



December 22, 2022

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. RP22-1033-

Motion to Place Interim Rates into Effect

Dear Ms. Bose:

Pursuant to Section 4 of the Natural Gas Act ("NGA")¹ and Part 154 of the regulations of the Federal Energy Regulatory Commission ("FERC" or "Commission"),² specifically 18 C.F.R. § 154.206(b), Northern Natural Gas Company ("Northern") hereby moves and submits for filing as part of its F.E.R.C. Gas Tariff, Sixth Revised Volume No. 1 ("Tariff"), the following tariff sheets under Part 154 of the Regulations of the Federal Energy Regulatory Commission ("FERC" or "Commission"), to put in place an interim rate reduction ("Interim Rates") in its natural gas transportation and storage rates:

SIXTH REVISED VOLUME NO. 1

Substitute Twentieth Revised Sheet No. 50 Substitute Twenty Third Revised Sheet No. 51 Substitute Twenty First Revised Sheet No. 52 Substitute Twenty Third Revised Sheet No. 53 Substitute Sixth Revised Sheet No. 55 Fifth Revised Sheet No. 55A Substitute Ninth Revised Sheet No. 59 Substitute Ninth Revised Sheet No. 59A Substitute Twentieth Revised Sheet No. 60 Substitute Twentieth Revised Sheet No. 60A

¹ 15 U.S.C. § 717c.

² 18 C.F.R. Part 154 (2022).

Kimberly D. Bose, Secretary December 22, 2022 Page 2 of 4

Purpose

Northern tenders the referenced tariff sheets for filing for the purpose of placing in effect reduced Interim Rates in furtherance of continued settlement discussions in the Docket No. RP22-1033 general Section 4 rate proceeding.³ The tariff sheets are proposed to become effective January 1, 2023, subject to refund.

Northern is filing contemporaneously in Docket No. RP22-1033, under separate cover, to place its Base Case⁴ rates in effect on January 1, 2023, subject to adjustment to remove costs associated with facilities that will not be in service by the end of the test period, December 31, 2022. However, as requested herein, Northern seeks to place in effect on January 1, 2023, Interim Rates that are lower than the Base Case rates. These Interim Rates would be Northern's effective rates and remain in place subject to Northern's right to terminate the Interim Rates and place the Base Case rates in effect, subject to refund, on 30 calendar days' notice ("30-days' notice"). Northern's proposed Interim Rates reflect an approximate 30% reduction below the Market Area Base Case rates.

In the July 1 Filing, the tariff rates for the injection charge and withdrawal charge were increased from \$0.0197 to \$0.0232. The capacity and reservation charges for the market-based rate Service Agreements listed in Sheet No. 55A in Northern's Tariff were not revised in the July 1 Filing. Northern has recalculated the reservation and capacity charges for the market-based rate contracts and will amend the contracts accordingly. Therefore, Northern is submitting the revised rates listed in Sheet No. 55A.

Northern is proposing lower Interim Rates as a good faith demonstration of Northern's continued willingness to engage in settlement discussions in order to reach a mutually-agreeable resolution of the issues in this case. Both the Interim Rates and the Base Case rates, as applicable, will be subject to refund. In the event a settlement is reached and is approved by the Commission, Northern will charge the new settlement rates and pay refunds to shippers to the extent the settlement rates are lower than the Interim Rates. However, if Northern determines that this matter cannot be resolved through settlement, Northern may file to terminate the Interim Rates and place the Base Case rates in effect on 30-days' notice. In that event, Northern will not seek to retroactively surcharge its shippers for the difference between the Interim Rates and the Base Case rates for the period of time the Interim Rates were in effect. Northern requests the right, to file a compliance filing with 30-days' notice, to terminate the effectiveness of the Interim Rates and supersede the Interim Rates with the Base Case rates and that the filing of the Interim Rates will not affect Northern's right to defend its Base Case rates and its Prospective Case rates at hearing.

 3 On July 1, 2022, Northern filed revised tariff sheets proposed to be effective on August 1, 2022, to reflect a general Section 4 rate increase. On July 29, 2022, the Commission accepted the Base Case rate schedules, suspended them until January 1, 2023, subject to refund, and set the matter for hearing. *Northern Natural Gas Co.*, 180 FERC \P 61,066 (2022).

⁴ The term "Base Case" shall have the meaning defined in the contemporaneously filed "Motion to Place Base Case Revised Tariff Sheets into Effect" referred to herein.

Kimberly D. Bose, Secretary December 22, 2022 Page 3 of 4

Northern's request is in the public interest as it provides shippers with lower Interim Rates and is intended to foster continued good-faith settlement discussions among the parties. Northern's request is also consistent with Commission precedent. In *Northern Natural Gas Company*, 170 FERC ¶ 61,058 (2020), the Commission granted a similar request to put in place interim rates during the pendency of settlement discussions that were lower than the suspended rates, subject to Northern's right to terminate the interim rates upon 30-days' notice and replace them with the suspended rates.

As stated above, concurrent with this filing, Northern is filing a separate motion to place its Base Case rates in effect on January 1, 2023, subject to adjustment to remove costs associated with facilities that will not be in service by the end of the test period, December 31, 2022. In the event the Commission accepts the Interim Rates, Northern respectfully requests that the Interim Rates be placed in effect in lieu of the Base Case rates, subject to Northern's ability to reinstate the Base Case rates upon 30-days' notice as discussed above.

In the event the Commission cannot provide Northern with the above requested assurances, Northern requests permission to withdraw this filing in every respect and that its Base Case rate filing submitted this same day be accepted subject to refund on January 1, 2023, without reference to this filing.

Northern believes that prompt acceptance of the instant filing is in the public interest since it will result in more productive settlement discussions regarding the cost of transportation for Northern's shippers.

Additionally, in the official Commission settlement proceedings, Northern is offering a deferred collection agreement option for shippers that are in agreement with the settlement rates proposed by Northern through those proceedings. Northern is making this option available to all of its shippers with information available posted on Northern's website.

Waivers

In order to provide Northern and its shippers with additional rate certainty and to permit the benefits of the lower Interim Rates to take effect as planned on January 1, 2023, Northern respectfully requests that the Commission grant all waivers of its regulations necessary to accept the instant filing to be effective as requested herein so that Northern and its customers have certainty on the rates to be charged for January 2023 billing. Consequently, Northern respectfully requests that the Commission rule on this motion no later than January 25, 2023 to ensure its January 2023 billings reflect the appropriate rates.

Kimberly D. Bose, Secretary December 22, 2022 Page 4 of 4

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.

Data Processing Requirements

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

Communication

It is respectfully requested that all Commission orders and correspondence, as well as pleadings and correspondence from other persons concerning this filing, be served upon each of the following:

Kirk Lavengood Vice President, General Counsel and Regulatory Affairs Northern Natural Gas Company 1111 South 103rd Street Omaha, NE 68124-1000 (402) 398-7376 kirk.lavengood@nngco.com J. Gregory Porter
Assistant General Counsel and
Chief Compliance Officer
Northern Natural Gas Company
1111 South 103rd Street
Omaha, NE 68124-1000
(402) 398-7406
greg.porter@nngco.com

Respectfully submitted,

/s/ Kirk Lavengood

Kirk Lavengood Vice President, General Counsel and Regulatory Affairs

Attachments

RATE SCHEDULE TF

MARKET-	-TO-MARKET	FIELD-TO- FIELD/MARKET <u>DEMARCATION</u>	,
TF12 Base	TF12 Variable TF5	TFF	
13.876 24.976	13.876 -0- 33.854 36.99	8.798 5 <u>15.837</u>	
Market Area 4/	Field Mileage Rate per 100 miles	Out-of Balance	Carlton Surcharge 5/
Commodity	Commodity	Commodity	Maximum Minimum
0.0260 0.0260	0.0103	0.0260	0.0175
	0.0103	0.0217	
	TF12 Base 13.876 24.976 Market Area 4/ Commodity 0.0260	13.876	Market

 $^{1/% \}left(\frac{1}{2}\right) =0$ The minimum reservation rate is equal to zero.

^{2/} Shipper shall pay the applicable Electric Compression commodity rate as shown in Sheet No. 54 and ACA unit surcharge as posted on FERC's website at https://www.ferc.gov.

^{3/} The firm transportation services commodity rates are not discountable. The commodity rate is the maximum and minimum commodity rate. The applicable MIDs commodity rate will be in addition to the TF reservation rates. The MIDs rates shown in Sheet Nos. 59-60A represent the throughput commodity rates for any transaction involving MIDs.

^{4/} There will be no commodity charge 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 commodity charge for transportation as set forth in Sheet Nos. 141, 142C and 147.

^{5/} Applicable to Market Area Shippers as provided for in the Carlton Settlement filed in Docket No. RP96-347 dated October 28, 1996.

Substitute Twenty Third Revised Sheet No. 51 Superseding Twenty Third Revised Sheet No. 51

RATE SCHEDULE TFX

		MARKET-TO-M	MARKET	FIELD-TO-FIELD				
RESERVA	ATION RATES	Apr-Oct No	ov-Mar_	Apr-0	Oct Nov-Mar_			
Base Tariff Rates 1/		<u>\$13.876</u> <u>\$36.995</u>		<u>\$8.7</u>	\$15.837			
COMMODITY RATES	S 2/ 3/					-		
TI	FX	Market Area 4/	Field Mileage Rate per 100 mil	Les	Out-of-Balance		Carlton Surcharg	re 5/
Receipt Point	Delivery Point	Commodity	Commodity		Commodity	1	<u>Maximum</u>	Minimum
Market Field Market	Market Market Field	0.0260 0.0260	0.0103 0.0103		0.0260		0.0175 0.0175	0.0000
Field	Field		0.0103		0.0217			

^{1/} The minimum reservation rate is equal to zero.
2/ Shipper shall pay the applicable Electric Compression commodity rate as shown in Sheet No. 54 and ACA unit surcharge as posted on FERC's website at https://www.ferc.gov.

^{3/} The firm transportation services commodity rates are not discountable. The commodity rate is the maximum and minimum commodity rate. The applicable MIDs commodity rate will be in addition to the TFX reservation rates. The MIDs rates shown in Sheet Nos. 59-60A represent the throughput commodity rates for any transaction involving MIDs.

^{4/} There will be no commodity charge 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 commodity charge for transportation as set forth in Sheet Nos. 141, 142C and 147.

^{5/} Applicable to Market Area Shippers as provided for in the Carlton Settlement filed in Docket No. RP96-347 dated October 28, 1996.

RATE SCHEDULE TI

COMMODITY RATES 1/ 2/

TI		Market Area 3/		Field Mileage Rate per 100 miles		Out-of-Balance		Carlton Surcharge 4/	
Receipt Point	Delivery Point	<u>Maximum</u>	Minimum	<u>Maximum</u>	Minimum	<u>Maximum</u>	Minimum	Maximum	Minimum
NOVEMBER - MARG	СН								
Market Field Market Field	Market Market Field Field	1.2429 1.2429	0.0260 0.0260	0.2572 0.2572 0.2572	0.0103 0.0103 0.0103	1.2429	0.0260	0.0175 0.0175 	0.0000
APRIL - OCTOBER Market Field Market Field	R Market Market Field Field	0.4824 0.4824	0.0260 0.0260	0.1475 0.1475 0.1475	0.0103 0.0103 0.0103	0.4824	0.0260	0.0000 0.0000	0.0000

^{1/} Shipper shall pay the applicable Electric Compression commodity rate as shown in Sheet No. 54 and ACA unit surcharge as posted on FERC's website at https://www.ferc.gov.

^{2/} The MIDs rates shown in Sheet Nos. 59-60A represent the throughput commodity rates for any transaction involving MIDs.

^{3/} There will be no commodity charge 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 commodity charge for transportation as set forth in Sheet Nos. 141, 142C and 147.

^{4/} Applicable to Market Area Shippers as provided for in the Carlton Settlement filed in Docket No. RP96-347 dated October 28, 1996.

Substitute Twenty Third Revised Sheet No. 53
Superseding
Twenty Third Revised Sheet No. 53

greater of 56.5000 or 2.0 times 5/

greater of 113.0000 or 3.0 times 5/

	Commodity <u>Charges</u>
GS-T COMMODITY THROUGHPUT RATE	Nov-Oct
Market Area Field to Demarcation Field-to-Market	1.7149 1/ 2/ 1.0282 2.7431 1/

BEAVER COMPRESSION FEE

Incidental Jurisdictional Compression Fee 0.0400

WATERVILLE STORAGE

The Market Area transportation rate, Fuel and UAF is charged for delivery to Waterville storage point (POI 922), or other similarly situated third party storage points in the Market Area. If redelivery from Waterville, or other similarly situated third party storage points, is to a Market Area point, there are no additional transportation, Fuel or UAF charges. If the redelivery is to a Field Area delivery point, the Field Area mileage/MID transportation rate and Fuel is charged.

CAPACITY RELEASE FEE (Rate per transaction) Negotiated 3/ Marketing DAILY DELIVERY VARIANCE CHARGE: Non-SOL/SUL/Critical Day Positive DDVC 4 / Negative DDVC 4/ 4 / Punitive DDVC SOL Day greater of 1.0000 or 1.25 times 5/ Positive DDVC Negative DDVC 0.0000 Punitive DDVC greater of 6/ or 2.0 times 5/ SUL Day Positive DDVC 0.0000 Negative DDVC greater of 1.0000 or 1.25 times 5/ Punitive DDVC Critical Day Positive/Critical DDVC -First 2% greater of 15.0000 or 1.50 times 5/ -Next 3% greater of 22.0000 or 1.75 times 5/ Negative DDVC 0.0000

AUTHORIZED OVERRUN

-Level I -Level II

Punitive/Critical DDVC

TF, TFX, TI and GS-T Rate Schedules

- 1/ In addition, Shipper shall pay the applicable Electric Compression commodity rate as shown in Sheet No. 54 and the ACA unit surcharge as posted on FERC's website at https://www.ferc.gov.
- 2/ There will be no commodity charge 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 commodity charge for transportation as set forth in Sheet Nos. 141, 142C and 147.
- 3/ Northern will assess fee only in those instances outlined in Sheet No. 288.
- 4/ The rate will be the applicable maximum Winter Season or Summer Season Market Area TI Rate.
- 5/ The highest published Platts "Gas Daily" Midpoint price on the applicable day at any of the applicable index points of: Market Area Northern, demarc and Northern, Ventura; or Field Area Panhandle, Tx.-Okla. and El Paso, Permian.
- 6/ Charge equal to five (5) times the SMS monthly reservation fee.
- 7/ The Authorized Overrun Rate shall be equal to the TI rate for the applicable MID path shown in Sheet Nos. 59-60A.

RATE SCHEDULES FDD, PDD, IDD, ILD & SMS

Rate Schedule FDD		
Maximum Reservation Charge	4.3552	1/
Maximum Capacity Charge	0.9065	1/
Injection Charge - Firm	0.0232	
Withdrawal Charge - Firm	0.0232	
Annual Rollover Charge	0.9065	1/
Rate Schedule PDD		
Maximum Capacity Charge	0.9065	1/
Maximum Monthly Inventory Charge	0.2188	1/
Injection Charge	0.0232	
Withdrawal Charge	0.0232	
Annual Rollover Charge	0.9065	1/
Rate Schedule IDD		
Maximum Monthly Inventory Charge	0.2188	1/
Injection Charge	0.0232	
Withdrawal Charge	0.0232	
Annual Rollover Charge	0.9065	1/
Rate Schedule ILD		
Maximum Charge	11.7500	
Minimum Charge	0.5044	
Performance Obligation Charge	2.0000	
Rate Schedule SMS		
Reservation Charge	6.1010	
Commodity Rate	0.0208	

^{1/} Minimum Rate is zero.

Rate Schedule FDD 2008 Market-Based Rate Expansion

Rate Schedule FDD	Reservation Charge	Capacity Charge	Injection Charge Firm	Withdrawal Charge Firm	100% Load Factor
Shipper					
Cascade Municipal Utilities	3.4920	0.7268	MAX	MAX	1.50
City of Remsen, Iowa	3.4920	0.7268	MAX	MAX	1.50
City of West Bend, Iowa	3.4920	0.7268	MAX	MAX	1.50
Woodbine Municipal Natural Gas Systems	3.4920	0.7268	MAX	MAX	1.50
Preston Municipal Natural Gas Department	3.4920	0.7268	MAX	MAX	1.50
City of Whittemore	3.4920	0.7268	MAX	MAX	1.50
City of Rolfe, Iowa	3.4920	0.7268	MAX	MAX	1.50
City of Scribner	3.4920	0.7268	MAX	MAX	1.50
City of Round Lake, MN	3.4920	0.7268	MAX	MAX	1.50
City of Fairbank	3.4920	0.7268	MAX	MAX	1.50
Wall Lake Municipal Gas	3.4920	0.7268	MAX	MAX	1.50
Black Hills Utility Holdings, Inc.	3.2775	0.6822	MAX	MAX	1.4107
Minnesota Energy Resources Corporation	3.2758	0.6818	MAX	MAX	1.41
Northern States Power - Generation	3.0115	0.6268	MAX	MAX	1.30
Southwestern Public Service Co.	3.0115	0.6268	MAX	MAX	1.30

$\begin{array}{c} \mathtt{MILEAGE\ INDICATOR\ DISTRICTS\ (dollars\ per\ Dth)} \\ \mathtt{DELIVERY\ DISTRICT} \end{array}$

RECE	IPT		1	2	3	4	5	6	7	7B	8	9
DIST												
1	TI N	Apr-Oct Nov-Mar TF	0.1003	0.2418	0.5067	0.7202	0.8102		0.6584	0.8668	1.5458	1.3323
2	TI N	Apr-Oct Nov-Mar TF	0.1183	0.0180	0.1826	0.4938	0.6404		0.5350	0.7433	1.3786	1.1703
3	TI N	Apr-Oct Nov-Mar TF	0.7973	0.5170	0.1337	0.1569	0.7022	0.2493 0.4347 0.0174	0.3241	0.5324	1.4480	1.2371
4	TI N	Apr-Oct Nov-Mar TF	0.7690	0.6842	0.4835	0.1157	0.4244		0.4552	0.6636	1.3220	1.1060
5	TI N	Apr-Oct Nov-Mar TF	0.7047	0.6353	0.4990	0.4475	0.0694		0.3524	0.5607	1.2526	1.0391
6	TI N	Apr-Oct Nov-Mar TF	0.4475	0.3575	0.1286	0.1929	0.2649		0.2032	0.4115	1.1574	0.8462
7	TI N	Apr-Oct Nov-Mar TF	0.7716	0.6713	0.6430	0.5093	0.5453		0.2572	0.4655	0.7407	0.5247
7B	TI N	Apr-Oct Nov-Mar TF	0.7716	0.6713	0.6430	0.5093	0.5453		0.2572	0.0000	0.7407	0.5247
8	TI N	Apr-Oct Nov-Mar TF	1.5458	1.4635	1.3529	1.3349	1.3220		1.1060	0.8771	0.0206	0.5324
9	TI N	Apr-Oct Nov-Mar TF	1.3426	1.2500	1.1240	1.0468	0.8951		0.6250	0.3961	0.3266	0.1723

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. "TF" is applicable to Rate Schedules TF and TFX.

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

MILEAGE INDICATOR DISTRICTS (dollars per Dth) $\frac{\text{DELIVERY DISTRICT}}{\text{DELIVERY DISTRICT}}$

REC	EIPT		1	2	3	4	5	6	7	7в	8	9
DIS	TRIC											
		Apr-Oct										
10	TI :	Nov-Mar										
		TF	0.0548	0.0567	0.0547	0.0474	0.0394	0.0401	0.0301	0.0209	0.0197	0.0169
		Apr-Oct										
11	TI :	Nov-Mar										
		TF	0.0526	0.0486	0.0440	0.0386	0.0380	0.0213	0.0265	0.0173	0.0110	0.0138
		Apr-Oct										
12	TI :	Nov-Mar	1.4223	1.3220	1.3220	1.1265	1.2037	0.9748	0.7665	0.5375	0.4295	0.4064
		TF	0.0570	0.0529	0.0529	0.0451	0.0482	0.0390	0.0307	0.0215	0.0172	0.0163
	TI.	Apr-Oct	0.7700	0.7685	0.7788	0.6977	0.6992	0.5871	0.4720	0.3407	0.2596	0.2434
13	TI :	Nov-Mar	1.3426	1.3400	1.3580	1.2166	1.2191	1.0237	0.8230	0.5941	0.4527	0.4244
		TF	0.0538	0.0537	0.0544	0.0487	0.0488	0.0410	0.0330	0.0238	0.0181	0.0170
		Apr-Oct										
14	TI :	Nov-Mar										
		TF	0.0659	0.0688	0.0656	0.0602	0.0556	0.0527	0.0457	0.0366	0.0319	0.0313
		Apr-Oct										
15	TI :	Nov-Mar										
		TF	0.0867	0.0831	0.0818	0.0736	0.0717	0.0695	0.0617	0.0525	0.0471	0.0461
		Apr-Oct										
16A	TI :	Nov-Mar										
		TF	0.0706	0.0660	0.0691	0.0572	0.0616	0.0485	0.0436	0.0344	0.0301	0.0295
		Apr-Oct										
16B	Ή1.	Nov-Mar										
		TF	0.0793	0.0715	0.0722	0.0709	0.0677	0.0656	0.0477	0.0385	0.0382	0.0377
			1 6600	1 6046	1 2000	1 4500	1 4001	1 0650	1 0550	1 1010	1 0760	1 0600
1		Apr-Oct										
17	TI.	Nov-Mar										
		TF	U.1162	0.1121	0.0977	0.1015	0.0994	0.0955	0.0877	0.0785	0.0752	0.0746

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.

"TF" is applicable to Rate Schedules TF and TFX.

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 https://www.ferc.gov and the Carlton surcharge, if applicable.

MILEAGE INDICATOR DISTRICTS (dollars per Dth) DELIVERY DISTRICT

RECE DIST		10	11	12 1		4 15	5 16A		17
DIST	TI Apr-Oct	0 9042 0	7301 0 02						1 6101
1	TI Nov-Mar								
_	TF		0510 0.05						
	TI Apr-Oct	0.7847 0.							
2	TI Nov-Mar		1317 1.26						
	TF	0.0548 0.	0453 0.05	06 0.0550	0.0640	0.0756	0.0643	0.0715	0.0977
	TI Apr-Oct		6933 0.76						
3	TI Nov-Mar		2088 1.33						
	TF	0.0565 0.	0484 0.05	36 0.0581	0.0693	0.0786	0.0589	0.0722	0.0984
	TI Apr-Oct	0.7036 0.	6151 0.69	03 0.7537	0.8894	1.0487	0.8673	1.0148	1.4974
4	TI Nov-Mar		0725 1.20						
	TF	0.0491 0.	0430 0.04	32 0.0526	0.0621	0.0732	0.0606	0.0709	0.0971
	TI Apr-Oct	0.7419 0.	5767 0.65	20 0.7154	0.7847	0.9883	0.8821	0.9691	1.4517
5	TI Nov-Mar		0057 1.13						
	TF	0.0518 0.	0403 0.04	55 0.0500	0.0548	0.0690	0.0616	0.0677	0.0939
	TI Apr-Oct	0.6741 0.	5207 0.59	74 0.6608	0.7921	0.9765	0.7847	0.9396	1.4222
6	TI Nov-Mar		9079 1.04						
	TF	0.0471 0.	0364 0.04	17 0.0461	0.0553	0.0682	0.0548	0.0656	0.0918
	TI Apr-Oct	0.4410 0.	2832 0.35	70 0.4219	0.5561	0.8599	0.5502	0.6829	1.1655
7	TI Nov-Mar		4938 0.62						
	TF	0.0308 0.	0198 0.02	49 0.0295	0.0388	0.0600	0.0384	0.0477	0.0739
	TI Apr-Oct	0.4410 0.	2832 0.35	70 0.4219	0.5561	0.8599	0.5502	0.6829	1.1655
7B	TI Nov-Mar		4938 0.62						
	TF	0.0308 0.	0198 0.02	49 0.0295	0.0388	0.0600	0.0384	0.0477	0.0739
	TI Apr-Oct	0.3216 0.							
8	TI Nov-Mar		3344 0.42						
	TF	0.0225 0.	0134 0.01	/1 0.0216	0.0303	0.0457	0.0288	0.0382	0.0644
	TI Apr-Oct	0.2493 0.	1121 0.24	34 0.2478	0.3909	0.5989	0.4381	0.5399	1.0225
9	TI Nov-Mar								
	TF	0.0174 0.	0078 0.01	70 0.0173	0.0273	0.0418	0.0306	0.0377	0.0639

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.

"TF" is applicable to Rate Schedules TF and TFX.

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 https://www.ferc.gov and the Carlton surcharge, if applicable.

RECEIPT DISTRICT	10 11	. 12	13	14	15	16A	16B	17
TI Apr-Oct 10 TI Nov-Mar TF		0.3781 0	.4835	0.7150	0.9928	0.5890	0.9362	2.1793
TI Apr-Oct 11 TI Nov-Mar TF	0.1578 0.0354 0.2752 0.061 0.0110 0.0025	0.1132 0	.3164	0.5401	0.8771	0.4578	0.7022	1.9453
TI Apr-Oct 12 TI Nov-Mar TF	0.2463 0.1210 0.4295 0.2109 0.0172 0.0084	0.2572 0	.3935	0.6507	0.9311	0.6250	0.8771	2.1202
TI Apr-Oct 13 TI Nov-Mar TF	0.3230 0.1254 0.5633 0.2186 0.0226 0.0088	0.3215 0	.1440	0.3189	0.6867	0.2598	0.5067	1.7498
TI Apr-Oct 14 TI Nov-Mar TF	0.2847 0.3203 0.4964 0.5583 0.0199 0.0224	0.6970 0	.2186	0.0617	0.8796	0.4938	0.7536	1.9967
TI Apr-Oct 15 TI Nov-Mar TF		1.0494 0	.6661	0.9131	0.0643	0.4398	0.6739	1.9170
TI Apr-Oct 16A TI Nov-Mar TF	0.4882 0.2817 0.8513 0.4913 0.0341 0.0197	0.6327 0	.2598	0.5041	0.4218	0.0437	0.2418	1.4849
TI Apr-Oct 16B TI Nov-Mar TF	0.5369 0.402 0.9362 0.7022 0.0375 0.0283	0.8771 0	.5067	0.7536	0.6739	0.2418	0.0000	1.2431
TI Apr-Oct 17 TI Nov-Mar TF		2 1.7592 1	.3349	0.9516	0.9799	0.7510	1.0802	1.2431

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.

"TF" is applicable to Rate Schedules TF and TFX.

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 https://www.ferc.gov and the Carlton surcharge, if applicable.

RATE SCHEDULE TF

	=	MARKET-	TO-MARKET	FIELD-TO- FIELD/MARKET DEMARCATION	
RESERVAT	ION RATES	TF12 Base	TF12 Variable TF5	TFF	
Base Tariff Rat	es 1/				
Summer (Apr-Oct Winter (Nov-Mar		1 <u>3</u> 6 .876 <u>6</u> 24 <u>8</u> .976 <u>8</u>		-0- _36.995 <u>42.754</u>	8.798
COMMODITY RATES	2/ 3/				
TF12 Base, TF12	Var., TF5 & TFF	Market Area 4/	Field Mileage Rate per 100 miles	Out-of Balance	Carlton Surcharge 5/
Receipt Point	Delivery Point	Commodity	<u>Commodity</u>	Commodity	Maximum Minimum
Market Field Market	Market Market Field	0.0260 0.0260	0.0103 0.0103	0.0260	0.0175
Field	Field		0.0103	0.0217	

 $^{1/% \}left(\frac{1}{2}\right) =0$ The minimum reservation rate is equal to zero.

^{2/} Shipper shall pay the applicable Electric Compression commodity rate as shown in Sheet No. 54 and ACA unit surcharge as posted on FERC's website at https://www.ferc.gov.

^{3/} The firm transportation services commodity rates are not discountable. The commodity rate is the maximum and minimum commodity rate. The applicable MIDs commodity rate will be in addition to the TF reservation rates. The MIDs rates shown in Sheet Nos. 59-60A represent the throughput commodity rates for any transaction involving MIDs.

^{4/} There will be no commodity charge 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 commodity charge for transportation as set forth in Sheet Nos. 141, 142C and 147.

^{5/} Applicable to Market Area Shippers as provided for in the Carlton Settlement filed in Docket No. RP96-347 dated October 28, 1996.

RATE SCHEDULE TFX

		MARKET-TO-N	MARKET	FIELD-	TO-FIELD			
RESERV.	ATION RATES	Apr-Oct No	ov-Mar	Apr-Oct	Nov-Mar_			
Base Tariff Ra	tes 1/	\$13 <u>6.876033</u> \$36.995 <u>42.754</u> \$8.798 \$			<u>\$15.</u>	\$15.837_		
COMMODITY RATE	S 2/ 3/							
т	FX	Market Area 4/	Field Mileage Rate per 100 mil	les <u>Ou</u>	t-of-Balance	1	Carlton Surcharg	re 5/
Receipt Point	Delivery Point	Commodity	Commodity	Co	mmodity	I	<u>Maximum</u>	Minimum
Market Field Market	Market Market Field	0.0260 0.0260	0.0103 0.0103	0.	0260		0.0175 0.0175	0.0000
Field	Field		0.0103	0.	0217			

^{1/} The minimum reservation rate is equal to zero.
2/ Shipper shall pay the applicable Electric Compression commodity rate as shown in Sheet No. 54 and ACA unit surcharge as posted on FERC's website at https://www.ferc.gov.

^{3/} The firm transportation services commodity rates are not discountable. The commodity rate is the maximum and minimum commodity rate. The applicable MIDs commodity rate will be in addition to the TFX reservation rates. The MIDs rates shown in Sheet Nos. 59-60A represent the throughput commodity rates for any transaction involving MIDs.

^{4/} There will be no commodity charge 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 commodity charge for transportation as set forth in Sheet Nos. 141, 142C and 147.

^{5/} Applicable to Market Area Shippers as provided for in the Carlton Settlement filed in Docket No. RP96-347 dated October 28, 1996.

RATE SCHEDULE TI

COMMODITY RATES 1/ 2/

			Field Mi	Leage		_ Carlton			
TI		Market Area	3/	Rate per	100 miles	Out-of-E	alance	Surchar	ge 4/
Receipt Point	<u>Delivery Point</u>	<u>Maximum</u> <u>Mir</u>	imum	<u>Maximum</u>	Minimum	Maximum	Minimum	<u>Maximum</u>	<u>Minimum</u>
NOVEMBER - MARC	CH								
Market 0.0000	Market	1. <u>2429</u> 4324	0.026	50		1.24	294324	0.0260	0.0175
Field	Market	1.24294324	0.026	0.25	72 0.010)3		0.0	175 0.0000
Market	Field			0.2572	0.0103			1	
Field	Field			0.2572	0.0103	0.5427	0.0217	1	
APRIL - OCTOBER	₹								
Market	Market	0.4824 5534	0.026	50		0.48	245534	0.0260	0.0000
0.0000									
Field	Market	0. <u>4824</u> 5534	0.026	0.14	75 0.010)3		0.0	0.0000
Market	Field			0.1475	0.0103			1	
Field	Field			0.1475	0.0103	0.3112	0.0217		

^{1/} Shipper shall pay the applicable Electric Compression commodity rate as shown in Sheet No. 54 and ACA unit surcharge as posted on FERC's website at https://www.ferc.gov.

^{2/} The MIDs rates shown in Sheet Nos. 59-60A represent the throughput commodity rates for any transaction involving MIDs.

^{3/} There will be no commodity charge 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 commodity charge for transportation as set forth in Sheet Nos. 141, 142C and 147.

^{4/} Applicable to Market Area Shippers as provided for in the Carlton Settlement filed in Docket No. RP96-347 dated October 28, 1996.

Substitute Twenty Third Revised Sheet No. 53
Superseding
Twenty Third Revised Sheet No. 53

Effective On: January 1, 2023

Commodity Charges

Nov-Oct

GS-T COMMODITY THROUGHPUT RATE
Market Area
Field to Demarcation
Field-to-Market

1.71499817 1/ 2/ 1.0282 2.74313.0099 1/

BEAVER COMPRESSION FEE

Incidental Jurisdictional Compression Fee

0.0400

Negotiated 3/

WATERVILLE STORAGE

The Market Area transportation rate, Fuel and UAF is charged for delivery to Waterville storage point (POI 922), or other similarly situated third party storage points in the Market Area. If redelivery from Waterville, or other similarly situated third party storage points, is to a Market Area point, there are no additional transportation, Fuel or UAF charges. If the redelivery is to a Field Area delivery point, the Field Area mileage/MID transportation rate and Fuel is charged.

CAPACITY RELEASE FEE (Rate per transaction) Marketing

1342.1002119	11090014004 07
DAILY DELIVERY VARIANCE CHARGE:	
Non-SOL/SUL/Critical Day	
Positive DDVC	4/
Negative DDVC	4/
Punitive DDVC	4/
SOL Day	
Positive DDVC	greater of 1.0000 or 1.25 times 5/
Negative DDVC	0.0000
Punitive DDVC	greater of 6/ or 2.0 times 5/
SUL Day	
Positive DDVC	0.0000
Negative DDVC	greater of 1.0000 or 1.25 times 5/
Punitive DDVC	0.0000
Critical Day	
Positive/Critical DDVC	
-First 2%	greater of 15.0000 or 1.50 times 5/
-Next 3%	greater of 22.0000 or 1.75 times 5/
Negative DDVC	0.0000
Punitive/Critical DDVC	
-Level I	greater of 56.5000 or 2.0 times 5/
-Level II	greater of 113.0000 or 3.0 times 5/
AUTHORIZED OVERRUN	
TF, TFX, TI and GS-T Rate Schedules	7/

- 1/ In addition, Shipper shall pay the applicable Electric Compression commodity rate as shown in Sheet No. 54 and the ACA unit surcharge as posted on FERC's website at https://www.ferc.gov.
- 2/ There will be no commodity charge 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 commodity charge for transportation as set forth in Sheet Nos. 141, 142C and 147.
- 3/ Northern will assess fee only in those instances outlined in Sheet No. 288.
- 4/ The rate will be the applicable maximum Winter Season or Summer Season Market Area TI Rate.
- 5/ The highest published Platts "Gas Daily" Midpoint price on the applicable day at any of the applicable index points of: Market Area Northern, demarc and Northern, Ventura; or Field Area Panhandle, Tx.-Okla. and El Paso, Permian.
- 6/ Charge equal to five (5) times the SMS monthly reservation fee.
- 7/ The Authorized Overrun Rate shall be equal to the TI rate for the applicable MID path shown in Sheet Nos. 59-60A.

RATE SCHEDULES FDD, PDD, IDD, ILD & SMS

Rate Schedule FDD	
Maximum Reservation Charge	4.3552 1/
Maximum Capacity Charge	0.9065 1/
Injection Charge - Firm	0.0232
Withdrawal Charge - Firm	0.0232
Annual Rollover Charge	0.9065 1/
Rate Schedule PDD	
Maximum Capacity Charge	0.9065 1/
Maximum Monthly Inventory Charge	0.2188 1/
Injection Charge	0.0232
Withdrawal Charge	0.0232
Annual Rollover Charge	0.9065 1/
Rate Schedule IDD	
Maximum Monthly Inventory Charge	0.2188 1/
Injection Charge	0.0232
Withdrawal Charge	0.0232
Annual Rollover Charge	0.9065 1/
Rate Schedule ILD	
Maximum Charge	11.7500
Minimum Charge	0.5044
Performance Obligation Charge	2.0000
Rate Schedule SMS	
Rate Schedule SMS Reservation Charge	6.10107.0499

^{1/} Minimum Rate is zero.

Rate Schedule FDD 2008 Market-Based Rate Expansion

Rate Schedule FDD	Reservation Charge	Capacity Charge	Injection Charge Firm	Withdrawal Charge Firm	100% Load Factor
Shipper	charge	charge	111111	TIM	140001
Cascade Municipal Utilities	3. <u>4920</u> 5088	0.7 <u>268</u> 3	O3 MAX	MAX	1.50
City of Remsen, Iowa	3. <u>4920</u> 5088	0.7 <u>268</u> 3	O3 MAX	MAX	1.50
City of West Bend, Iowa	3. <u>4920</u> 5088	0.7 <u>268</u> 34	O3 MAX	MAX	1.50
Woodbine Municipal Natural Gas Systems	3. <u>4920</u> 5088	0.7 <u>268</u> 34	O3 MAX	MAX	1.50
Preston Municipal Natural Gas Department	3. <u>4920</u> 5088	0.7 <u>268</u> 34	O3 MAX	MAX	1.50
City of Whittemore	3. <u>4920</u> 5088	0.7 <u>268</u> 34	O3 MAX	MAX	1.50
City of Rolfe, Iowa	3. <u>4920</u> 5088	0.7 <u>268</u> 34	O3 MAX	MAX	1.50
City of Scribner	3. <u>4920</u> 5088	0.7 <u>268</u> 34	O3 MAX	MAX	1.50
City of Round Lake, MN	3. <u>4920</u> 5088	0.7 <u>268</u> 34	O3 MAX	MAX	1.50
City of Fairbank	3. <u>4920</u> 5088	0.7 <u>268</u> 34	O3 MAX	MAX	1.50
Wall Lake Municipal Gas	3. <u>4920</u> 5088	0.7 <u>268</u> 34	O3 MAX	MAX	1.50
Black Hills Utility Holdings, Inc.	3.2 <u>775<mark>943</mark></u>	0.68 <u>22</u> 57	MAX	MAX	1.4107
Minnesota Energy Resources Corporation	3.2 <u>758</u> 926	0.68 <u>18<mark>53</mark></u>	MAX	MAX	1.41
Northern States Power - Generation	3.0 <u>115<mark>283</mark></u>	0.6 <u>268<mark>30</mark>:</u>	3 MAX	MAX	1.30
Southwestern Public Service Co.	3.0 <u>115<mark>283</mark></u>	0.6 <u>268<mark>30</mark>:</u>	3 MAX	MAX	1.30

RECE DIST		יד	1	2	3	4	5	6	7	7B	8	9
		Apr-Oct	0 0575	0 1387	0 2906	0 4130	0 4646	0 3304	0 3776	0 4971	0 8865	0 7641
		Nov-Mar										
	11										0.0619	
			0.0010	0.003	0.0200	0.0200	0.0021	0.0201	0.0201	0.001	0.0013	0.0001
	TI	Apr-Oct	0.0679	0.0103	0.1047	0.2832	0.3673	0.2434	0.3068	0.4263	0.7906	0.6711
		Nov-Mar										
		TF	0.0047	0.0007	0.0073	0.0198	0.0256	0.0170	0.0214	0.0298	0.0552	0.0469
	TI	Apr-Oct	0.4573	0.2965	0.0767	0.0900	0.4027	0.2493	0.1859	0.3053	0.8304	0.7095
3	TI	Nov-Mar										
		TF	0.0319	0.0207	0.0054	0.0063	0.0281	0.0174	0.0130	0.0213	0.0580	0.0495
		Apr-Oct										
4	TI	Nov-Mar										
		T'F'	0.0308	0.0274	0.0194	0.0046	0.0170	0.0116	0.0182	0.0266	0.0529	0.0443
		7	0 4040	0 2642	0 0000	0 0567	0 0000	0 1101	0 0001	0 2016	0 7100	0 5050
_		Apr-Oct										
9		TF										
		1.5	0.0202	0.0234	0.0200	0.01/9	 U.UUZO	0.0070	0.0141	0.0223	0.0302	0.0410
	ΤΤ	Apr-Oct	0.2567	0.2050	0.0738	0.1106	0.1519	0.0988	0.1165	0.2360	0.6638	0.4853
		Nov-Mar										
		TF										
			0.01/3	0.0110	0.0002	0.0077	0.0100	0.0003	0.0001	0.0100	0.0101	0.0003
	TI	Apr-Oct	0.4425	0.3850	0.3688	0.2921	0.3127	0.1844	0.1475	0.2670	0.4248	0.3009
7	TI	Nov-Mar	0.7716	0.6713	0.6430	0.5093	0.5453	0.3215	0.2572	0.4655	0.7407	0.5247
		TF	0.0309	0.0269	0.0258	0.0204	0.0218	0.0129	0.0103	0.0186	0.0297	0.0210
	TI	Apr-Oct	0.4425	0.3850	0.3688	0.2921	0.3127	0.1844	0.1475	0.0000	0.4248	0.3009
7B	TI	Nov-Mar										
		TF	0.0309	0.0269	0.0258	0.0204	0.0218	0.0129	0.0103	0.0000	0.0297	0.0210
			0 0065	0 0000	0 7750	0 7655	0 7500	0 6101	0 6040	0 5000	0 0110	0 0050
0		Apr-Oct										
8		-NOV-Mar TF										
		11	0.0015	0.0500	0.0542	0.0555	0.0323	0.0427	0.0445	0.0551	0.0000	0.0213
	TI	Apr-Oct	0.7700	0.7169	0.6446	0.6003	0.5133	0.5236	0.3584	0.2272	0.1873	0.0988
9		Nov-Mar										
		TF	0.0538	0.0501	0.0450	0.0419	0.0358	0.0366	0.0250	0.0159	0.0131	0.0069
	TI	Apr-Oct	0.0575	0.1387	0.2906	0.4130	0.4646	0.3304	0.3776	0.4971	0.8865	0.7641
1	TI	Nov-Mar										
		TF	0.0040	0.0097	0.0203	0.0288	0.0324	0.0231	0.0264	0.0347	0.0619	0.0534
		Apr-Oct										
2	TI	Nov-Mar										
		TF	0.0047	0.0007	0.0073	0.0198	0.0256	0.0170	0.0214	0.0298	0.0552	0.0469
	шт	Ann Oat	0 4572	0 2065	0 0767	0 0000	0 4027	0 2402	0 1050	0 2052	0 0 2 0 4	0 7005
3		Apr-Oct Nov-Mar										
3	11	TF									0.0580	
		11	0.0313	0.0207	0.0054	0.0005	0.0201	0.0174	0.0130	0.0213	0.0300	0.0455
	ΤТ	Apr-Oct	0.4410	0.3924	0.2773	0.0664	0.2434	0.1667	0.2611	0.3806	0.7582	0.6343
4		Nov-Mar										
		TF									0.0529	
							0					
	ΤI	Apr-Oct	0.4042	0.3643	0.2862	0.2567	0.0398	0.1121	0.2021	0.3216	0.7183	0.5959
5		Nov-Mar										
		TF	0.0282	0.0254	0.0200	0.0179	0.0028	0.0078	0.0141	0.0225	0.0502	0.0416
		Apr-Oct										
6	TI	Nov-Mar										
		TF	0.0179	0.0143	0.0052	0.0077	0.0106	0.0069	0.0081	0.0165	0.0464	0.0339
			0 4 1 0 =	0 0055	0 0000	0.0003	0 010-	0 101	0 1 1 5 5	0 0000	0 4045	0 0000
	TI	Apr-Oct	U.4425	0.3850	U.3688	0.2921	U.3127	U.1844	U.1475	0.2670	0.4248	0.3009

7	ΤI	Nov-Mar	0.7716	0.6713	0.6430	0.5093	0.5453	0.3215	0.2572	0.4655	0.7407	0.5247
		TF	0.0309	0.0269	0.0258	0.0204	0.0218	0.0129	0.0103	0.0186	0.0297	0.0210
	TΙ	Apr-Oct	0.4425	0.3850	0.3688	0.2921	0.3127	0.1844	0.1475	0.0000	0.4248	0.3009
7B	ΤI	Nov-Mar	0.7716	0.6713	0.6430	0.5093	0.5453	0.3215	0.2572	0.0000	0.7407	0.5247
		TF	0.0309	0.0269	0.0258	0.0204	0.0218	0.0129	0.0103	0.0000	0.0297	0.0210
	ΤI	Apr-Oct	0.8865	0.8393	0.7759	0.7655	0.7582	0.6121	0.6343	0.5030	0.0118	0.3053
8	TI	Nov-Mar	1.5458	1.4635	1.3529	1.3349	1.3220	1.0674	1.1060	0.8771	0.0206	0.5324
		TF	0.0619	0.0586	0.0542	0.0535	0.0529	0.0427	0.0443	0.0351	0.0008	0.0213
	TΙ	Apr-Oct	0.7700	0.7169	0.6446	0.6003	0.5133	0.5236	0.3584	0.2272	0.1873	0.0988
9	TI	Nov-Mar	1.3426	1.2500	1.1240	1.0468	0.8951	0.9131	0.6250	0.3961	0.3266	0.1723
		TF	0.0538	0.0501	0.0450	0.0419	0.0358	0.0366	0.0250	0.0159	0.0131	0.0069

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. "TF" is applicable to Rate Schedules TF and TFX.

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

$\begin{array}{c} \mathtt{MILEAGE} \ \mathtt{INDICATOR} \ \mathtt{DISTRICTS} \ \ (\mathtt{dollars} \ \mathtt{per} \ \mathtt{Dth}) \\ \underline{\mathtt{DELIVERY}} \ \mathtt{DISTRICT} \end{array}$

REC	TRI	CT						6				
		Apr-Oct										
10		Nov-Mar										
		TF	0.0548	0.0567	0.0547	0.0474	0.0394	0.0401	0.0301	0.0209	0.0197	0.0169
			0 7507	0 6060	0 6000	0 5501	0 5440	0 0050	0 0701	0 0470	0 1570	0 1000
		Apr-Oct										
++		Nov-Mar										
		TF	0.0526	0.0486	0.0440	0.0386	0.0380	0.0213	0.0265	0.01/3	0.0110	0.0138
	m =	7	0 0157	0 7500	0 7500	0 (461	0 (000	0 5500	0 4206	0 2002	0 0460	0 0001
10		Apr-Oct										
		TF										
		1.5	0.0370	0.0329	0.0329	0.0431	0.0402	0.0390	-0.030/	0.0213	0.01/2	-0.0103
	πт	Apr-Oct	0 7700	0 7685	0 7788	0 6077	0 6002	0 5871	0 4720	0 3/07	0 2596	0 2/3/
		Nov-Mar										
		TF										
		11	0.0550	0.0557	0.0544	0.0407	0.0400	0.0110	0.0550	0.0230	0.0101	0.0170
	ΤΤ	Apr-Oct	0 9440	0 9853	0 9396	0 8614	0 7965	0 7552	0 6549	0 5236	0 4573	0 4484
14		Nov-Mar										
		TF										
			0.0003	0.0000	0.0000	0.0002	0.0000	0.002	0.0107	0.0000	0.0013	0.0010
	ТŢ	Apr-Oct	1.2420	1.1903	1.1712	1.0546	1.0266	0.9956	0.8835	0.7523	0.6741	0.6608
		Nov-Mar										
		TF	0.0867	0.0831	0.0818	0.0736	0.0717	0.0695	0.0617	0.0525	0.0471	0.0461
	TI	Apr-Oct	1.0104	0.9455	0.9897	0.8186	0.8821	0.6947	0.6239	0.4927	0.4307	0.4219
16A	TI	Nov-Mar	1.7618	1.6487	1.7258	1.4275	1.5381	1.2114	1.0880	0.8590	0.7510	0.7356
		TF	0.0706	0.0660	0.0691	0.0572	0.0616	0.0485	0.0436	0.0344	0.0301	0.0295
	TI	Apr-Oct	1.1358	1.0237	1.0340	1.0148	0.9691	0.9396	0.6829	0.5517	0.5472	0.5399
16B	TI	Nov-Mar	1.9804	1.7850	1.8030	1.7695	1.6898	1.6384	1.1908	0.9619	0.9542	0.9414
		TF	0.0793	0.0715	0.0722	0.0709	0.0677	0.0656	0.0477	0.0385	0.0382	0.0377
		Apr-Oct										
	TI	Nov-Mar	2.9012	2.7983	2.4408	2.5334	2.4820	2.3842	2.1888	1.9599	1.8776	1.8621
	TI	Nov-Mar TF	2.9012 0.1162	2.7983 0.1121	2.4408 0.0977	2.5334 0.1015	2.4820 0.0994	2.3842 0.0955	2.1888 0.0877	1.9599 0.0785	1.8776 0.0752	1.8621 0.0746
	TI TI	Nov-Mar TF Apr-Oct	2.9012 0.1162 0.7847	2.7983 0.1121 0.8113	2.4408 0.0977 0.7832	2.5334 0.1015 0.6785	2.4820 0.0994 0.5649	2.3842 0.0955 0.5738	2.1888 0.0877 0.4307	1.9599 0.0785 0.2994	1.8776 0.0752 0.2817	1.8621 0.0746 0.2419
	TI TI	Nov-Mar TF Apr-Oct Nov-Mar	2.9012 0.1162 0.7847 1.3683	2.7983 0.1121 0.8113 1.4146	2.4408 0.0977 0.7832 1.3657	2.5334 0.1015 0.6785 1.1831	2.4820 0.0994 0.5649 0.9851	2.3842 0.0955 0.5738 1.0005	2.1888 0.0877 0.4307 0.7510	1.9599 0.0785 0.2994 0.5221	1.8776 0.0752 0.2817 0.4913	1.8621 0.0746 0.2419 0.4218
	TI TI	Nov-Mar TF Apr-Oct Nov-Mar	2.9012 0.1162 0.7847 1.3683	2.7983 0.1121 0.8113 1.4146	2.4408 0.0977 0.7832 1.3657	2.5334 0.1015 0.6785 1.1831	2.4820 0.0994 0.5649 0.9851	2.3842 0.0955 0.5738	2.1888 0.0877 0.4307 0.7510	1.9599 0.0785 0.2994 0.5221	1.8776 0.0752 0.2817 0.4913	1.8621 0.0746 0.2419 0.4218
	TI TI TI	Nov-Mar TF Apr-Oct Nov-Mar	2.9012 0.1162 0.7847 1.3683 0.0548	2.7983 0.1121 0.8113 1.4146 0.0567	2.4408 0.0977 0.7832 1.3657 0.0547	2.5334 0.1015 0.6785 1.1831 0.0474	2.4820 0.0994 0.5649 0.9851 0.0394	2.3842 0.0955 0.5738 1.0005 0.0401	2.1888 0.0877 0.4307 0.7510 0.0301	1.9599 0.0785 0.2994 0.5221 0.0209	1.8776 0.0752 0.2817 0.4913 0.0197	1.8621 0.0746 0.2419 0.4218 0.0169
10	TI TI TI	Nov-Mar TF Apr-Oct Nov-Mar TF	2.9012 0.1162 0.7847 1.3683 0.0548	2.7983 0.1121 0.8113 1.4146 0.0567	2.4408 0.0977 0.7832 1.3657 0.0547	2.5334 0.1015 0.6785 1.1831 0.0474	2.4820 0.0994 0.5649 0.9851 0.0394	2.3842 0.0955 0.5738 1.0005 0.0401	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791	1.9599 0.0785 0.2994 0.5221 0.0209	1.8776 0.0752 0.2817 0.4913 0.0197	1.8621 0.0746 0.2419 0.4218 0.0169
	TI TI TI	Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446
10	TI TI TI	Nov-Mar TF Apr-Oct Nov-Mar TF	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491	2.3842 0.0955 0.5738 1.0005 0.0401	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446
10	TI TI TI TI	Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143 0.0526	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140 0.0486	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982 0.0440	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645 0.0386	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491 0.0380	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324 0.0213	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610 0.0265	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321 0.0173	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752 0.0110	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446 0.0138
10	TI TI TI TI TI	Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143 0.0526	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140 0.0486	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982 0.0440	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645 0.0386	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491 0.0380	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324 0.0213	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610 0.0265	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321 0.0173	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752 0.0110	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446 0.0138 0.2331
10	TI TI TI TI TI	Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143 0.0526	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140 0.0486 0.7582 1.3220	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982 0.0440 0.7582 1.3220	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645 0.0386 0.6461 1.1265	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491 0.0380 0.6903 1.2037	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324 0.0213	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610 0.0265 0.4396 0.7665	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321 0.0173 0.3083 0.5375	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752 0.0110 0.2463 0.4295	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446 0.0138 0.2331 0.4064
10	TI TI TI TI TI	Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143 0.0526	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140 0.0486 0.7582 1.3220	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982 0.0440 0.7582 1.3220	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645 0.0386 0.6461 1.1265	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491 0.0380 0.6903 1.2037	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324 0.0213 0.5590 0.9748	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610 0.0265 0.4396 0.7665	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321 0.0173 0.3083 0.5375	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752 0.0110 0.2463 0.4295	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446 0.0138 0.2331 0.4064
10	TI TI TI TI TI	Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct TF Apr-Oct TF	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143 0.0526 0.8157 1.4223 0.0570	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140 0.0486 0.7582 1.3220 0.0529	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982 0.0440 0.7582 1.3220 0.0529	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645 0.0386 0.6461 1.1265 0.0451	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491 0.0380 0.6903 1.2037 0.0482	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324 0.0213 0.5590 0.9748 0.0390	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610 0.0265 0.4396 0.7665 0.0307	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321 0.0173 0.3083 0.5375 0.0215	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752 0.0110 0.2463 0.4295 0.0172	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446 0.0138 0.2331 0.4064 0.0163
10	TI TI TI TI TI TI TI TI	Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143 0.0526 0.8157 1.4223 0.0570	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140 0.0486 0.7582 1.3220 0.0529 0.7685	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982 0.0440 0.7582 1.3220 0.0529	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645 0.0386 0.6461 1.1265 0.0451	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491 0.0380 0.6903 1.2037 0.0482	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324 0.0213 0.5590 0.9748 0.0390	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610 0.0265 0.4396 0.7665 0.0307	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321 0.0173 0.3083 0.5375 0.0215	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752 0.0110 0.2463 0.4295 0.0172	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446 0.0138 0.2331 0.4064 0.0163 0.2434
11 12	TI TI TI TI TI TI TI TI	Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143 0.0526 0.8157 1.4223 0.0570 0.7700 1.3426	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140 0.0486 0.7582 1.3220 0.0529 0.7685 1.3400	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982 0.0440 0.7582 1.3220 0.0529 0.7788 1.3580	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645 0.0386 0.6461 1.1265 0.0451 0.6977 1.2166	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491 0.0380 0.6903 1.2037 0.0482 0.6992 1.2191	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324 0.0213 0.5590 0.9748 0.0390	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610 0.0265 0.4396 0.7665 0.0307 0.4720 0.8230	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321 0.0173 0.3083 0.5375 0.0215	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752 0.0110 0.2463 0.4295 0.0172 0.2596 0.4527	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446 0.0138 0.2331 0.4064 0.0163 0.2434 0.4244
11 12	TI TI TI TI TI TI TI TI	Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143 0.0526 0.8157 1.4223 0.0570 0.7700 1.3426	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140 0.0486 0.7582 1.3220 0.0529 0.7685 1.3400	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982 0.0440 0.7582 1.3220 0.0529 0.7788 1.3580	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645 0.0386 0.6461 1.1265 0.0451 0.6977 1.2166	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491 0.0380 0.6903 1.2037 0.0482 0.6992 1.2191	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324 0.0213 0.5590 0.9748 0.0390	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610 0.0265 0.4396 0.7665 0.0307 0.4720 0.8230	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321 0.0173 0.3083 0.5375 0.0215	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752 0.0110 0.2463 0.4295 0.0172 0.2596 0.4527	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446 0.0138 0.2331 0.4064 0.0163 0.2434 0.4244
11 12	TI	Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Apr-Oct Apr-Oct Apr-Oct Apr-Oct Apr-Oct Apr-Oct Apr-Oct	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143 0.0526 0.8157 1.4223 0.0570 0.7700 1.3426 0.0538	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140 0.0486 0.7582 1.3220 0.0529 0.7685 1.3400 0.0537 0.9853	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982 0.0440 0.7582 1.3220 0.0529 0.7788 1.3580 0.0544	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645 0.0386 0.6461 1.1265 0.0451 0.6977 1.2166 0.0487	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491 0.0380 0.6903 1.2037 0.0482 0.6992 1.2191 0.0488	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324 0.0213 0.5590 0.9748 0.0390 0.5871 1.0237 0.0410	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610 0.0265 0.4396 0.7665 0.0307 0.4720 0.8230 0.0330	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321 0.0173 0.3083 0.5375 0.0215 0.3407 0.5941 0.0238	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752 0.0110 0.2463 0.4295 0.0172 0.2596 0.4527 0.0181	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446 0.0138 0.2331 0.4064 0.0163 0.2434 0.4244 0.0170 0.4484
11 12	TI	Nov-Mar TF Apr-Oct TF	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143 0.0526 0.8157 1.4223 0.0570 0.7700 1.3426 0.0538	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140 0.0486 0.7582 1.3220 0.0529 0.7685 1.3400 0.0537 0.9853	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982 0.0440 0.7582 1.3220 0.0529 0.7788 1.3580 0.0544	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645 0.0386 0.6461 1.1265 0.0451 0.6977 1.2166 0.0487	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491 0.0380 0.6903 1.2037 0.0482 0.6992 1.2191 0.0488	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324 0.0213 0.5590 0.9748 0.0390 0.5871 1.0237 0.0410	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610 0.0265 0.4396 0.7665 0.0307 0.4720 0.8230 0.0330	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321 0.0173 0.3083 0.5375 0.0215 0.3407 0.5941 0.0238	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752 0.0110 0.2463 0.4295 0.0172 0.2596 0.4527 0.0181	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446 0.0138 0.2331 0.4064 0.0163 0.2434 0.4244 0.0170 0.4484
10 11 12 13	TI	Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Apr-Oct Apr-Oct Apr-Oct Apr-Oct Apr-Oct Apr-Oct Apr-Oct	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143 0.0526 0.8157 1.4223 0.0570 0.7700 1.3426 0.0538 0.9440 1.6461	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140 0.0486 0.7582 1.3220 0.0529 0.7685 1.3400 0.0537 0.9853 1.7181	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982 0.0440 0.7582 1.3220 0.0529 0.7788 1.3580 0.0544 0.9396 1.6384	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645 0.0386 0.6461 1.1265 0.0451 0.6977 1.2166 0.0487	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491 0.0380 0.6903 1.2037 0.0482 0.6992 1.2191 0.0488 0.7965 1.3889	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324 0.0213 0.5590 0.9748 0.0390 0.5871 1.0237 0.0410	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610 0.0265 0.4396 0.7665 0.0307 0.4720 0.8230 0.0330 0.6549 1.1420	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321 0.0173 0.3083 0.5375 0.0215 0.3407 0.5941 0.0238 0.5236 0.9131	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752 0.0110 0.2463 0.4295 0.0172 0.2596 0.4527 0.0181	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446 0.0138 0.2331 0.4064 0.0163 0.2434 0.0170 0.4484 0.7819
10 11 12 13	TI	Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143 0.0526 0.8157 1.4223 0.0570 0.7700 1.3426 0.0538 0.9440 1.6461 0.0659	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140 0.0486 0.7582 1.3220 0.0529 0.7685 1.3400 0.0537 0.9853 1.7181 0.0688	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982 0.0440 0.7582 1.3220 0.0529 0.7788 1.3580 0.0544 0.9396 1.6384 0.0656	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645 0.0386 0.6461 1.1265 0.0451 0.6977 1.2166 0.0487 0.8614 1.5020 0.0602	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491 0.0380 0.6903 1.2037 0.0482 0.6992 1.2191 0.0488 0.7965 1.3889 0.0556	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324 0.0213 0.5590 0.9748 0.0390 0.5871 1.0237 0.0410 0.7552 1.3169 0.0527	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610 0.0265 0.4396 0.7665 0.0307 0.4720 0.8230 0.0330 0.6549 1.1420 0.0457	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321 0.0173 0.3083 0.5375 0.0215 0.3407 0.5941 0.0238 0.5236 0.9131 0.0366	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752 0.0110 0.2463 0.4295 0.0172 0.2596 0.4527 0.0181 0.4573 0.7973 0.0319	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446 0.0138 0.2331 0.4064 0.0163 0.2434 0.4244 0.0170 0.4484 0.7819 0.0313
10 11 12 13	TI T	Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Apr-Oct Apr-Oct Apr-Oct Apr-Oct Apr-Oct Apr-Oct Apr-Oct	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143 0.0526 0.8157 1.4223 0.0570 0.7700 1.3426 0.0538 0.9440 1.6461 0.0659 1.2420	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140 0.0486 0.7582 1.3220 0.0529 0.7685 1.3400 0.0537 0.9853 1.7181 0.0688 1.1903	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982 0.0440 0.7582 1.3220 0.0529 0.7788 1.3580 0.0544 0.9396 1.6384 0.0656 1.1712	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645 0.0386 0.6461 1.1265 0.0451 0.6977 1.2166 0.0487 0.8614 1.5020 0.0602 1.0546	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491 0.0380 0.6903 1.2037 0.0482 0.6992 1.2191 0.0488 0.7965 1.3889 0.0556	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324 0.0213 0.5590 0.9748 0.0390 0.5871 1.0237 0.0410 0.7552 1.3169 0.0527 0.9956	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610 0.0265 0.4396 0.7665 0.0307 0.4720 0.8230 0.0330 0.6549 1.1420 0.0457 0.8835	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321 0.0173 0.3083 0.5375 0.0215 0.3407 0.5941 0.0238 0.5236 0.9131 0.0366 0.7523	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752 0.0110 0.2463 0.4295 0.0172 0.2596 0.4527 0.0181 0.4573 0.7973 0.0319 0.6741	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446 0.0138 0.2331 0.4064 0.0163 0.2434 0.4244 0.0170 0.4484 0.7819 0.0313 0.6608
10 11 12 13	TI T	Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143 0.0526 0.8157 1.4223 0.0570 0.7700 1.3426 0.0538 0.9440 1.6461 0.0659 1.2420 2.1656	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140 0.0486 0.7582 1.3220 0.0529 0.7685 1.3400 0.0537 0.9853 1.7181 0.0688 1.1903 2.0756	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982 0.0440 0.7582 1.3220 0.0529 0.7788 1.3580 0.0544 0.9396 1.6384 0.0656	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645 0.0386 0.6461 1.1265 0.0451 0.6977 1.2166 0.0487 0.8614 1.5020 0.0602 1.0546 1.8390	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491 0.0380 0.6903 1.2037 0.0482 0.6992 1.2191 0.0488 0.7965 1.3889 0.0556	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324 0.0213 0.5590 0.9748 0.0390 0.5871 1.0237 0.0410 0.7552 1.3169 0.0527	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610 0.0265 0.4396 0.7665 0.0307 0.4720 0.8230 0.0330 0.6549 1.1420 0.0457 0.8835 1.5406	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321 0.0173 0.3083 0.5375 0.0215 0.3407 0.5941 0.0238 0.9131 0.0366 0.7523 1.3117	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752 0.0110 0.2463 0.4295 0.0172 0.2596 0.4527 0.0181 0.4573 0.7973 0.0319 0.6741 1.1754	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446 0.0138 0.2331 0.4064 0.0163 0.2434 0.0170 0.4484 0.07819 0.0313 0.6608 1.1523
10 111 12 13 14	TI T	Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Apr-Oct Apr-Oct Apr-Oct Apr-Oct Apr-Oct Apr-Oct Apr-Oct	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143 0.0526 0.8157 1.4223 0.0570 0.7700 1.3426 0.0538 0.9440 1.6461 0.0659 1.2420 2.1656	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140 0.0486 0.7582 1.3220 0.0529 0.7685 1.3400 0.0537 0.9853 1.7181 0.0688 1.1903 2.0756	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982 0.0440 0.7582 1.3220 0.0529 0.7788 1.3580 0.0544 0.9396 1.6384 0.0656	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645 0.0386 0.6461 1.1265 0.0451 0.6977 1.2166 0.0487 0.8614 1.5020 0.0602 1.0546 1.8390	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491 0.0380 0.6903 1.2037 0.0482 0.6992 1.2191 0.0488 0.7965 1.3889 0.0556	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324 0.0213 0.5590 0.9748 0.0390 0.5871 1.0237 0.0410 0.7552 1.3169 0.0527 0.9956	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610 0.0265 0.4396 0.7665 0.0307 0.4720 0.8230 0.0330 0.6549 1.1420 0.0457 0.8835 1.5406	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321 0.0173 0.3083 0.5375 0.0215 0.3407 0.5941 0.0238 0.9131 0.0366 0.7523 1.3117	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752 0.0110 0.2463 0.4295 0.0172 0.2596 0.4527 0.0181 0.4573 0.7973 0.0319 0.6741 1.1754	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446 0.0138 0.2331 0.4064 0.0163 0.2434 0.0170 0.4484 0.07819 0.0313 0.6608 1.1523
10 111 12 13 14	TI T	Nov-Mar TF Apr-Oct Nov-Mar TF TF Apr-Oct Nov-Mar TF	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143 0.0526 0.8157 1.4223 0.0570 0.7700 1.3426 0.0538 0.9440 1.6461 0.0659 1.2420 2.1656 0.0867	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140 0.0486 0.7582 1.3220 0.0529 0.7685 1.3400 0.0537 0.9853 1.7181 0.0688 1.1903 2.0756 0.0831	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982 0.0440 0.7582 1.3220 0.0529 0.7788 1.3580 0.0544 0.9396 1.6384 0.0656 1.1712 2.0422 0.0818	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645 0.0386 0.6461 1.1265 0.0451 0.6977 1.2166 0.0487 0.8614 1.5020 0.0602 1.0546 1.8390 0.0736	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491 0.0380 0.6903 1.2037 0.0482 0.6992 1.2191 0.0488 0.7965 1.3889 0.0556 1.0266 1.7901 0.0717	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324 0.0213 0.5590 0.9748 0.0390 0.5871 1.0237 0.0410 0.7552 1.3169 0.0527 0.9956 1.7361 0.0695	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610 0.0265 0.4396 0.7665 0.0307 0.4720 0.8230 0.0330 0.6549 1.1420 0.0457 0.8835 1.5406 0.0617	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321 0.0173 0.3083 0.5375 0.0215 0.3407 0.5941 0.0238 0.5236 0.9131 0.0366 0.7523 1.3117	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752 0.0110 0.2463 0.4295 0.0172 0.2596 0.4527 0.0181 0.4573 0.7973 0.0319 0.6741 1.1754 0.0471	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446 0.0138 0.2331 0.4064 0.0163 0.2434 0.0170 0.4484 0.07819 0.0313 0.6608 1.1523 0.0461
10 11 12 13 14 15	TI T	Nov-Mar TF Apr-Oct Apr-Oct Nov-Mar TF Apr-Oct	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143 0.0526 0.8157 1.4223 0.0570 0.7700 1.3426 0.0538 0.9440 1.6461 0.0659 1.2420 2.1656 0.0867 1.0104	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140 0.0486 0.7582 1.3220 0.0529 0.7685 1.3400 0.0537 0.9853 1.7181 0.0688 1.1903 2.0756 0.0831 0.9455	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982 0.0440 0.7582 1.3220 0.0529 0.7788 1.3580 0.0544 0.9396 1.6384 0.0656 1.1712 2.0422 0.0818 0.9897	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645 0.0386 0.6461 1.1265 0.0451 0.6977 1.2166 0.0487 0.8614 1.5020 0.0602 1.0546 1.8390 0.0736 0.8186	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491 0.0380 0.6903 1.2037 0.0482 0.6992 1.2191 0.0488 0.7965 1.3889 0.0556 1.0266 1.7901 0.0717	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324 0.0213 0.5590 0.9748 0.0390 0.5871 1.0237 0.0410 0.7552 1.3169 0.0527 0.9956 1.7361 0.0695	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610 0.0265 0.4396 0.7665 0.0307 0.4720 0.8230 0.0330 0.6549 1.1420 0.0457 0.8835 1.5406 0.0617 0.6239	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321 0.0173 0.3083 0.5375 0.0215 0.3407 0.5941 0.0238 0.5236 0.9131 0.0366 0.7523 1.3117 0.0525	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752 0.0110 0.2463 0.4295 0.0172 0.2596 0.4527 0.0181 0.4573 0.7973 0.0319 0.6741 1.1754 0.0471 0.4307	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446 0.0138 0.2331 0.4064 0.0163 0.2434 0.0170 0.4484 0.0170 0.4484 0.7819 0.0313 0.6608 1.1523 0.0461 0.4219
10 11 12 13 14 15	TI T	Nov-Mar TF Apr-Oct Nov-Mar TF	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143 0.0526 0.8157 1.4223 0.0570 0.7700 1.3426 0.0538 0.9440 1.6461 0.0659 1.2420 2.1656 0.0867 1.0104 1.7618	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140 0.0486 0.7582 1.3220 0.0529 0.7685 1.3400 0.0537 0.9853 1.7181 0.0688 1.1903 2.0756 0.0831 0.9455 1.6487	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982 0.0440 0.7582 1.3220 0.0529 0.7788 1.3580 0.0544 0.9396 1.6384 0.0656 1.1712 2.0422 0.0818 0.9897 1.7258	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645 0.0386 0.6461 1.1265 0.0451 0.6977 1.2166 0.0487 0.8614 1.5020 0.0602 1.0546 1.8390 0.0736 0.8186 1.4275	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491 0.0380 0.6903 1.2037 0.0482 0.6992 1.2191 0.0488 0.7965 1.3889 0.0556 1.0266 1.7901 0.0717	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324 0.0213 0.5590 0.9748 0.0390 0.5871 1.0237 0.0410 0.7552 1.3169 0.0527 0.9956 1.7361 0.0695	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610 0.0265 0.4396 0.7665 0.0307 0.4720 0.8230 0.0330 0.6549 1.1420 0.0457 0.8835 1.5406 0.0617 0.6239 1.0880	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321 0.0173 0.3083 0.5375 0.0215 0.3407 0.5941 0.0238 0.5236 0.9131 0.0366 0.7523 1.3117 0.0525 0.4927 0.8590	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752 0.0110 0.2463 0.4295 0.0172 0.2596 0.4527 0.0181 0.4573 0.7973 0.0319 0.6741 1.1754 0.0471 0.4307 0.7510	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446 0.0138 0.2331 0.4064 0.0163 0.2434 0.0170 0.4484 0.0170 0.4484 0.7819 0.0313 0.6608 1.1523 0.0461 0.4219 0.7356
10 11 12 13 14 15	TI T	Nov-Mar TF Apr-Oct Apr-Oct Nov-Mar TF Apr-Oct	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143 0.0526 0.8157 1.4223 0.0570 0.7700 1.3426 0.0538 0.9440 1.6461 0.0659 1.2420 2.1656 0.0867 1.0104 1.7618	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140 0.0486 0.7582 1.3220 0.0529 0.7685 1.3400 0.0537 0.9853 1.7181 0.0688 1.1903 2.0756 0.0831 0.9455 1.6487	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982 0.0440 0.7582 1.3220 0.0529 0.7788 1.3580 0.0544 0.9396 1.6384 0.0656 1.1712 2.0422 0.0818 0.9897 1.7258	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645 0.0386 0.6461 1.1265 0.0451 0.6977 1.2166 0.0487 0.8614 1.5020 0.0602 1.0546 1.8390 0.0736 0.8186 1.4275	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491 0.0380 0.6903 1.2037 0.0482 0.6992 1.2191 0.0488 0.7965 1.3889 0.0556 1.0266 1.7901 0.0717	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324 0.0213 0.5590 0.9748 0.0390 0.5871 1.0237 0.0410 0.7552 1.3169 0.0527 0.9956 1.7361 0.0695	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610 0.0265 0.4396 0.7665 0.0307 0.4720 0.8230 0.0330 0.6549 1.1420 0.0457 0.8835 1.5406 0.0617 0.6239 1.0880	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321 0.0173 0.3083 0.5375 0.0215 0.3407 0.5941 0.0238 0.5236 0.9131 0.0366 0.7523 1.3117 0.0525 0.4927 0.8590	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752 0.0110 0.2463 0.4295 0.0172 0.2596 0.4527 0.0181 0.4573 0.7973 0.0319 0.6741 1.1754 0.0471 0.4307 0.7510	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446 0.0138 0.2331 0.4064 0.0163 0.2434 0.0170 0.4484 0.0170 0.4484 0.7819 0.0313 0.6608 1.1523 0.0461 0.4219 0.7356
10 11 12 13 14 15	TI T	Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143 0.0526 0.8157 1.4223 0.0570 0.7700 1.3426 0.0538 0.9440 1.6461 0.0659 1.2420 2.1656 0.0867 1.0104 1.7618 0.0706	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140 0.0486 0.7582 1.3220 0.0529 0.7685 1.3400 0.0537 0.9853 1.7181 0.0688 1.1903 2.0756 0.0831 0.9455 1.6487 0.0660	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982 0.0440 0.7582 1.3220 0.0529 0.7788 1.3580 0.0544 0.9396 1.6384 0.0656 1.1712 2.0422 0.0818 0.9897 1.7258 0.0691	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645 0.0386 0.6461 1.1265 0.0451 0.6977 1.2166 0.0487 0.8614 1.5020 0.0602 1.0546 1.8390 0.0736 0.8186 1.4275 0.0572	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491 0.0380 0.6903 1.2037 0.0482 0.6992 1.2191 0.0488 0.7965 1.3889 0.0556 1.0266 1.7901 0.0717 0.8821 1.5381 0.0616	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324 0.0213 0.5590 0.9748 0.0390 0.5871 1.0237 0.0410 0.7552 1.3169 0.0527 0.9956 1.7361 0.0695 0.6947 1.2114 0.0485	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610 0.0265 0.4396 0.7665 0.0307 0.4720 0.8230 0.0330 0.6549 1.1420 0.0457 0.8835 1.5406 0.0617 0.6239 1.0880 0.0436	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321 0.0173 0.3083 0.5375 0.0215 0.3407 0.5941 0.0238 0.5236 0.9131 0.0366 0.7523 1.3117 0.0525 0.4927 0.8590 0.0344	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752 0.0110 0.2463 0.4295 0.0172 0.2596 0.4527 0.0181 0.4573 0.7973 0.0319 0.6741 1.1754 0.0471 0.4307 0.7510 0.0301	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446 0.0138 0.2331 0.4064 0.0163 0.2434 0.0170 0.4484 0.7819 0.0313 0.6608 1.1523 0.0461 0.4219 0.7356 0.0295
10 111 12 13 14 15 16A	TI T	Nov-Mar TF Apr-Oct Nov-Mar TF	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143 0.0526 0.8157 1.4223 0.0570 0.7700 1.3426 0.0538 0.9440 1.6461 0.0659 1.2420 2.1656 0.0867 1.0104 1.7618 0.0706 1.1358	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140 0.0486 0.7582 1.3220 0.0529 0.7685 1.3400 0.0537 0.9853 1.7181 0.0688 1.1903 2.0756 0.0831 0.9455 1.6487 0.0660 1.0237	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982 0.0440 0.7582 1.3220 0.0529 0.7788 1.3580 0.0544 0.9396 1.6384 0.0656 1.1712 2.0422 0.0818 0.9897 1.7258 0.0691 1.0340	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645 0.0386 0.6461 1.1265 0.0451 0.6977 1.2166 0.0487 0.8614 1.5020 0.0602 1.0546 1.8390 0.0736 0.8186 1.4275 0.0572 1.0148	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491 0.0380 0.6903 1.2037 0.0482 0.6992 1.2191 0.0488 0.7965 1.3889 0.0556 1.0266 1.7901 0.0717 0.8821 1.5381 0.0616 0.9691	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324 0.0213 0.5590 0.9748 0.0390 0.5871 1.0237 0.0410 0.7552 1.3169 0.0527 0.9956 1.7361 0.0695 0.6947 1.2114 0.0485 0.9396	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610 0.0265 0.4396 0.7665 0.0307 0.4720 0.8230 0.0330 0.6549 1.1420 0.0457 0.8835 1.5406 0.0617 0.6239 1.0880 0.0436	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321 0.0173 0.3083 0.5375 0.0215 0.3407 0.5941 0.0238 0.5236 0.9131 0.0366 0.7523 1.3117 0.0525 0.4927 0.8590 0.0344 0.5517	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752 0.0110 0.2463 0.4295 0.0172 0.2596 0.4527 0.0181 0.4573 0.7973 0.0319 0.6741 1.1754 0.0471 0.4307 0.7510 0.0301 0.5472	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446 0.0138 0.2331 0.4064 0.0163 0.2434 0.4244 0.0170 0.4484 0.7819 0.0313 0.6608 1.1523 0.0461 0.4219 0.7356 0.0295
10 111 12 13 14 15 16A	TI T	Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF Apr-Oct Nov-Mar TF	2.9012 0.1162 0.7847 1.3683 0.0548 0.7537 1.3143 0.0526 0.8157 1.4223 0.0570 0.7700 1.3426 0.0538 0.9440 1.6461 0.0659 1.2420 2.1656 0.0867 1.0104 1.7618 0.0706 1.1358 1.9804	2.7983 0.1121 0.8113 1.4146 0.0567 0.6962 1.2140 0.0486 0.7582 1.3220 0.0529 0.7685 1.3400 0.0537 0.9853 1.7181 0.0688 1.1903 2.0756 0.0831 0.9455 1.6487 0.0660 1.0237 1.7850	2.4408 0.0977 0.7832 1.3657 0.0547 0.6298 1.0982 0.0440 0.7582 1.3220 0.0529 0.7788 1.3580 0.0544 0.9396 1.6384 0.0656 1.1712 2.0422 0.0818 0.9897 1.7258 0.0691 1.0340 1.8030	2.5334 0.1015 0.6785 1.1831 0.0474 0.5531 0.9645 0.0386 0.6461 1.1265 0.0451 0.6977 1.2166 0.0487 0.8614 1.5020 0.0602 1.0546 1.8390 0.0736 0.8186 1.4275 0.0572 1.0148 1.7695	2.4820 0.0994 0.5649 0.9851 0.0394 0.5443 0.9491 0.0380 0.6903 1.2037 0.0482 0.6992 1.2191 0.0488 0.7965 1.3889 0.0556 1.0266 1.7901 0.0717 0.8821 1.5381 0.0616 0.9691 1.6898	2.3842 0.0955 0.5738 1.0005 0.0401 0.3053 0.5324 0.0213 0.5590 0.9748 0.0390 0.5871 1.0237 0.0410 0.7552 1.3169 0.0527 0.9956 1.7361 0.0695 0.6947 1.2114 0.0485 0.9396	2.1888 0.0877 0.4307 0.7510 0.0301 0.3791 0.6610 0.0265 0.4396 0.7665 0.0307 0.4720 0.8230 0.0330 0.6549 1.1420 0.0457 0.8835 1.5406 0.0617 0.6239 1.0880 0.0436 0.6829 1.1908	1.9599 0.0785 0.2994 0.5221 0.0209 0.2478 0.4321 0.0173 0.3083 0.5375 0.0215 0.3407 0.5941 0.0238 0.5236 0.9131 0.0366 0.7523 1.3117 0.0525 0.4927 0.8590 0.0344 0.5517 0.9619	1.8776 0.0752 0.2817 0.4913 0.0197 0.1578 0.2752 0.0110 0.2463 0.4295 0.0172 0.2596 0.4527 0.0181 0.4573 0.7973 0.0319 0.6741 1.1754 0.0471 0.4307 0.7510 0.0301 0.5472 0.9542	1.8621 0.0746 0.2419 0.4218 0.0169 0.1977 0.3446 0.0138 0.2331 0.4064 0.0163 0.2434 0.0170 0.4484 0.0170 0.4484 0.7819 0.0313 0.6608 1.1523 0.0461 0.4219 0.7356 0.0295 0.5399 0.9414

Northern Natural Gas Company FERC Gas Tariff Sixth Revised Volume No. 1

Substitute Ninth Revised Sheet No. 59A Superseding Ninth Revised Sheet No. 59A

TI Apr-Oct 1.6638 1.6048 1.3998 1.4529 1.4234 1.3673 1.2552 1.1240 1.0768 1.0679

17 TI Nov-Mar 2.9012 2.7983 2.4408 2.5334 2.4820 2.3842 2.1888 1.9599 1.8776 1.8621

TF 0.1162 0.1121 0.0977 0.1015 0.0994 0.0955 0.0877 0.0785 0.0752 0.0746

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. "TF" is applicable to Rate Schedules TF and TFX.

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 https://www.ferc.gov and the Carlton surcharge, if applicable.

$\begin{array}{c} \text{MILEAGE INDICATOR DISTRICTS} & \text{(dollars per Dth)} \\ & \underline{\text{DELIVERY DISTRICT}} \end{array}$

RECE		п	10) 1:	1 1:	2 1	3 1	4 1	5 16A	16B	17
		Apr-Oct	0 0042	0 7201	0 0201	0 0000	1 0170	1 00/1	1 0110	1 1250	1 6001
		-									
+		Nov-Mar									
-		TF	0.0631	0.0510	0.05/3	0.0622	0.0/11	0.0757	0.0707	0.0793	0.1055
			0 7047	0 6400	0 7040	0 7077	0 0160	1 0000	0 0004	1 0007	1 5000
		Apr-Oct									
2		Nov-Mar									
-		TF	0.0548	0.0453	0.0506	0.0550	0.0640	0.0756	0.0643	0.0715	0.0977
		Apr-Oct									
3		Nov-Mar									
		TF	0.0565	0.0484	0.0536	0.0581	0.0693	0.0786	0.0589	0.0722	0.0984
		Apr-Oct									
4		Nov-Mar									
		TF	0.0491	0.0430	0.0482	0.0526	0.0621	0.0732	0.0606	0.0709	0.0971
	TI	Apr-Oct	0.7419	0.5767	0.6520	0.7154	0.7847	0.9883	0.8821	0.9691	1.5227
5	TI	Nov-Mar	1.2937	1.0057	1.1368	1.2474	1.3683	1.7232	1.5381	1.6898	3.1224
		TF	0.0518	0.0403	0.0455	0.0500	0.0548	0.0690	0.0616	0.0677	0.0939
	TI	Apr-Oct	0.6741	0.5207	0.5974	0.6608	0.7921	0.9765	0.7847	0.9396	1.4932
6	TI	Nov-Mar	1.1754	0.9079	1.0417	1.1523	1.3812	1.7027	1.3683	1.6384	3.0710
		TF	0.0471	0.0364	0.0417	0.0461	0.0553	0.0682	0.0548	0.0656	0.0918
	TI	Apr-Oct	0.4410	0.2832	0.3570	0.4219	0.5561	0.8599	0.5502	0.6829	1.2365
7	TI	Nov-Mar	0.7690	0.4938	0.6224	0.7356	0.9696	1.4995	0.9594	1.1908	2.6234
		TF	0.0308	0.0198	0.0249	0.0295	0.0388	0.0600	0.0384	0.0477	0.0739
	TI	Apr-Oct	0.4410	0.2832	0.3570	0.4219	0.5561	0.8599	0.5502	0.6829	1.2365
7B -	TI	Nov-Mar	0.7690	0.4938	0.6224	0.7356	0.9696	1.4995	0.9594	1.1908	2.6234
		TF	0.0308	0.0198	0.0249	0.0295	0.0388	0.0600	0.0384	0.0477	0.0739
-		Apr-Oct									
8		Nov-Mar									
		TF	0.0225	0.0134	0.0171	0.0216	0.0303	0.0457	0.0288	0.0382	0.0644
_		Apr-Oct									
9		Nov-Mar									
		TF									
_		Apr-Oct									
1	TI	Nov-Mar									
		TF	0.0631	0.0510	0.0573	0.0622	0.0711	0.0757	0.0707	0.0793	0.1055
			0 7047	0 6400	0 7040	0 7077	0 01 60	1 0000	0 0004	1 0000	1 5060
		Apr-Oct	0.7847								
2	TI	Nov-Mar							1.6049		
		TF	0.0548	0.0453	0.0506	0.0550	0.0640	0.0756	0.0643	0.0715	0.0977
								4 4054		4 0040	4 5466
			0.8098								
3	TI	Nov-Mar							1.4712		
		TF	0.0565	0.0484	0.0536	0.0581	0.0693	0.0786	0.0589	0.0722	0.0984
		Apr-Oct							0.8673		
4	TI	Nov-Mar							1.5123		
		TF	0.0491	0.0430	0.0482	0.0526	0.0621	0.0732	0.0606	0.0709	0.0971
		Apr-Oct							0.8821		
5	TI	Nov-Mar							1.5381		
		TF	0.0518	0.0403	0.0455	0.0500	0.0548	0.0690	0.0616	0.0677	0.0939
	TI	Apr-Oct	0.6741	0.5207	0.5974	0.6608	0.7921	0.9765	0.7847	0.9396	1.4222
6	ΤI	Nov-Mar	1.1754	0.9079	1.0417	1.1523	1.3812	1.7027	1.3683	1.6384	2.8815
		TF	0.0471	0.0364	0.0417	0.0461	0.0553	0.0682	0.0548	0.0656	0.0918
	TI	Apr-Oct	0.4410	0.2832	0.3570	0.4219	0.5561	0.8599	0.5502	0.6829	1.1655

7	TI Nov-Mar	0.7690	0.4938	0.6224	0.7356	0.9696	1.4995	0.9594	1.1908	2.4339
	TF	0.0308	0.0198	0.0249	0.0295	0.0388	0.0600	0.0384	0.0477	0.0739
	TI Apr-Oct	0.4410	0.2832	0.3570	0.4219	0.5561	0.8599	0.5502	0.6829	1.1655
7B	TI Nov-Mar	0.7690	0.4938	0.6224	0.7356	0.9696	1.4995	0.9594	1.1908	2.4339
	TF	0.0308	0.0198	0.0249	0.0295	0.0388	0.0600	0.0384	0.0477	0.0739
	TI Apr-Oct	0.3216	0.1918	0.2449	0.3098	0.4337	0.6549	0.4130	0.5472	1.0298
8	TI Nov-Mar	0.5607	0.3344	0.4270	0.5401	0.7562	1.1420	0.7202	0.9542	2.1973
	TF	0.0225	0.0134	0.0171	0.0216	0.0303	0.0457	0.0288	0.0382	0.0644
	TI Apr-Oct	0.2493	0.1121	0.2434	0.2478	0.3909	0.5989	0.4381	0.5399	1.0225
9	TI Nov-Mar	0.4347	0.1955	0.4244	0.4321	0.6816	1.0442	0.7639	0.9414	2.1845
	TF	0.0174	0.0078	0.0170	0.0173	0.0273	0.0418	0.0306	0.0377	0.0639

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.
"TF" is applicable to Rate Schedules TF and TFX.

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 https://www.ferc.gov and the Carlton surcharge, if applicable.

RECE	IPT		10	11	12	13	14	15	16A	16B	17
DIST	RIC	Γ									
		Apr-Oct									
10		Nov-Mar									
		TF	0.0012	0.0050	0.0151	0.0194	0.0286	0.0398	0.0236	0.0375	0.0637
	TI	Apr-Oct	0.1578	0.0354	0.0649	0.1814	0.3098	0.5030	0.2626	0.4027	0.9563
		Nov-Mar									
		TF									
			0.0460	0 1010	0 1475	0 0057	0 0700	0 5040	0 0504	0 5000	1 0566
		Apr-Oct Nov-Mar									
12		TF									
		I F	0.0172	0.0004	0.0103	0.0130	0.0201	0.0373	0.0230	0.0331	0.0013
	TI	Apr-Oct	0.3230	0.1254	0.1844	0.0826	0.1829	0.3938	0.1490	0.2906	0.8442
13	TI	Nov-Mar	0.5633	0.2186	0.3215	0.1440	0.3189	0.6867	0.2598	0.5067	1.9393
-		TF	0.0226	0.0088	0.0129	0.0058	0.0128	0.0275	0.0104	0.0203	0.0465
		Apr-Oct									
		Nov-Mar									
		TF	0.0199	0.0224	0.02/9	0.0088	0.0025	0.0352	0.0198	0.0302	0.0564
	TI	Apr-Oct	0.6446	0.5177	0.6018	0.3820	0.5236	0.0369	0.2522	0.3865	0.9401
		Nov-Mar									
		TF	0.0450	0.0362	0.0420	0.0267	0.0366	0.0026	0.0176	0.0270	0.0532
		Apr-Oct									
		Nov-Mar									
		TF	0.0341	0.0197	0.0253	0.0104	0.0202	0.0169	0.0018	0.0097	0.0359
	TI	Apr-Oct	0.5369	0.4027	0.5030	0.2906	0.4322	0.3865	0.1387	0.0000	0.5536
		Nov-Mar									
-		TF	0.0375	0.0281	0.0351	0.0203	0.0302	0.0270	0.0097	0.0000	0.0262
		Apr-Oct									
17		Nov-Mar									
		TF Oct									
10		Apr-Oct Nov-Mar									
		TF				0.0194					
			0.0012	0.0000	0.0101	0.0101	0.0200	0.0000	0.0200	0.0070	0.0007
	ΤI	Apr-Oct	0.1578	0.0354	0.0649	0.1814	0.3098	0.5030	0.2626	0.4027	0.8853
11	ΤI	Nov-Mar	0.2752	0.0617	0.1132	0.3164	0.5401	0.8771	0.4578	0.7022	1.9453
		TF	0.0110	0.0025	0.0045	0.0127	0.0216	0.0351	0.0183	0.0281	0.0543
	шт	7 Oct	0 2462	0 1010	0 1475	0 0057	0 2722	0 5240	0 2504	0 5020	0 0050
12		Apr-Oct Nov-Mar				0.2257					
12		TF				0.0158					
			0.0172	0.0001	0.0100	0.0130	0.0201	0.0373	0.0250	0.0001	0.0013
	ΤI	Apr-Oct	0.3230	0.1254	0.1844	0.0826	0.1829	0.3938	0.1490	0.2906	0.7732
13	ΤI	Nov-Mar	0.5633	0.2186	0.3215	0.1440	0.3189	0.6867	0.2598	0.5067	1.7498
		TF	0.0226	0.0088	0.0129	0.0058	0.0128	0.0275	0.0104	0.0203	0.0465
			0 0047	0 0001	0 0000	0 1054	0 0054	0 5045	0 0000	0 4000	0 0140
1 4		Apr-Oct				0.1254					
14	TI	Nov-Mar TF	0.4964			0.2186					
		1.0	0.0199	0.0224	0.0279	0.0000	0.0023	0.0332	0.0196	0.0302	0.0364
	TI	Apr-Oct	0.6446	0.5177	0.6018	0.3820	0.5236	0.0369	0.2522	0.3865	0.8691
15		Nov-Mar				0.6661					
		TF	0.0450	0.0362	0.0420	0.0267	0.0366	0.0026	0.0176	0.0270	0.0532
1.0-		Apr-Oct				0.1490					
16A		Nov-Mar TF				0.2598					
		1 L	0.0341	0.0197	0.0253	0.0104	0.0202	0.0109	0.0018	0.0097	0.0339
	ΤI	Apr-Oct	0.5369	0.4027	0.5030	0.2906	0.4322	0.3865	0.1387	0.0000	0.4826
16B		Nov-Mar				0.5067					
		TF	0.0375	0.0281	0.0351	0.0203	0.0302	0.0270	0.0097	0.0000	0.0262

Substitute Twentieth Revised Sheet No. 60A Superseding Twentieth Revised Sheet No. 60A

	TI Apr-Oct	1.0841	0.9263	1.0089	0.7655	0.5458	0.5620	0.4307	0.6195	0.4826
17	TI Nov-Mar	1.8904	1.6152	1.7592	1.3349	0.9516	0.9799	0.7510	1.0802	1.2431
	TF	0.0757	0.0647	0.0705	0.0535	0.0381	0.0392	0.0301	0.0433	0.0262

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.

"TF" is applicable to Rate Schedules TF and TFX.

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 https://www.ferc.gov and the Carlton surcharge, if applicable.