784	543	546	7,809	438	821	982	472		14,511
ST	MID 17	964001	REDFIELD LAGOON SEPARATOR EAST VENT	146	583	407	311	335	139	78			24	117	1,193	3,333
ST	MID 17	964002	REDFIELD LAGOON SEPARATOR WEST VENT	11,214	5,368	1,668	2,923	1,117	858	408			155	1,359	4,551	29,621
ST	MID 17	964007	REDFIELD LAGOON SEPARATOR NORTH VENT		1,736	1,634	510	328								4,208
ST	MID 17	964013	REDFIELD 1 COMP FUEL WEST RUN	33,789	19,038	12,799	132	148	1	237	12,258	13,058	20,399	20,726	25,940	158,525
ST	MID 17	964014	REDFIELD DEHY FUEL	7,988	5,209	4,503	3,206	1,094	807	441	633	84	931	3,454	7,672	36,022
ST	MID 17	964018	REDFIELD SPC BUILDING DOMESTIC FUEL	723	677	461	283	97			2	77	261	366	699	3,646
ST	MID 17	964019	REDFIELD LOCAT BLDG HEATER FUEL	342	300	152							772	974	1,469	4,009
ST	MID 17	964042	REDFIELD H2S TREATER FUEL	4,691	2,833	1,660	1,576	1,480	1,347	995	411	448	788	1,392	4,272	21,893
ST	MID 17	964051	REDFIELD DOMESTIC FUEL	768	563	424	520	354	134	92	74	32	472	322	935	4,690

NORTHERN NATURAL GAS COMPANY  
 PERIODIC RATE ADJUSTMENTS FOR FUEL  
 FUEL CONSUMED DATA - TRANSPORTATION AND STORAGE  
 JANUARY, 2020 - DECEMBER, 2020

SCHEDULE 1

Sec /1	MID Zone	Station Number	Station Name	Source: Measurement Data warehouse														
				Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Annual		
ST	MID 17	969042	REDFIELD FUEL UNIT 5	39,538	25,268							991	33,708	33,774	36,796	35,360	36,298	241,733
ST	MID 17	969043	REDFIELD FUEL UNIT 6	356	2,600	5,187	5,005	760	600	1,451		73			712	1,908	68	18,720
ST	MID 17	990020	LYONS UNMETERED	1,764	2,045	1,829	1,176	1,048	779	1,507		1,003	995	1,002	775	1,898	1,898	15,821
ST	MID 17	990047	REDFIELD ST PETER PLANT UNMETERED	80	74	79	77	75	75		76	30	31		76	78	78	829
ST	MID 17	990048	REDFIELD MT SIMON PLANT UNMETERED	639	412	59	13	49	48		46	584	587	591	61	1,147		4,236
ST	MID 17	990049	REDFIELD MT SIMON UNMETERED	3,992	1,340	898	571	408	375	379		460	452	443	786	8,571		18,675
ST	MID 17	990050	REDFIELD ST PETER UNMETERED	9,662	4,626	2,912	1,846	1,404	1,056		868	298	301	424	1,144	11,151		35,692
<b>ST Total</b>				122,298	79,410	42,525	32,496	16,098	21,397	22,911		55,959	60,115	70,082	80,220	115,067		718,578
<b>Grand Total</b>				2,458,271	2,207,994	2,075,428	1,492,012	994,979	882,616	1,067,218		1,110,460	1,189,480	1,583,851	1,334,077	1,217,131		17,613,517
Total Transportation Fuel				2,335,973	2,128,584	2,032,903	1,459,516	978,881	861,219	1,044,307		1,054,501	1,129,365	1,513,769	1,253,857	1,102,064		16,894,939
Total Storage Fuel				122,298	79,410	42,525	32,496	16,098	21,397	22,911		55,959	60,115	70,082	80,220	115,067		718,578
Total Fuel				2,458,271	2,207,994	2,075,428	1,492,012	994,979	882,616	1,067,218		1,110,460	1,189,480	1,583,851	1,334,077	1,217,131		17,613,517

Foot notes

1/

S1 = Section 1 Transportation Facility Fuel.  
 S2 = Section 2 Transportation Facility Fuel.  
 S3 = Section 3 Transportation Facility Fuel.  
 ST = Storage Fuel.

2/

S1	MID	none	Abandoned Section 1 stations																0
S2	MID	none	Abandoned Section 2 stations																0
S3	MID 17	none	Abandoned Section 2 stations																0



**Annual Transactions from January, 2020 - December, 2020 for Mainline Fuel**

Receipt MID	D1	D2	D3	D4	D5	D6	D7	D7B	D8	D9	D10	D11	D12	D13	D14	D15	D16a	D16b	D17	Annual Total		
<b>SECTION 1 - SECTION 1</b>																	<b>SECTION 1 - SECTION 2</b>			<b>SECTION 1 - SECTION 3</b>		
R01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
R02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
R03	-	-	74,625,495	4,889,365	9,564,627	60,059,089	11,750,608	-	230,043	-	2,008,508	-	-	1,521	-	-	552,823	41,832,174	-	205,514,253		
R04	-	-	920,699	3,223,167	-	42,601,428	5,318,705	-	342,149	-	24,598	-	-	10,254	-	-	-	1,584,296	-	54,025,296		
R05	-	-	560,226	411,832	-	10,282,895	5,880,465	-	24,494	-	50,997	-	-	-	-	-	-	3,502,814	-	20,713,723		
R06	-	-	112,544,131	4,677,610	384,251	42,092,200	1,882,848	-	150,744	-	2,000	-	-	27,296	-	-	-	92,677,330	-	254,438,410		
R07	-	-	-	-	-	226,687	-	-	-	-	-	-	-	-	-	-	-	-	-	226,687		
R7b	-	-	-	-	-	-	-	391,896,328	-	-	-	-	-	-	-	-	MID 8-16A	3,425,427	-	-		
																	MID 16B	139,596,614	-	-		
<b>SECTION 2 - SECTION 1</b>																	<b>SECTION 2 - SECTION 2</b>			<b>SECTION 2 - SECTION 3</b>		
R7b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
R08	-	-	-	9,998	24,997	373	211,670	-	83,346	-	7,168	-	-	6,495	-	603	1,001	5,934,157	-	6,279,808		
R09	-	-	-	1,578	-	-	-	-	32,083	46,290	25,065	-	-	-	-	-	-	29,771,602	-	29,876,618		
R10	-	-	-	5,127	-	10,818	1,509,868	-	179,445	110,659	4,743,763	49,682	-	196,693	-	2,489	55,444	66,332,972	-	73,196,960		
R11	-	-	-	-	-	-	-	-	-	-	-	606,896	-	138,156	-	-	-	9,954,883	-	10,699,935		
R12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
R13	-	-	-	-	-	216,970	836,191	-	9,090	-	-	-	-	4,671,001	-	683,467	655,049	10,883,644	-	17,955,412		
R14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
R15	-	-	-	302,999	447,051	-	690,300	-	-	-	-	-	-	1,948,605	-	342,618	421,682	830,047	-	4,983,302		
R16a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,580,304	-	1,580,304		
R16b	-	-	-	108,485	249,913	19,777	744,404	-	-	-	1,630,281	-	-	-	-	-	-	-	222,139,943	224,892,803		
						MID 8-16A	4,267,940										MID 7B-16A	15,016,790	125,287,609	-		
						Rec=MID 16B	1,122,579										Rec=MID 16B	1,630,281		222,139,943		
<b>SECTION 3 - SECTION 1</b>																	<b>SECTION 3 - SECTION 2</b>			<b>SECTION 3 - SECTION 3</b>		
R17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	769,478,475		
																				769,478,475		
Total	-	-	188,650,551	13,630,161	10,670,839	155,510,237	28,825,059	-	1,051,394	156,949	8,492,380	656,578	-	7,000,021	-	1,029,177	1,685,999	264,884,223	991,618,418	1,673,861,986		

Source: Northern's Accounting System.

**Annual Transactions from January, 2020 - December, 2020 for Mainline Fuel**

Point Exceptions: Throughput from these receipt points to MIDs 1-7  
 are excluded from Section 2 fuel derivation on Schedule 3 (Tariff Sheet No. 54A).

150	MID 16 A	NNG/Williams Barton	
475 & 62997	MID 8	Westar/NNG Carson	
179 & 78287	MID 13	ANR/NNG Greensburg	
60667 & 78284	MID 8	NNG/TW Gray ITE	5,655
61491	MID 9	NNG/Warren Canadian	
71214 & 78292	MID 16 A	NNG/KN Tescott Pony Express	
71363	MID 9	NNG/Bingham Hemphill	
71394	MID 9	NNG/Crescendo Hemphill	1,578
71432	MID 16 A	MCMC/NNG Rice County ITE	
78441 & 78883	MID 13	Cheyenne Plains Interconnect	14,378
78643 & 78902	MID 8	Enbridge-Pampa Interconnect	241,313
			262,924

Point Exceptions: Throughput from MIDs 1-7 to these delivery points  
 are excluded from Section 2 fuel derivation on Schedule 3.

Delivery			
475	MID 8	Westar/NNG Carson	
4891	MID 8	WTG-Lark Farm Tap	
60667 & 78284	MID 8	NNG/TW Gray ITE	562,513
35402	MID 8	Damson/Crawford	
35706	MID 8	Phillips/NNG Carson	
55610	MID 8	North Texas Gas/NNG Farm Tap	
56111	MID 8	Cabot/NNG Bryan Carson	
			562,513

**Annual Transactions from January, 2020 - December, 2020 for Mainline Fuel**

**Mainline Throughput**

(A)	(B)	(C)	(D)	(E)	(F)
	Section 1 (1-7)	Section 2 (8-16a)	Section 2 (16b)	Section 3 (17)	Total
Section 1 (1-7)	391,896,328	3,425,427	139,596,614	-	534,918,369
Section 2 (8-16a)	4,267,940	15,016,790	125,287,609	-	144,572,339
Section 2 (16b)	1,122,579	1,630,281	-	222,139,943	224,892,803
Section 3 (17)	-	-	-	769,478,475	769,478,475
<b>Total</b>	<b>397,286,847</b>	<b>20,072,498</b>	<b>264,884,223</b>	<b>991,618,418</b>	<b>1,673,861,986</b> 1/

	Fuel Consumed	Throughput	Percentage
Section 1	3,639,417 2/	540,308,888 5/	0.67%
Section 2	4,881,060 3/	288,399,224 6/	1.69%
Section 3, Apr-Oct	3,511,839 4/	493,263,448 7/	0.71%
<b>Total</b>	<b>12,032,316</b>	<b>1,321,971,560</b>	

**Backup:**

Matrices linked to numbers in Column B

1	Throughput		Section 1 (1-7b)	Section 2 (8-16a)	Section 2 (16b)	Section 3 (17)	Total
Section 1-1	391,896,328	Section 1 (1-7)	391,896,328	3,425,427	139,596,614	-	534,918,369
Section 2-1	4,267,940	Section 2 (8-16a)					-
Section 2(16b)-1	1,122,579	Section 2 (16b)	4,267,940				4,267,940
Section 3-1	-	Section 3 (17)	1,122,579				1,122,579
Section 1-2	3,425,427	Total	-				-
Section 1-2(16b)	139,596,614		397,286,847	3,425,427	139,596,614	-	540,308,888 5/
Section 1-3	-						
	<b>540,308,888</b> 5/						
<b>2</b>	<b>Throughput</b>						
Section 2-1	4,267,940	Section 1 (1-7b)	Section 1 (1-7b)	Section 2 (8-16a)	Section 2 (16b)	Section 3 (17)	Total
Section 2(16b)-1	-	Section 2 (8-16a)		3,425,427	139,596,614	-	143,022,041
Section 3-1	-	Section 2 (8-16a)	4,267,940	15,016,790	125,287,609	-	144,572,339
Section 1-2	3,425,427	less exempt POIs			(825,437)		(825,437)
Section 2-2	15,016,790	Section 2 (16b)	-	1,630,281			1,630,281
Section 2(16b)-2	1,630,281	Section 3 (17)	-	-			-
Section 3-2	-	Total	4,267,940	20,072,498	264,058,786	-	288,399,224 6/
Section 1-2(16b)	139,596,614						
Section 2-2(16b)	125,287,609						
less exempt POIs	(825,437) 8/						
Section 1-3	-						
Section 2-3	-						
	<b>288,399,224</b> 6/						
<b>3</b>	<b>Throughput</b>						
Section 1-3	-	Section 1 (1-7b)					
Section 2-3	-	Section 2 (8-16a)					
Section 2(16b)-3	222,139,943	Section 2 (16b)		105,942,588	116,197,355	222,139,943	
Section 3-3	769,478,475	Section (17)		387,320,860	382,157,615	769,478,475	
	<b>991,618,418</b>	Total		<b>493,263,448</b>	<b>498,354,970</b>	<b>991,618,418</b>	7/

1/ See Schedule No. 2  
 2/ See Schedule No. 1, subtotal S1 for MIDs 1-7  
 3/ See Schedule No. 1, subtotal S2 for MIDs 8-16B  
 4/ See Schedule No. 1, subtotal S3 for MID 17, April-October  
 5/ Section 1 Throughput  
 6/ Section 2 Throughput  
 7/ Section 3 April - October Throughput  
 8/ See Point Exceptions on page 2 of Schedule No. 2

Northern Natural Gas Company  
 Periodic Rate Adjustments for Fuel  
 Allocate Retained Fuel by Section

Schedule 4

**Annual Transactions from January, 2020 - December, 2020 for Mainline Fuel**

		Apr-Oct									
		Fuel %		Charged:			MID 1-7		MID 8-16	MID 17 /1	Total
Rec	Del	Fuel Retained	Fuel%	Section 1	Section 2	Market	Section 1	Section 2	Market	Retained	
<b>W/ Summer(April-October) Market fuel rate</b>											
Section 1	Section 1	926,119	0.0039	0.0039			926,119	0	0	926,119	
Section 1	Section 2	40,504	0.0235	0.0039	0.0196		6,722	33,782	0	40,504	
Section 1	Section 2 (16b)	1,889,282	0.0235	0.0039	0.0196		313,540	1,575,742	0	1,889,282	
Section 2	Section 1	60,861	0.0235	0.0039	0.0196		10,100	50,761	0	60,861	
Section 2	Section 2	179,494	0.0196		0.0196		0	179,494	0	179,494	
Section 2	Section 2 (16b)	1,235,100	0.0196		0.0196		0	1,235,100	0	1,235,100	
Section 2 (16b)	Section 1	1,444	0.0039	0.0039			1,444	0	0	1,444	
Section 2 (16b)	Section 2	24,466	0.0196		0.0196		0	24,466	0	24,466	
Section 2 (16b)	Section 2 (16b) 2/	9,740	0.0196		0.0196		0	9,740	0	9,740	
Section 2 (16b)	Section 3	603,636	0.0057			0.0057	0	0	603,636	603,636	
Section 3	Section 1		0.0039	0.0039			0	0	0	0	
Section 3	Section 2		0.0196		0.0196		0	0	0	0	
Section 3	Section 2 (16b)		0.0196		0.0196		0	0	0	0	
Section 3	Section 3	2,209,638	0.0057			0.0057	0	0	2,209,638	2,209,638	
Total	Summer	7,180,284					1,257,926	3,109,084	2,813,274	7,180,284	
<b>W/Jan-Mar &amp; Nov-Dec Market Fuel rates</b>											
Section 1	Section 1	1,064,836	0.0039	0.0039			1,064,836	0	0	1,064,836	
Section 1	Section 2	32,514	0.0235	0.0039	0.0196		5,396	27,118	0	32,514	
Section 1	Section 2 (16b)	1,821,137	0.0235	0.0039	0.0196		302,231	1,518,906	0	1,821,137	
Section 2	Section 1	43,601	0.0235	0.0039	0.0196		7,236	36,365	0	43,601	
Section 2	Section 2	138,625	0.0196		0.0196		0	138,625	0	138,625	
Section 2	Section 2 (16b)	1,527,649	0.0196		0.0196		0	1,527,649	0	1,527,649	
Section 2 (16b)	Section 1	6,082	0.0039	0.0039			6,082	0	0	6,082	
Section 2 (16b)	Section 2	8,139	0.0196		0.0196		0	8,139	0	8,139	
Section 2 (16b)	Section 2 (16b) 2/	2,047	0.0196		0.0196		0	2,047	0	2,047	
Section 2 (16b)	Section 3	1,325,985	0.0057			0.0057	0	0	1,325,985	1,325,985	
Section 3	Section 1		0.0039	0.0039	0.0000		0	0	0	0	
Section 3	Section 2		0.0196		0.0196		0	0	0	0	
Section 3	Section 2 (16b)		0.0196		0.0196		0	0	0	0	
Section 3	Section 3	4,289,376	0.0057			0.0057	0	0	4,289,376	4,289,376	
Reverse fuel from Sec 2 exceptions		-4,205	0.0235	0.0039	0.0196		-698	-3,507	0	-4,205	
Move fuel to Section 1 3/		4,205	0.0039	0.0039			4,205	0	0	4,205	
Total	Winter	10,259,991					1,389,288	3,255,342	5,615,361	10,259,991	
Annual Total		17,440,275					2,647,214	6,364,426	8,428,635	17,440,275	

1/ Section 3 fuel retained is calculated seasonally. Winter fuel retained is not used at this time.

2/ Reflects fuel retained on out-of-balance deliveries to 16B and from 7B to 16B

3/ Only Section 1 fuel is retained for Section 1-2 or Section 2-1 paths described on page 2 of Schedule 2

Northern Natural Gas Company  
 Periodic Rate Adjustments for Fuel  
 Mainline Fuel True-up

Schedule No. 5

**Annual Transactions from January, 2020 - December, 2020 for Mainline Fuel**

Mainline Fuel	Section 1	Section 2	Apr-Oct Section 3	Total	
1 Actual Mainline Fuel Consumed 1/	3,639,417	4,881,060	3,511,839	12,032,316	
2 Actual Mainline Fuel Retained 2/	2,647,214	6,364,426	2,813,274	11,824,914	
3 less True-up Under(Over) Recovered 3/	(1,440,084)	933,527	(1,324,951)	(1,831,508)	
4 Actual Mainline Fuel Retained	<u>4,087,298</u>	<u>5,430,899</u>	<u>4,138,225</u>	<u>13,656,422</u>	line 2 - line 3
5 Under(Over) Recovered	<u>(447,881)</u>	<u>(549,839)</u>	<u>(626,386)</u>	<u>(1,624,106)</u>	line 1 - line 4
6 Total Throughput Applicable to Mainline Fuel 4/	540,308,888	288,399,224	493,263,448		
7 True-up Adjustment Due (Shipper)Northern	<u>-0.08%</u>	<u>-0.19%</u>	<u>-0.13%</u>		line 5 / line 6

1/ See Schedule No. 1

2/ See Schedule No. 4

3/ Mainline Fuel True-up as stated on Schedule No. 5 of Northern's January 31, 2020 fuel filing in  
 Docket No. RP20-478-000

4/ See Schedule No. 3

Northern Natural Gas Company  
 Periodic Rate Adjustments for Fuel  
 Mainline Fuel  
 Effective April 1, 2020

Schedule No. 6

Base Mainline Fuel Percent 1/

	<u>Section 1</u>	<u>Section 2</u>	<u>Apr-Oct Section 3</u>		
Section 1	0.67%	2.36%	3.07%	Section 1	0.67%
Section 2	2.36% 4/	1.69%	2.40%	Section 2	1.69%
Section 3	0.67%	1.69%	0.71%	Section 3	0.71%

True-up Mainline Fuel Percent 2/

	<u>Section 1</u>	<u>Section 2</u>	<u>Apr-Oct Section 3</u>		
Section 1	-0.08%	-0.27%	-0.40%	Section 1	-0.08%
Section 2	-0.27%	-0.19%	-0.32%	Section 2	-0.19%
Section 3	-0.08%	-0.19%	-0.13%	Section 3	-0.13%

Total Mainline Fuel Percent 3/ 4/

	<u>Section 1</u>	<u>Section 2</u>	<u>Apr-Oct Section 3</u>		
Section 1	0.59%	2.09%	2.67%	Section 1	0.59%
Section 2	2.09%	1.50%	2.08%	Section 2	1.50%
Section 3	0.59%	1.50%	0.58%	Section 3	0.58%

1/ See Schedule No. 3

2/ See Schedule No. 5

3/ Base Mainline Fuel Percent plus True-up Mainline Fuel Percent

4/ Fuel percent from MID 16B or Exempt Section 2 Points to Section 1 equals the Section 1 percentage. Exempt Section 1 and 2 points are listed on Schedule 2

Northern Natural Gas Company  
Accounting Month Basis for 2020

Schedule 7

(a)	(b)	Jan-20 (c)	Feb-20 (d)	Mar-20 (e)	Apr-20 (f)	May-20 (g)	Jun-20 (h)	Jul-20 (i)	Aug-20 (j)	Sep-20 (k)	Oct-20 (l)	Nov-20 (m)	Dec-20 (n)	2020 (o)
1	SOURCE													
2	Purchase	651,800	425,000	474,010	275,000	523,500	115,000	(20,000)	160,000	1,763,200	2,062,675	5,814,694	150,000	12,394,879
3	Transport	143,533,112	149,032,574	133,139,153	123,477,052	103,016,444	86,061,528	88,156,111	105,882,750	104,983,580	97,244,412	121,664,495	107,254,792	1,363,446,003
4	URR Retained									-	-	-	-	-
5	Fuel Retained	2,608,745	2,628,737	2,358,326	2,303,385	1,135,502	928,012	903,470	1,023,698	1,016,191	992,311	1,181,100	1,438,427	18,517,904
6	Storage Retained	-	-	-	-	-	-	130,733	136,774	139,247	157,008	107,630	2,647	674,039
7	UAF Retained	(218,135)	(226,546)	(202,475)	(187,500)	135,578	113,644	116,387	139,398	138,497	128,299	160,433	141,960	239,540
8	<b>NET RECEIPTS/SOURCES</b>	<b>146,575,522</b>	<b>151,859,765</b>	<b>135,769,014</b>	<b>125,867,937</b>	<b>104,811,024</b>	<b>87,218,184</b>	<b>89,286,701</b>	<b>107,342,620</b>	<b>108,040,715</b>	<b>100,584,705</b>	<b>128,928,352</b>	<b>108,987,826</b>	<b>1,395,272,365</b>
9	DISPOSITION													
10	Operational Sales	759,500	-	155,000	-	-	50,000	2,676,868	385,000	(75,000)	-	-	2,184,750	6,136,118
11	Transport, IT FT	143,493,588	149,305,914	132,694,141	123,682,765	102,959,215	86,256,074	87,779,485	106,281,912	105,107,111	97,926,158	121,516,082	106,792,122	1,363,794,567
12	Gas Losses/Workorder	170	-	(61)	-	(170)	278	-	420	191	-	-	85,890	86,718
13	URR Recognized									194,608	-	-	-	194,608
14	Fuel Used & Storage Fuel Used	2,226,686	2,458,441	2,207,994	2,075,428	1,492,182	994,532	882,894	1,066,798	1,110,689	1,189,671	1,583,851	1,334,077	18,623,243
15	Condensate	-	-	5,876	15	-	-	-	-	2,209	-	3,285	-	11,385
16	Storage INJ (WD)	(187,700)	(954,260)	241,137	(723,688)	(288,337)	757,881	(1,722,657)	(136,298)	1,685,828	1,402,215	6,083,196	(922,928)	5,234,389
17	<b>NET DELIVERIES/DISPOSITION</b>	<b>146,292,244</b>	<b>150,810,095</b>	<b>135,304,087</b>	<b>125,034,520</b>	<b>104,162,890</b>	<b>88,058,765</b>	<b>89,616,590</b>	<b>107,597,832</b>	<b>108,025,636</b>	<b>100,518,044</b>	<b>129,186,414</b>	<b>109,473,911</b>	<b>1,394,081,028</b>
16	ACCOUNTING UAF (Over) Under	283,278	1,049,670	464,927	833,417	648,134	(840,581)	(329,889)	(255,212)	15,079	66,661	(258,062)	(486,085)	1,191,337

UAF =	
Line (16), Total Column	1,191,337
Divided by:	
Throughput =	1,382,203,447
Line (3) + (4) + (6) Total Column	
Base UAF	0.09%

True-up	2020
UAF Retained	239,540
Add 2019 Over (Under) recovery	89,041
UAF Retained	328,581
UAF Actual Jan-Dec Actual	1,191,337
UAF Over (Under) recovered	(862,756)
Divided by:	
Throughput =	1,382,203,447
Line (3) + (4) + (6) Total Column	
UAF system-wide adjustment	0.06%
Effective UAF	0.15%

Northern Natural Gas Company  
 Periodic Rate Adjustments for Fuel  
 Storage Fuel

Schedule No. 8  
 page 1 of 2

1 Storage Fuel Consumed	1/	718,578
2 FDD Injections	2/	59,161,573
3 Storage Fuel Rate		1.21%
<u>True-up</u>		
4 Actual Storage Fuel Consumed	1/	718,578
5 Actual Storage Fuel Retained	3/	674,039
6 Less prior year True-Up Under(Over) Recovered	4/	<u>(37,242)</u>
7 Actual Storage Fuel Retained Related To Consumed		711,281
8 Under(Over) Recovered		7,297
9 FDD Injections		59,161,573
10 Storage Fuel Rate True-up		0.01%
<u>Total Storage Fuel Percentage</u>		
11 Actual Fuel Rate Percent (Line 3)		1.21%
12 True Up Percent (Line 10)		<u>0.01%</u>
13 Total Storage Fuel Percentage		1.22%

1/ Schedule No. 1

2/ Total from Schedule 8 page 2, column (b)

3/ Total from Schedule 8 page 2, column (c)

4/ In order to recognize retention to recover the prior year's under/(over) recovery, the Storage Fuel-True Up as stated on Schedule No. 8 of Northern's January 31, 2020 annual fuel filing in Docket No. RP20-478-000 such amount must be deducted from the total actual retention.



Northern Natural Gas Company  
 Periodic Rate Adjustments for Fuel  
 Storage Injections and Fuel Retained

Schedule No. 8  
 Page 2 of 2

FDD Injections by month

Month	Injection volume on which storage fuel was retained (dth)	Storage fuel retained (dth)
(a)	(b)	(c)
202006	11,484,378	130,733
202007	11,999,255	136,774
202008	12,228,905	139,247
202009	13,775,112	157,008
1/ 202010	9,673,923	110,277
Total	<b>59,161,573</b>	<b>674,039</b>

1/ Prior period adjustment injections made in November are included with October activity. The PPAs are tied to imbalance-to-storage for October.

Northern Natural Gas Company  
Periodic Rate Adjustments for Fuel  
Market Area Electric Compression Charge

Schedule No. 9  
Page 1 of 2

For the Period January, 2020 - December, 2020

1 Electric Compression Charges	\$455,618 1/
2 Deliveries to Market area (MID 17)	982,769,370 2/
3 Electric Compression Charge	\$0.0005
4 <u>True-up</u>	
5 Actual Electric Compression Commodity Charge Retained	\$686,150 3/
6 Less prior year True-Up Under(Over) Recovered	207,613 4/
7 Actual Electric Compression Charge collected vs. costs	\$478,537
8 Under(Over) Recovered (Line 1 less Line 7)	-\$22,919
9 Electric Compression Rate True-up	\$0.0000
10 <u>Total Electric Compression Charge</u>	
11 Actual Compression Rate	\$0.0005
12 True Up	<u>\$0.0000</u>
13 Total Electric Compression Charge	<b>\$0.0005</b>

1/ Schedule No. 9 Costs for electric compression at facilities listed below:  
Poppo Creek, added 10/2003. Spencer added 12/2006.  
Chatfield incremental added 1/2007. Spring Green added 1/2008.  
Elk River added 11/2011.

See Schedule 9, page 2, column (a)

2/ Schedule 9, page 2, column (e )

3/ Schedule 9, page 2, column (f)

4/ In order to recognize retention to recover the prior year's under/(over) recovery, the amount on line 8 of Schedule 9, page 1 of 2 of Northern's January 31, 2020 annual fuel filing in Docket RP20-478-000 must be deducted from the total actual retention.

Northern Natural Gas Company  
 Periodic Rate Adjustments for Fuel  
 Market Area Electric Compression Charge

Schedule No. 9  
 Page 2 of 2

For the Period January, 2020 - December, 2020

Month	Charges (a)	Total Market Area Throughput (b)	Less Fuel Retained (c)	Less UAF Retained (d)	Total Market Throughput assessed Elec Compr 1/ (e)	Elec Compr Collected (f)
202001	93,499.94	116,322,170	1,358,709	-172,486	115,135,947	80,095.76
202002	102,756.68	103,044,154	1,202,138	-152,752	101,994,768	70,840.67
202003	97,155.89	89,665,337	1,045,316	-132,380	88,752,401	62,220.81
202004	60,003.21	72,680,643	412,731	93,633	72,174,279	48,602.96
202005	1,385.87	58,446,692	333,759	75,170	58,037,763	42,378.05
202006	24,105.34	62,009,611	353,377	79,840	61,576,394	42,801.87
202007	8,310.79	72,220,103	411,490	92,818	71,715,795	50,129.35
202008	8,650.31	68,064,778	388,706	87,678	67,588,394	47,216.39
202009	8,209.24	67,319,970	384,607	86,653	66,848,710	46,413.03
202010	10,643.69	92,521,651	528,604	119,090	91,873,957	64,875.96
202011	18,822.83	82,720,640	877,440	106,095	81,737,105	56,403.95
202012	22,073.89	106,602,669	1,131,758	137,054	105,333,857	74,171.07
<b>Total</b>	<b>\$455,617.68</b>	991,618,418	8,428,635	420,413	<b>982,769,370</b>	<b>\$686,149.87</b>

1/ Mainline Section 3 throughput per Schedule 2 less fuel and UAF retained

Northern Natural Gas Company  
 Periodic Rate Adjustments for Fuel  
 Calculation of Storage URR Percentage

Schedule No. 10  
 page 1 of 2

	Total	Redfield	Lyons
1 Total Storage Injections (Mcf) 1/	37,651,661	30,992,324	6,659,337
2 Total Storage Withdrawals (Mcf) 1/	<u>37,468,063</u>	<u>30,938,099</u>	<u>6,529,964</u>
3 Annual URR Volume Under-Recovered End of 2019-2020 Storage Cycle (Mcf)	183,598	54,225	129,373
4 Annual URR Volume Converted (Dth) 2/	190,869	57,368	133,501
5 FDD Injections June - October 2020 (Dth) 3/	59,161,573		
6 Storage Under-Recovered Percentage effective June 1, 2021	0.32%		
<u>True-up (Not applicable in the first year of URR)</u>			
7 Annual URR Volume from Prior Year	-		
8 Actual Storage URR Retained 4/	-		
9 Less prior year True-Up Under(Over) Recovered	<u>-</u>		
10 Actual Storage URR Retained with True-up	-		
11 Under(Over) Recovered	-		
12 FDD Injections (Dth)	59,161,573		
13 Storage URR Percentage True-up	0.00%		
<u>Total Storage URR Percentage</u>			
14 Actual (Over) Under-Recovered Percent (Line 5)	0.32%		
15 True Up Percent (Not applicable for the first year of URR) (Line 12)	<u>0.00%</u>		
16 Total Storage (Over) Under-Recovered Fuel Percentage	0.32%		
<u>Post URR Balance</u>			
17 Prior Year Balance (Dth)		-	-
18 Annual Storage Under-Recovery (Dth)		<u>57,368</u>	<u>133,501</u>
19 New Post URR Balance (Dth)		57,368	133,501
<u>Pre URR Balance</u>			
20 Prior Balance (Per storage region operations) (Mcf)		6,966,443	1,289,531
21 Annual Activity (Mcf)		-	-
22 New Pre URR Balance (Mcf)		6,966,443	1,289,531

1/ Redfield and Lyons storage fields only.

2/ The Annual URR Volume Under-Recovered End of 2019-2020 Storage Cycle (Mcf) has been converted to Dth based on the average Btu factor for the Storage Cycle Year.

3/ Total from Schedule 10 page 2, column (b)

4/ Total from Schedule 10 page 2, column (c)

Northern Natural Gas Company  
 Periodic Rate Adjustments for Fuel  
 Storage Injections and URR Retained

Schedule No. 10  
 Page 2 of 2

FDD Injections by month

Month	Injection volume on which storage URR was retained (dth)	Storage URR retained (dth)
(a)	(b)	(c)
202006	11,484,378	0
202007	11,999,255	0
202008	12,228,905	0
202009	13,775,112	0
1/ 202010	9,673,923	0
Total	<b>59,161,573</b>	<b>0</b>

1/ Prior period adjustment injections made in November are included with October activity. The PPAs are tied to imbalance-to-storage for October.