

**NORTHERN NATURAL GAS COMPANY
CARLTON RESOLUTION REIMBURSEMENT - JUNE 1, 2023**

Carlton Settlement Shipper	Appendix B					
	Allocated	Market Area	"Sourcer"	Small	Commodity	Total Amount
	Flow	Adjusted Peak	New Carlton	Customer	Surcharge	
	Obligation	Day	Resolution	Buyout	Allocation	Due Customer
	Dth 1/	Dth 2/	Dth 3/	\$ 4/	\$ 5/	\$ 6/
(a)	(b)	(c)	(d)	(e)	(f)	(g)
Archer Daniels Midland Company	550	7,000	552	62.71	7,647.22	7,709.93
Austin Utilities	950	12,100	954	108.38	13,208.84	13,317.22
Black Hills Service Company, LLC.	7/ 14,626	186,589	14,682	1,667.95	203,361.77	205,029.72
Black Hills Energy Services Company	12		12	1.36	166.22	167.58
Symmetry Energy Solutions, LLC. (MN)	2		2	0.23	27.70	27.93
Constellation Energy Generation, LLC	6		6	0.68	83.11	83.79
Vista Energy Marketing, LP	3		3	0.34	41.55	41.89
Cardinal FG Company	559	7,116	561	63.74	7,772.36	7,836.10
Cargill, Incorporated	972	12,375	975	110.77	13,514.73	13,625.50
Cascade Municipal Utilities	82	1,050	83	9.43	1,140.14	1,149.57
Cedar Falls Utilities	958	0	0	0.00	13,320.08	13,320.08
Centerpoint Energy Minnesota Gas	64,678	823,855	64,927	7,376.08	899,285.80	906,661.88
CF Industries Nitrogen, LLC	2,120	27,000	2,128	241.75	29,476.58	29,718.33
Circle Pines Utilities	210	2,675	211	23.97	2,919.85	2,943.82
City of Duluth, MN	2,506	31,925	2,515	285.71	34,843.54	35,129.25
City of Everly	20	250	20	2.27	278.08	280.35
City of Fairbank, IA	35	450	35	3.98	486.64	490.62
City of Fremont, NE	785	10,000	788	89.52	10,914.68	11,004.20
City of Gilmore, IA	22	275	22	2.50	305.89	308.39
City of Hartley, IA	82	1,050	83	9.43	1,140.13	1,149.56
City of Hawarden, IA	142	1,803	142	16.13	1,974.38	1,990.51
City of Ponca, NE	27	340	27	3.07	375.41	378.48
City of Remsen, IA	93	1,184	94	10.68	1,293.08	1,303.76
City of Rolfe, IA	35	450	36	4.09	486.64	490.73
City of Round Lake, MN	10	125	10	1.14	139.04	140.18
City of Sac City, IA	94	1,200	95	10.79	1,306.98	1,317.77
City of Sanborn, IA	75	956	75	8.52	1,042.80	1,051.32
City of Sioux Center	141	1,800	142	16.13	1,960.47	1,976.60
City of Tipton, IA	133	1,700	134	15.22	1,849.24	1,864.46
City of Two Harbors, MN	191	2,430	191	21.70	2,655.67	2,677.37
City of Virginia, MN	184	2,346	185	21.02	2,558.34	2,579.36
City of Waukee	55	700	55	6.25	764.72	770.97
City of West Bend, IA	71	900	72	8.18	987.19	995.37
City of Whittemore, IA	37	475	37	4.20	514.45	518.65
Community Utility Company	71	900	71	8.07	987.19	995.26
Coon Rapids Municipal Utilities	68	860	68	7.73	945.48	953.21
Emmetsburg Municipal Gas Works	198	2,516	198	22.49	2,753.00	2,775.49

**NORTHERN NATURAL GAS COMPANY
CARLTON RESOLUTION REIMBURSEMENT - JUNE 1, 2023**

Carlton Settlement Shipper	Appendix B					
	Allocated	Market Area	"Sourcer"	Small	Commodity	Total Amount
	Flow	Adjusted Peak	New Carlton	Customer	Surcharge	
	Obligation	Day	Resolution	Buyout	Allocation	Due Customer
	Dth 1/	Dth 2/	Dth 3/	\$ 4/	\$ 5/	\$ 6/
(a)	(b)	(c)	(d)	(e)	(f)	(g)
Flint Hills Resources, LP	2,748	35,000	2,758	313.32	38,208.32	38,521.64
Graettinger Municipal Gas	42	541	42	4.78	583.96	588.74
Great Plains Natural Gas Co.	1,709	21,764	1,717	195.05	23,762.02	23,957.07
Guthrie Center Municipal Utilities	110	1,400	110	12.50	1,529.44	1,541.94
Harlan Municipal Utilities	205	2,610	206	23.40	2,850.33	2,873.73
Hibbing Public Utilities Commission	241	3,068	242	27.49	3,350.87	3,378.36
Hutchinson Utility Commission	150	1,911	150	17.04	2,085.61	2,102.65
Interstate Power and Light Company	13,695	174,446	13,749	1,561.95	190,415.91	191,977.86
Jo-Carroll Energy, Inc. (NFP)	243	3,100	244	27.72	3,378.68	3,406.40
Lake Park Municipal Utilities	35	450	35	3.98	486.64	490.62
Madison Gas and Electric Company	4,413	56,219	4,429	503.16	61,358.55	61,861.71
Manilla Municipal Gas Dept	39	500	39	4.43	542.25	546.68
Manning Municipal Gas Dept	72	916	72	8.18	1,001.09	1,009.27
Metropolitan Utilities District	14,092	179,500	14,146	1,607.06	195,935.80	197,542.86
MidAmerican Energy Company	30,626	390,119	30,743	3,492.55	425,825.29	429,317.84
MidAmerican Energy Services, LLC	786	10,000	788	89.52	10,928.58	11,018.10
Midwest Natural Gas, Inc.	1,086	13,839	1,091	123.94	15,099.80	15,223.74
Minnesota Energy Resources Corporation	12,852	163,705	12,901	1,465.62	178,694.79	180,160.41
Minnesota Mining & Manufacturing Co	31	400	32	3.64	431.03	434.67
National Public Gas Agency	70	900	70	7.95	973.28	981.23
New Ulm Public Utilities Commission	50	637	50	5.68	695.20	700.88
Nicor Gas Company	14,607	186,058	14,664	1,665.90	203,096.40	204,762.30
Northern States Power Company - MN	28,398	361,740	28,506	3,238.42	394,847.08	398,085.50
Northern States Power Company - WI	4,944	62,970	4,963	563.82	68,741.61	69,305.43
Northwest Natural Gas LLC	210	2,675	211	23.97	2,919.85	2,943.82
Northwestern Corporation	3,869	49,283	3,884	441.24	53,794.75	54,235.99
Osage Municipal Utilities	118	1,500	118	13.41	1,640.68	1,654.09
Owatonna Public Utilities	785	10,001	788	89.52	10,914.68	11,004.20
Preston Municipal Natural Gas Department	45	570	45	5.11	625.68	630.79
Rock Energy Cooperative	195	2,480	195	22.15	2,711.29	2,733.44
Rock Rapids Municipal Utilities	71	900	71	8.06	987.19	995.25
Semco Energy, Inc d/b/a Semco Energy Gas	3,605	45,917	3,618	411.02	50,124.08	50,535.10
Sheehan's Gas Company	124	1,584	125	14.20	1,724.10	1,738.30
St Croix Valley Natural Gas	537	6,839	539	61.23	7,466.47	7,527.70
Superior Water Light & Power	1,006	12,813	1,010	114.74	13,987.47	14,102.21
Town of Brooklyn	39	500	39	4.43	542.26	546.69
Town of Sabula	29	368	29	3.29	403.22	406.51

**NORTHERN NATURAL GAS COMPANY
CARLTON RESOLUTION REIMBURSEMENT - JUNE 1, 2023**

Carlton Settlement Shipper	Appendix B					
	Allocated Flow	Market Area Adjusted Peak Day	"Sourcer" New Carlton Resolution	Small Customer Buyout	Commodity Surcharge	Total Amount
	Obligation	Entitlement	Obligation	Allocation	Allocation	Due Customer
	Dth 1/	Dth 2/	Dth 3/	\$ 4/	\$ 5/	\$ 6/
(a)	(b)	(c)	(d)	(e)	(f)	(g)
Viroqua Gas Company a division of Madison Gas and Electric Company	188	2,389	188	21.36	2,613.96	2,635.32
Westbrook Light & Power	28	351	28	3.18	389.31	392.49
Wisconsin Gas LLC	8,561	109,050	8,594	976.32	119,032.53	120,008.85
Wisconsin Power and Light Company	5,305	67,576	5,327	605.18	73,760.96	74,366.14
Woodbine Municipal Natural Gas Systems	65	823	65	7.39	903.77	911.16
World Fuel Services, Inc.	208	2,650	209	23.74	2,892.04	2,915.78
TOTALS	247,035	3,134,457	247,021	28,062.85	3,434,785.81	3,462,848.66

Adjustments for entitlement reduced below original obligation:

Armour Swift-Eckrich, Inc.	15
Watertown Municipal Utilities	471
Heartland Corn Products	20
Hutchinson Utility Commission	1,204
New Ulm Public Utilities Commission	382
Wisconsin Electric Power Company	873
Total reductions	<u>2,965</u>
Total Flow Obligation	250,000

Footnotes:

- 1/ Flow Obligation as shown on Sixth Revised Volume No. 1 Tariff Sheet Nos. 263F and 263G. Used to allocate Commodity \$ in column (f). Any shipper whose current MDQ is lower than its obligation received a share of Commodity dollars based on its MDQ.
- 2/ Entitlement subject to Flow Obligation after Small Customer Buyout.
- 3/ Flow Obligation after Small Customer Buyout. Tariff Sheet Nos. 263H and 263H.01. Used to allocate Appendix B dollars in column (e).
- 4/ Appendix B Customers (Tariff Sheet No. 263 I) Buyout (0 Dth x \$0.19 x 151 days) plus carrying charges through June 1.
Schedule No. 2 Amount * (d) / Total (d).
- 5/ Carlton Commodity Surcharge plus carrying charges through June 1. Schedule No. 3 Amount * (b) / Total (b).
- 6/ Total may not sum exactly due to rounding.
- 7/ Black Hills Service Company, LLC released some capacity with its 2022/2023 Carlton Obligation.
The acquiring shippers receive a share of the Black Hills Service Company, LLC allocation based on their posted obligations.

**NORTHERN NATURAL GAS COMPANY
CARLTON RESOLUTION REIMBURSEMENT - JUNE 1, 2023
APPENDIX B (SMALL CUSTOMER) BUYOUT WITH INTEREST CALCULATION
2022/2023 HEATING SEASON**

Billing Month	Small Customer Buyout MDQ in Dth	Buyout Amount Billed	FERC Interest Rate	Days for first invoice month	Days - full month	Partial Month Interest Rate	Full Month Interest Rate	Interest for first month billed	Interest on full month	Total Interest	End of Month Cumulative Balance	
(a)	(b)	1/ (c)	(d)	2/ (e)	(f)	3/ (g)	4/ (h)	5/ (i)	6/ (j)	7/ (k)	8/ (l)	
November 2022	958	\$5,460.60	4.91%									
December 2022	958	\$5,642.62	4.91%	20	31	0.00269041	0.00417014	\$14.69	\$0.00	\$14.69	\$5,475.29	9/
January 2023	958	\$5,642.62	6.31%	19	31	0.00328466	0.00535918	\$18.53	\$29.34	\$47.88	\$11,117.91	
February 2023	958	\$5,096.56	6.31%	16	28	0.00276603	0.00484055	\$15.61	\$53.82	\$69.42	\$16,760.53	
March 2023	958	\$5,642.62	6.31%	19	31	0.00328466	0.00535918	\$16.74	\$89.82	\$106.56	\$22,080.96	9/
April 2023			7.50%	18	30	0.00369863	0.00616438	\$20.87	\$136.12	\$156.99	\$27,723.58	
May 2023			7.50%		31	0.00000000	0.00636986	\$0.00	\$176.60	\$176.60	\$27,723.58	
June 2023			7.50%		1	0.00000000	0.00020548	\$0.00	\$5.70	\$5.70	\$28,062.85	9/10/
Totals		\$27,485.02								\$577.83	\$28,062.85	

1/ Per the Tariff, Small Customers electing the buyout option pay \$0.19 times flow obligation volume times 151 days.

2/ Interest for the first month in which principal was invoiced is calculated from invoice due date through the end of the month.

3/ Partial Month Interest is the FERC Interest Rate divided by 365 days times the number of days in column (e).

4/ Full Month Interest is the FERC Interest Rate divided by 365 days times the number of days in the month as shown in column (f).

5/ Interest for first month (i) is buyout amount billed in column (c) from previous month times Partial Month Interest (g).

6/ Interest on full month (j) is the Cumulative Balance from previous month (l) times Full Month Interest (h).

7/ Total interest in column (k) is the sum of columns (i) and (j).

8/ Cumulative Balance in column (l) shows the principal amount on which a full month's worth of interest will be calculated in the next month.

Column (l) is the Buyout Amount (c) plus the Cumulative Balance (l) from the previous month plus all interest (k) from previous quarters.

9/ Add interest for the quarter to principal for future interest calculations.

10/ Interest for June is calculated through the date invoices with the credits are posted.

**NORTHERN NATURAL GAS COMPANY
CARLTON RESOLUTION REIMBURSEMENT - JUNE 1, 2023
COMMODITY CHARGE WITH INTEREST CALCULATION
2022/2023 HEATING SEASON**

Billing Month	Commodity Surcharge Amount	FERC Interest Rate	Days for first invoice month	Days - full month	Partial Month Interest Rate	Full Month Interest Rate	Interest for first month billed	Interest on full month	Total interest	End of Month Cumulative Balance
(a)	1/ (b)	(c)	2/ (d)	(e)	3/ (f)	4/ (g)	5/ (h)	6/ (i)	7/ (j)	8/ (k)
November 2022	\$590,401.40	4.91%								
December 2022	\$731,582.53	4.91%	9	31	0.00121068	0.00417014	\$714.79	\$0.00	\$714.79	\$591,116.19 9/
January 2023	\$747,662.11	6.31%	8	31	0.00138301	0.00535918	\$1,011.79	\$3,167.90	\$4,179.69	\$1,322,698.72
February 2023	\$581,832.11	6.31%	7	28	0.00121014	0.00484055	\$904.77	\$6,402.59	\$7,307.36	\$2,070,360.83
March 2023	\$718,250.56	6.31%	11	31	0.00190164	0.00535918	\$1,106.44	\$11,095.43	\$12,201.87	\$2,675,881.86 9/
April 2023	\$953.14	7.50%	6	30	0.00123288	0.00616438	\$885.51	\$16,495.16	\$17,380.68	\$3,394,132.42
May 2023		7.50%	9	31	0.00184932	0.00636986	\$1.76	\$21,620.17	\$21,621.93	\$3,395,085.56
June 2023		7.50%		1		0.00020548	\$0.00	\$697.65	\$697.65	\$3,434,785.81 9/10/
Totals	\$3,370,681.85							\$64,103.96		\$3,434,785.81

1/ Surcharge before discounting. It is based on the volume from Schedule 4, column (c), Line 4 times \$0.0175 per Dth.

Difference is due to rounding on individual invoices.

2/ Interest for the first month in which principal was invoiced is calculated from invoice due date through the end of the month.

3/ Partial Month Interest is the FERC Interest Rate divided by 365 days times the number of days in column (d).

4/ Full Month Interest is the FERC Interest Rate divided by 365 days times the number of days in the month as shown in column (e).

5/ Interest for first month (h) is the amount billed in column (b) from previous month times Partial Month Interest (f).

6/ Interest on full month (i) is the Cumulative Balance from previous month (k) times Full Month Interest (g).

7/ Total interest in column (j) is the sum of columns (h) and (i).

8/ Cumulative Balance in column (k) shows the principal amount on which a full month's worth of interest will be calculated in the next month.

Column (k) is the commodity surcharge amount (b) plus the Cumulative Balance (k) from the previous month plus all interest (j) from previous quarters.

9/ Add interest for the quarter to principal for future interest calculations.

10/ Interest for June is calculated through the date invoices with the credits are posted.

NORTHERN NATURAL GAS COMPANY
CARLTON RESOLUTION REIMBURSEMENT - JUNE 1, 2023
CARLTON VOLUMES SUBJECT TO COMMODITY SURCHARGE BY TYPE OF SERVICE
2022/2023 HEATING SEASON

TYPE OF SERVICE	COMMODITY VOLUMES	COMMODITY OVERRUN VOLUMES	TOTAL
	Dth (a)	Dth (b)	Dth (c)
TF	24,692,369	1,890,804	26,583,173
TFX	161,667,523	3,633,553	165,301,076
TI	633,007		633,007
GS-T	0	0	0
TOTAL	<u>186,992,899</u>	<u>5,524,357</u>	<u>192,517,256</u>

**NORTHERN NATURAL GAS COMPANY
CARLTON RESOLUTION REIMBURSEMENT - JUNE 1, 2023
CARLTON NON-PERFORMANCE PENALTY CREDIT
2022/2023 HEATING SEASON**

Carlton Settlement Shipper	Allocated	Percent of	Allocation	Carlton Penalty
	Flow Obligation	Obligation	Factor adjusted for penalty paid	
(a)	Dth 1/ (b)	(c) = (b)/Sum(b)	2/ (d)	(e) = dollars * d/Sum(d)
Archer Daniels Midland Company	550	0.002226	0.002226	\$ 7.27
Austin Utilities	950	0.003846	0.003846	\$ 12.56
Black Hills Service Company, LLC.	14,626	0.059206	0.059206	\$ 193.38
Black Hills Energy Services Company	12	0.000049	0.000048	\$ 0.16
Symmetry Energy Solutions, LLC. (MN)	2	0.000008	0.000008	\$ 0.03
Constellation Energy Generation, LLC	6	0.000024	0.000024	\$ 0.08
Vista Energy Marketing, LP	3	0.000012	0.000007	\$ 0.02
Cardinal FG Company	559	0.002263	0.002263	\$ 7.39
Cargill, Incorporated	972	0.003935	0.003935	\$ 12.85
Cascade Municipal Utilities	82	0.000332	0.000332	\$ 1.08
Cedar Falls Utilities	958	0.003878	0.003878	\$ 12.67
Centerpoint Energy Minnesota Gas	64,678	0.261817	0.261817	\$ 855.18
CF Industries Nitrogen, LLC	2,120	0.008582	0.008582	\$ 28.03
Circle Pines Utilities	210	0.000850	0.000850	\$ 2.78
City of Duluth, MN	2,506	0.010144	0.010144	\$ 33.13
City of Everly	20	0.000081	0.000081	\$ 0.26
City of Fairbank, IA	35	0.000142	0.000142	\$ 0.46
City of Fremont, NE	785	0.003178	0.003178	\$ 10.38
City of Gilmore, IA	22	0.000089	0.000089	\$ 0.29
City of Hartley, IA	82	0.000332	0.000332	\$ 1.08
City of Hawarden, IA	142	0.000575	0.000575	\$ 1.88
City of Ponca, NE	27	0.000109	0.000109	\$ 0.36
City of Remsen, IA	93	0.000376	0.000376	\$ 1.23
City of Rolfe, IA	35	0.000142	0.000142	\$ 0.46
City of Round Lake, MN	10	0.000040	0.000040	\$ 0.13
City of Sac City, IA	94	0.000381	0.000381	\$ 1.24
City of Sanborn, IA	75	0.000304	0.000304	\$ 0.99
City of Sioux Center	141	0.000571	0.000571	\$ 1.87
City of Tipton, IA	133	0.000538	0.000538	\$ 1.76
City of Two Harbors, MN	191	0.000773	0.000773	\$ 2.52
City of Virginia, MN	184	0.000745	0.000745	\$ 2.43
City of Waukeg	55	0.000223	0.000223	\$ 0.73
City of West Bend, IA	71	0.000287	0.000287	\$ 0.94
City of Whittemore, IA	37	0.000150	0.000150	\$ 0.49
Community Utility Company	71	0.000287	0.000287	\$ 0.94
Coon Rapids Municipal Utilities	68	0.000275	0.000275	\$ 0.90
Emmetsburg Municipal Gas Works	198	0.000802	0.000802	\$ 2.62
Flint Hills Resources, LP	2,748	0.011124	0.011124	\$ 36.33
Graettinger Municipal Gas	42	0.000170	0.000170	\$ 0.56
Great Plains Natural Gas Co.	1,709	0.006918	0.006918	\$ 22.60
Guthrie Center Municipal Utilities	110	0.000445	0.000445	\$ 1.45
Harlan Municipal Utilities	205	0.000830	0.000830	\$ 2.71
Hibbing Public Utilities Commission	241	0.000976	0.000976	\$ 3.19
Hutchinson Utility Commission	150	0.000607	0.000375	\$ 1.22
Interstate Power and Light Company	13,695	0.055437	0.055437	\$ 181.07
Jo-Carroll Energy, Inc. (NFP)	243	0.000984	0.000984	\$ 3.21
Lake Park Municipal Utilities	35	0.000142	0.000142	\$ 0.46
Madison Gas and Electric Company	4,413	0.017864	0.017864	\$ 58.35
Manilla Municipal Gas Dept	39	0.000158	0.000158	\$ 0.52
Manning Municipal Gas Dept	72	0.000291	0.000291	\$ 0.95
Metropolitan Utilities District	14,092	0.057045	0.057045	\$ 186.32
MidAmerican Energy Company	30,626	0.123974	0.123974	\$ 404.94
MidAmerican Energy Services, LLC	786	0.003182	0.003182	\$ 10.39
Midwest Natural Gas, Inc.	1086	0.004396	0.004396	\$ 14.36
Minnesota Energy Resources Corporation	12,852	0.052025	0.052025	\$ 169.93

**NORTHERN NATURAL GAS COMPANY
CARLTON RESOLUTION REIMBURSEMENT - JUNE 1, 2023
CARLTON NON-PERFORMANCE PENALTY CREDIT
2022/2023 HEATING SEASON**

Carlton Settlement Shipper	Allocated Flow Obligation	Percent of Obligation	Allocation Factor adjusted for penalty paid	Carlton Penalty Credit ("CRP")
(a)	Dth 1/ (b)	(c) = (b)/Sum(b)	2/ (d)	(e) = dollars * d/Sum(d)
Minnesota Mining & Manufacturing Co	31	0.000125	0.000125	\$ 0.41
National Public Gas Agency	70	0.000283	0.000283	\$ 0.92
New Ulm Public Utilities Commission	50	0.000202	0.000202	\$ 0.66
Nicor Gas Company	14,607	0.059129	0.059129	\$ 193.13
Northern States Power Company - MN	28,398	0.114955	0.114955	\$ 375.48
Northern States Power Company - WI	4,944	0.020013	0.020013	\$ 65.37
Northwest Natural Gas LLC	210	0.000850	0.000850	\$ 2.78
Northwestern Corporation	3,869	0.015662	0.015662	\$ 51.16
Osage Municipal Utilities	118	0.000478	0.000478	\$ 1.56
Owatonna Public Utilities	785	0.003178	0.003178	\$ 10.38
Preston Municipal Natural Gas Department	45	0.000182	0.000182	\$ 0.59
Rock Energy Cooperative	195	0.000789	0.000789	\$ 2.58
Rock Rapids Municipal Utilities	71	0.000287	0.000287	\$ 0.94
Semco Energy, Inc d/b/a Semco Energy Gas	3,605	0.014593	0.014593	\$ 47.66
Sheehan's Gas Company	124	0.000502	0.000502	\$ 1.64
St Croix Valley Natural Gas	537	0.002174	0.002174	\$ 7.10
Superior Water Light & Power	1,006	0.004072	0.004072	\$ 13.30
Town of Brooklyn	39	0.000158	0.000158	\$ 0.52
Town of Sabula	29	0.000117	0.000117	\$ 0.38
Viroqua Gas Company a division of Madison Gas and Electric Company	188	0.000761	0.000761	\$ 2.49
Westbrook Light & Power	28	0.000113	0.000113	\$ 0.37
Wisconsin Gas LLC	8,561	0.034655	0.034655	\$ 113.19
Wisconsin Power and Light Company	5,305	0.021475	0.021475	\$ 70.14
Woodbine Municipal Natural Gas Systems	65	0.000263	0.000263	\$ 0.86
World Fuel Services, Inc.	208	0.000842	0.000842	\$ 2.75
TOTALS	247,035	1.00000000	0.999760	\$ 3,265.49

1/ Flow Obligation as shown on Sixth Revised Volume No. 1 Tariff Sheet Nos. 263F and 263G.

2/ Final allocation factor (d) is each shipper's Flow Obligation (b) as percent of Total (247,035Dth), multiplied by a factor equal to 1 minus the percent of the total Carlton penalty paid by the shipper.

3/ Shipper(s) incurring penalty	Penalties	% of penalty	(d) = (100% - % penalty)
Vista Energy Marketing, LP	\$ 1,950.00	0.609375	0.390625
Symmetry - AMA for Hutchinson	\$ 1,225.00	0.382813	0.617188
Black Hills Energy Services Company	\$ 25.00	0.007813	0.992188
Total Carlton Non-Performance Penalties	\$ 3,200.00	100%	

**NORTHERN NATURAL GAS COMPANY
CARLTON RESOLUTION REIMBURSEMENT - JUNE 1, 2023
NON-PERFORMANCE PENALTY CREDIT WITH INTEREST CALCULATION
2022/2023 HEATING SEASON**

Billing Month	Penalty Amount	FERC Interest rate	Days for first invoice month	Days - full month	Partial month interest	Full month interest	Interest for first month billed	Interest on full month	Total interest	End of Month Cumulative Balance
(a)	(b)	(c)	1/ (d)	(e)	2/ (f)	3/ (g)	4/ (h)	5/ (i)	6/ (j)	7/ (k)
November 2022	\$300	4.91%								
December 2022	\$1,400	4.91%	9	31	0.00121068	0.00417014	\$0.36	\$0.00	\$0.36	\$300.36 8/
January 2023	\$500	6.31%	8	31	0.00138301	0.00535918	\$1.94	\$1.61	\$3.55	\$1,700.36
February 2023	\$700	6.31%	7	28	0.00121014	0.00484055	\$0.61	\$8.23	\$8.84	\$2,200.36
March 2023	\$300	6.31%	11	31	0.00190164	0.00535918	\$1.33	\$11.79	\$13.12	\$2,925.87 8/
April 2023		7.50%	6	30	0.00123288	0.00616438	\$0.37	\$18.04	\$18.41	\$3,225.87
May 2023		7.50%	9	31	0.00184932	0.00636986	\$0.00	\$20.55	\$20.55	\$3,225.87
June 2023		7.50%		1		0.00020548	\$0.00	\$0.66	\$0.66	\$3,265.49 8/9/
Totals	\$3,200.00								\$65.49	\$3,265.49

1/ Interest for the first month in which principal was invoiced is calculated from invoice due date through the end of the month.

2/ Partial Month Interest is the FERC Interest divided by 365 days times the number of days in column (d).

3/ Full Month Interest is the FERC Interest divided by 365 days times the number of days in the month as shown in column (e).

4/ Interest for first month (h) is the buyout amount billed in column (b) from previous month times Partial Month Interest (f).

5/ Interest on full month (i) is the Cumulative Balance from previous month (k) times Full Month Interest (g).

6/ Total interest in column (j) is the sum of columns (h) and (i).

7/ Cumulative Balance in column (k) shows the principal amount on which a full month's worth of interest will be calculated in the next month.

Column (k) is the commodity surcharge amount (b) plus the Cumulative Balance (k) from the previous month plus all interest (j) from previous quarters.

8/ Add interest for the quarter to principal for future interest calculations.

9/ Interest for June is calculated through the date invoices with the credits are posted.