



**MICHAEL J. AHERN**  
 Partner  
 (612) 340-2881  
 FAX (612) 340-2643  
 ahern.michael@dorsey.com

August 1, 2014

Burl W. Haar  
 Executive Secretary  
 Minnesota Public Utilities Commission  
 Metro Square – Suite 350  
 212 7th Place East  
 St. Paul, MN 55101-2147

**Re: In the Matter of the Petition of Minnesota Energy Resources Corporation for Approval of a Tariff Revision and a New Area Surcharge for the Ely Lake Project**

**Docket No. G-011/M-14-524**

Dear Dr. Haar:

Enclosed for filing, please find a revised calculation of Minnesota Energy Resources Corporation’s (MERC) proposed New Area Surcharge (NAS) for the Ely Lake Project in Revised Exhibit C and updated Exhibits A (clean and redline tariffs) and D (proposed customer notice) reflecting the revised proposed New Area Surcharge for the Ely Lake Project.

MERC is submitting a revised NAS model to reflect interim distribution and customer charges and incorporate discussions with Commission staff regarding the independence of the NAS model from MERC’s general extension Contribution in Aid of Construction (CIAC) model. As a result of these changes, the CIAC is now \$702,850 and the NAS is \$33.50 for all rate classes. Although no customers are expected to take interruptible or transport service, a surcharge is proposed for these classes to comply with the Commission’s requirements and to prevent a duplicate filing in the event customers request these services in the future.

<b>Ely Lake Project</b>	
Residential	\$33.50
Small Commercial	\$33.50
Large Commercial	\$33.50
Small Volume Interruptible	\$33.50
Large Volume Interruptible	\$33.50
Small Volume Joint	\$33.50
Large Volume Joint	\$33.50
Small Volume Transport	\$33.50
Large Volume Transport	\$33.50

August 1, 2014  
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Please contact me at 612-340-2881 if you have any questions regarding this matter.

Sincerely yours,

/s/ Michael J. Ahern

Michael J. Ahern

Enclosures

cc: Service List

**Revised Exhibit A**

Clean and Redline Proposed Tariff Sheet Nos. 9.14-9.17

## Clean Tariff Sheets

## EXTENSION OF NATURAL GAS SERVICE

3. NEW AREA SURCHARGE RIDERAvailability:

Service under this rate schedule is available only to geographical areas that have not previously been served by the Company. This rate schedule will enable natural gas service to be extended to areas where the cost would otherwise have been prohibitive under the Company's present rate and service extension policy. Nothing in this rate schedule shall obligate the Company to extend natural gas service to any area. Rather, the New Area Surcharge will be used and implemented at the Company's discretion.

Applicability and Character of Service:

All customers on this rate shall receive service according to the terms and conditions of one of the Company's gas tariff services.

Rate:

As authorized by the MPUC, the total billing rate for any customer class will be the approved rate for that customer class plus a fixed monthly new area surcharge. All customers in the same rate class will be billed the same surcharge. The net present value of the new area surcharge will be treated as a Contribution-in-Aid-of-Construction for accounting and ratemaking purposes. The new area surcharge calculation includes the full life of plant additions.

Method:

A standard model will be used that is designated to calculate the total revenue requirement for each year of the average service life of the plant installed. The model will compare the total revenue requirements for each year with the retail revenues generated from customers served (actual and/or expected) by the project to determine if a revenue deficiency or revenue excess exists.

The Net Present Value (NPV) of the yearly revenue deficiencies or excesses will be calculated using a discount rate equal to the overall rate of return authorized in the most recent general rate proceeding. Projected customer CIAC surcharge revenues are then introduced into the model and the resultant NPV calculation is made to decide if the project is self supporting. A total NPV of approximately zero (\$0) will show a project is self supporting.

The model will be run each year after the initial construction phase of a project wherein actual amounts for certain variables will be substituted for projected values to track recovery of expansion costs and the potential to end the customer surcharge before the full term. The variables, which will be updated in the model, each year will be:

1. The actual capital costs and projected remaining capital costs for the project,
2. Number of customers used to calculate the surcharge revenue and the retail margin revenue, and
3. The actual surcharge and retail revenue received to date and the projected surcharge and retail revenue for the remaining term of the surcharge.

## EXTENSION OF NATURAL GAS SERVICE

3. NEW AREA SURCHARGE RIDER (Continued)Term:

The term of service under this rate schedule shall vary from area to area depending on the service extension project. However, under no circumstances shall the surcharge applicable to any project remain in effect for a term to exceed thirty (30) years. The Company assumes the risk for under recovery of expansion costs, if any, which may remain at the end of the maximum surcharge term.

Expiration:

The surcharge for all customers in an area subject to the New Area Surcharge Rider shall end on the date specified for the project tariff, on the date the approved revenue deficiency is retired, or at the end of thirty (30) years, whichever occurs first.

Revenue Requirements ModelDefinitions:

All terms describe contents and general operation of the Revenue Requirements Model used to determine a New Area Surcharge Rider for a project.

**Column/Description**

- 1) Time Period: Twelve (12) month calendar interval, which is one year of the project life. The year in which the project is constructed is designated as year 0.
- 2) Year.
- 3) Gross Plant Investment: Cumulative plant in service at the end of the year reduced by the net present value of surcharge revenues in year 0. The discount rate used for this present value calculation is the cost of long-term debt from the Company's most recent rate case. Plant in service shall be all capitalized costs incurred to provide or capable of providing utility service to the consuming public. Capitalized costs will include items such as pipeline interconnects, pressure regulating facilities, measurement and instrumentation, lateral delivery lines, distribution mains, mapping, customer service lines, meters and regulators.
- 4) Accumulated Depreciation Reserve: Book depreciation for the current year plus all previous years.
- 5) Net Plant In Service: The difference between Gross Plant Investment (Column 3) and Accumulated Depreciation Reserve (Column 4).
- 6) Average Net Plant: Average of Column 5.
- 7) Average Accumulated Deferred Income Taxes: The average of the beginning and the end of the year accumulated deferred income tax. Accumulated deferred income tax (ADIT) consists of two components: accumulated deferred income taxes on depreciation and accumulated deferred income taxes on contribution in aid of construction. At the end of the service life of the plant installed the balance of ADIT will be zero.

EXTENSION OF NATURAL GAS SERVICE

3. NEW AREA SURCHARGE RIDER (Continued)

- 8) Average Rate Base: Total of Average Net Plant (Column 6) plus Average Accumulated Deferred Income Taxes (Column 7).
- 9) Allowed Return: Derived from the Company's most recent general rate proceeding:

Equity Ratio	X	Return on Equity	X	(1+Tax Rate)	=	Weighted Cost
Long Term Debt Ratio	X	Debt Cost	X		=	Weighted Cost
Short Term Debt Ratio	X	Debt Cost	X		=	Weighted Cost
						Allowed Rate of Return

The Allowed Rate of Return multiplied by the Average Rate Base (Column 8) equals the Allowed Return.

- 10) Book Depreciation: The straight line cost recovery of the life of the assets for Gross Plant Investment defined in Column (3). The depreciation factor used is based on a weighted average of depreciation rates used in Company's most recent general rate proceeding.
- 11) O & M Expense: In any year shall be based on average incremental cost per customer. The cost per customer will include provisions for incremental distribution and customer accounting expenses. The calculation is average customers multiplied by incremental cost per customer.
- 12) Property Tax: In any year shall be a factor of the gross plant investment (after contribution-in-aid-of construction). The factor is based on historical experiences of actual taxes paid as a percentage of gross plant.
- 13) Total Revenue Requirement: Total of Allowed Return (Column 9), Book Depreciation (Column 10), O & M Expenses (Column 11), and Property Tax (Column 12).
- 14) Retail Revenue: This amount represents the retail revenue generated by multiplying the various retail billing rates (basic charge and delivery charge) approved in the Company's most recent general rate case proceeding by the expected average annual number of customers connected to the project each year.

EXTENSION OF NATURAL GAS SERVICE

3. NEW AREA SURCHARGE RIDER (Continued)

15) Revenue Excess or (Deficiency): Revenue excess or deficiency is the difference between the Total Revenue Requirement (Column 13) and the amount of Retail Revenue (Column 14). Excess occurs when the Total Revenue Requirement in a given year is less than the total Retail Revenue generated. Deficiency occurs when the Total Revenue Requirement in a given year is more than the total Retail Revenue generated.

16) Present Value of Cash Flows: The cash flows that produce either revenue excesses or deficiencies (Column 15) are discounted to a present value using a discount rate equal to the overall rate of return established in the most recent general rate proceeding.

If the sum of the present value calculations over the life of the project is zero, or as close to zero as possible, the model demonstrates that the project is “self supporting”. That is, the customer CIAC surcharge is the proper amount of customer contributed capital necessary to support the project at the projected (or actual) level of retail revenues.

Surcharge Rider Rates:

A surcharge as designated will be included in the monthly bills of the following Minnesota geographical areas:

<b>Ely Lake Project</b>	
Residential	\$33.50
Small Commercial	\$33.50
Large Commercial	\$33.50
Small Volume Interruptible	\$33.50
Large Volume Interruptible	\$33.50
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Large Volume Joint	\$33.50
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Large Volume Transport	\$33.50



## Redline Tariff Sheets

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Issued By: Jim Schott

\*Effective Date: Upon Commission Approval ~~December 1, 2012~~

Vice President, Regulatory Services Proposed Effective Date: Upon Commission Approval ~~December 1, 2012~~

Submittal Date: July 31, 2014

\*Effective with bills issued on and after this date.

## EXTENSION OF NATURAL GAS SERVICE

3. NEW AREA SURCHARGE RIDER (Continued)Term:

The term of service under this rate schedule shall vary from area to area depending on the service extension project. However, under no circumstances shall the surcharge applicable to any project remain in effect for a term to exceed ~~thirtyfiveen~~ (30+5) years. The Company assumes the risk for under recovery of expansion costs, if any, which may remain at the end of the maximum surcharge term.

Expiration:

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Submittal Date: July 31, 2014

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## **Revised Exhibit C**

### Proposed Surcharge Workpapers and Assumptions

**Minnesota Energy Resources New Area Surcharge Analysis  
ELY LAKE EXPANSION**

Time Period (1)	Year (2)	Net Plant				ADIT		Traditional Revenue Requirements					Retail Revenue (14)	Revenue Excess (Deficy.) (15)	PV of Cash Flows (16)
		Gross Plant Investment (3)	Accumulated Depreciation Reserve (4)	Net Plant In Service (5)	Average Net Plant (6)	Average ADIT (7)	Average Rate Base (8)	Allowed Return (9)	Book Deprec. (10)	O&M Expense (11)	Property Tax (12)	Total Rev. Requir. (13)			
0		87,049	1,845	85,204	42,602	139,866	182,468	17,986	1,845	4,500	3,047	27,378	15,450	(11,928)	(11,928)
1		132,149	4,647	127,502	106,353	268,144	374,497	36,914	2,802	9,000	4,625	53,341	30,900	(22,440)	(20,811)
2		168,229	8,213	160,016	143,759	245,410	389,168	38,360	3,566	12,600	5,888	60,415	43,260	(17,154)	(14,754)
3		177,249	11,971	165,278	162,647	223,696	386,342	38,082	3,758	13,500	6,204	61,543	46,350	(15,192)	(12,118)
4		181,759	15,824	165,935	165,606	203,328	368,934	36,366	3,853	13,950	6,362	60,530	47,895	(12,635)	(9,347)
5	195,289	19,965	175,324	170,630	184,440	355,069	34,999	4,140	15,300	6,835	61,274	52,531	(8,744)	(5,999)	
6	195,289	24,105	171,184	173,254	166,907	340,162	33,530	4,140	15,300	6,835	59,805	52,531	(7,274)	(4,628)	
7	195,289	28,245	167,044	169,114	150,713	319,827	31,525	4,140	15,300	6,835	57,800	52,531	(5,270)	(3,110)	
8	195,289	32,385	162,904	164,974	135,404	300,379	29,608	4,140	15,300	6,835	55,883	52,531	(3,353)	(1,835)	
9	195,289	36,525	158,764	160,834	120,343	281,177	27,715	4,140	15,300	6,835	53,991	52,531	(1,460)	(741)	
10	195,289	40,665	154,624	156,694	105,367	262,060	25,831	4,140	15,300	6,835	52,106	52,531	424	200	
11	195,289	44,805	150,484	152,554	90,433	242,986	23,951	4,140	15,300	6,835	50,226	52,531	2,304	1,006	
12	195,289	48,945	146,344	148,414	75,525	223,939	22,074	4,140	15,300	6,835	48,349	52,531	4,182	1,693	
13	195,289	53,086	142,203	144,274	60,630	204,904	20,197	4,140	15,300	6,835	46,472	52,531	6,058	2,274	
14	195,289	57,226	138,063	140,133	45,737	185,871	18,321	4,140	15,300	6,835	44,596	52,531	7,934	2,762	
15	195,289	61,366	133,923	135,993	30,844	166,837	16,445	4,140	15,300	6,835	42,720	52,531	9,810	3,168	
16	195,289	65,506	129,783	131,853	15,951	147,804	14,569	4,140	15,300	6,835	40,844	52,531	11,686	3,499	
17	195,289	69,646	125,643	127,713	1,058	128,771	12,693	4,140	15,300	6,835	38,968	52,531	13,562	3,766	
18	195,289	73,786	121,503	123,573	(13,835)	109,738	10,817	4,140	15,300	6,835	37,092	52,531	15,438	3,976	
19	195,289	77,926	117,363	119,433	(28,728)	90,704	8,941	4,140	15,300	6,835	35,216	52,531	17,315	4,136	
20	195,289	82,066	113,223	115,293	(39,969)	75,324	7,425	4,140	15,300	6,835	33,700	52,531	18,831	4,171	
21	195,289	86,207	109,082	111,152	(43,698)	67,454	6,649	4,140	15,300	6,835	32,924	52,531	19,606	4,028	
22	195,289	90,347	104,942	107,012	(43,192)	63,821	6,291	4,140	15,300	6,835	32,566	52,531	19,965	3,804	
23	195,289	94,487	100,802	102,872	(42,101)	60,771	5,990	4,140	15,300	6,835	32,265	52,531	20,265	3,581	
24	195,289	98,627	96,662	98,732	(40,740)	57,993	5,716	4,140	15,300	6,835	31,992	52,531	20,539	3,366	
25	195,289	102,767	92,522	94,592	(39,232)	55,360	5,457	4,140	15,300	6,835	31,732	52,531	20,798	3,161	
26	195,289	106,907	88,382	90,452	(37,578)	52,873	5,212	4,140	15,300	6,835	31,487	52,531	21,044	2,966	
27	195,289	111,047	84,242	86,312	(35,862)	50,449	4,973	4,140	15,300	6,835	31,248	52,531	21,283	2,782	
28	195,289	115,187	80,102	82,172	(34,146)	48,025	4,734	4,140	15,300	6,835	31,009	52,531	21,521	2,609	
29	195,289	119,328	75,961	78,031	(32,430)	45,601	4,495	4,140	15,300	6,835	30,770	52,531	21,760	2,446	
30	195,289	123,468	71,821	73,891	(30,714)	43,177	4,256	4,140	15,300	6,835	30,531	52,531	21,999	2,294	
31	195,289	127,608	67,681	69,751	(28,998)	40,753	4,017	4,140	15,300	6,835	30,292	52,531	22,238	2,150	
32	195,289	131,748	63,541	65,611	(27,282)	38,329	3,778	4,140	15,300	6,835	30,053	52,531	22,477	2,016	
33	195,289	135,888	59,401	61,471	(25,566)	35,905	3,539	4,140	15,300	6,835	29,814	52,531	22,716	1,889	
34	195,289	140,028	55,261	57,331	(23,850)	33,481	3,300	4,140	15,300	6,835	29,575	52,531	22,955	1,770	
35	195,289	144,168	51,121	53,191	(22,134)	31,057	3,061	4,140	15,300	6,835	29,337	52,531	23,194	1,659	
36	195,289	148,308	46,981	49,051	(20,418)	28,633	2,822	4,140	15,300	6,835	29,098	52,531	23,433	1,554	
37	195,289	152,449	42,840	44,910	(18,702)	26,209	2,583	4,140	15,300	6,835	28,859	52,531	23,672	1,456	
38	195,289	156,589	38,700	40,770	(16,985)	23,785	2,344	4,140	15,300	6,835	28,620	52,531	23,911	1,364	
39	195,289	160,729	34,560	36,630	(15,269)	21,361	2,106	4,140	15,300	6,835	28,381	52,531	24,150	1,278	
40	195,289	164,869	30,420	32,490	(13,553)	18,937	1,867	4,140	15,300	6,835	28,142	52,531	24,389	1,197	
41	195,289	169,009	26,280	28,350	(11,837)	16,513	1,628	4,140	15,300	6,835	27,903	52,531	24,628	1,121	
42	195,289	173,149	22,140	24,210	(10,121)	14,089	1,389	4,140	15,300	6,835	27,664	52,531	24,867	1,049	
43	195,289	177,289	18,000	20,070	(8,405)	11,665	1,150	4,140	15,300	6,835	27,425	52,531	25,105	983	
44	195,289	181,429	13,860	15,930	(6,689)	9,241	911	4,140	15,300	6,835	27,186	52,531	25,344	920	
45	195,289	185,570	9,719	11,789	(4,973)	6,817	672	4,140	15,300	6,835	26,947	52,531	25,583	861	
46	195,289	189,710	5,579	7,649	(3,257)	4,393	433	4,140	15,300	6,835	26,708	52,531	25,822	806	
47	195,289	193,850	1,439	3,509	(1,541)	1,968	194	4,140	15,300	6,835	26,469	52,531	26,061	755	
48	195,289	195,497	(208)	616	(341)	274	27	1,647	15,300	6,835	23,809	52,531	28,721	771	
								595,940	195,497	726,750	326,870	1,845,057	2,495,199	650,142	17





MERC New Area Surcharge Analysis  
 ELY LAKE EXPANSION  
 Page E-3

Yr. 1 Gross Plant Investment 789,899  
 CIAC (702,850)  
 Depreciable Book Basis 87,049

Book Depreciation Rate 2.1200%

Depreciable Tax Basis 789,899

Tax Rate 41.45%

Property Tax Rate 3.50% / Gross Plant

First Year of Analysis 2014

Year	Net Plant				ADIT - Property			
	Gross Plant	Depreciation	Acum. Res.	Net Plant	Avg Net Plant	Tax Rates	Tax Deprec.	Cum. Tax Deprec.
0	2014	87,049				3.750%	29,621	29,621
1	2015	87,049				7.219%	57,023	86,644
2	2016	87,049				6.677%	52,742	139,386
3	2017	87,049				6.177%	48,792	188,178
4	2018	87,049				5.713%	45,127	233,305
5	2019	87,049				5.285%	41,746	275,051
6	2020	87,049				4.888%	38,610	313,661
7	2021	87,049				4.522%	35,719	349,380
8	2022	87,049				4.462%	35,245	384,626
9	2023	87,049				4.461%	35,237	419,863
10	2024	87,049				4.462%	35,245	455,108
11	2025	87,049				4.461%	35,237	490,346
12	2026	87,049				4.462%	35,245	525,591
13	2027	87,049				4.461%	35,237	560,828
14	2028	87,049				4.462%	35,245	596,074
15	2029	87,049				4.461%	35,237	631,311
16	2030	87,049				4.462%	35,245	666,556
17	2031	87,049				4.461%	35,237	701,794
18	2032	87,049				4.462%	35,245	737,039
19	2033	87,049				4.461%	35,237	772,276
20	2034	87,049				2.231%	17,623	789,899
21	2035	87,049					-	789,899
22	2036	87,049					-	789,899
23	2037	87,049					-	789,899
24	2038	87,049					-	789,899
25	2039	87,049					-	789,899
26	2040	87,049					-	789,899
27	2041	87,049					-	789,899
28	2042	87,049					-	789,899
29	2043	87,049					-	789,899
30	2044	87,049					-	789,899
31	2045	87,049					-	789,899
32	2046	87,049					-	789,899
33	2047	87,049					-	789,899
34	2048	87,049					-	789,899
35	2049	87,049					-	789,899
36	2050	87,049					-	789,899
37	2051	87,049					-	789,899
38	2052	87,049					-	789,899
39	2053	87,049					-	789,899
40	2054	87,049					-	789,899
41	2055	87,049					-	789,899
42	2056	87,049					-	789,899
43	2057	87,049					-	789,899
44	2058	87,049					-	789,899
45	2059	87,049					-	789,899
46	2060	87,049					-	789,899
47	2061	87,049					-	789,899
48	2062	87,049					-	789,899
						100.000%	789,899	

MERC New Area Surcharge Analysis  
 ELY LAKE EXPANSION  
 Page E-4

Yr 2 Gross Plant Investment	45,100	Deprec Tax
Yr 2 Surcharge	-	
Yr 2 Net Investment	45,100	Deprec. Book
Book Depreciation Rate	2.120%	
Tax Rate	41.45%	

Year	Net Plant				Tax Rates	Tax Deprec.	ADIT - Prop
	Gross Plant	Depreciation	Accum. Res.	Net Plant			Cum Tax Deprec.
0	2014						
1	2015	45,100			3.750%	1,691	1,691
2	2016	45,100			7.219%	3,256	4,947
3	2017	45,100			6.677%	3,011	7,958
4	2018	45,100			6.177%	2,786	10,744
5	2019	45,100			5.713%	2,577	13,321
6	2020	45,100			5.285%	2,384	15,704
7	2021	45,100			4.888%	2,204	17,909
8	2022	45,100			4.522%	2,039	19,948
9	2023	45,100			4.462%	2,012	21,961
10	2024	45,100			4.461%	2,012	23,972
11	2025	45,100			4.462%	2,012	25,985
12	2026	45,100			4.461%	2,012	27,997
13	2027	45,100			4.462%	2,012	30,009
14	2028	45,100			4.461%	2,012	32,021
15	2029	45,100			4.462%	2,012	34,033
16	2030	45,100			4.461%	2,012	36,045
17	2031	45,100			4.462%	2,012	38,058
18	2032	45,100			4.461%	2,012	40,070
19	2033	45,100			4.462%	2,012	42,082
20	2034	45,100			4.461%	2,012	44,094
21	2035	45,100			2.231%	1,006	45,100
22	2036	45,100				-	45,100
23	2037	45,100				-	45,100
24	2038	45,100				-	45,100
25	2039	45,100				-	45,100
26	2040	45,100				-	45,100
27	2041	45,100				-	45,100
28	2042	45,100				-	45,100
29	2043	45,100				-	45,100
30	2044	45,100				-	45,100
31	2045	45,100				-	45,100
32	2046	45,100				-	45,100
33	2047	45,100				-	45,100
34	2048	45,100				-	45,100
35	2049	45,100				-	45,100
36	2050	45,100				-	45,100
37	2051	45,100				-	45,100
38	2052	45,100				-	45,100
39	2053	45,100				-	45,100
40	2054	45,100				-	45,100
41	2055	45,100				-	45,100
42	2056	45,100				-	45,100
43	2057	45,100				-	45,100
44	2058	45,100				-	45,100
45	2059	45,100				-	45,100
46	2060	45,100				-	45,100
47	2061	45,100				-	45,100
48	2062	45,100				-	45,100
					100.000%	45,100	

MERC New Area Surcharge Analysis  
 ELY LAKE EXPANSION  
 Page E-5

Yr. 3 Gross Plant Investment	36,080	Deprec Tax
Yr 3 Surcharge	-	
Yr 3 Net Investment	36,080	Deprec. Book
Book Depreciation Rate	2.120%	
Tax Rate	41.45%	

Year	Net Plant				ADIT - Prop			
	Gross Plant	Depreciation	Accum. Res.	Net Plant	Avg Net Plant	Tax Rates	Tax Deprec.	Cum Tax Deprec.
0	2014							
1	2015							
2	2016	36,080				3.750%	1,353	1,353
3	2017	36,080				7.219%	2,605	3,958
4	2018	36,080				6.677%	2,409	6,367
5	2019	36,080				6.177%	2,229	8,595
6	2020	36,080				5.713%	2,061	10,657
7	2021	36,080				5.285%	1,907	12,563
8	2022	36,080				4.888%	1,764	14,327
9	2023	36,080				4.522%	1,632	15,959
10	2024	36,080				4.462%	1,610	17,568
11	2025	36,080				4.461%	1,610	19,178
12	2026	36,080				4.462%	1,610	20,788
13	2027	36,080				4.461%	1,610	22,397
14	2028	36,080				4.462%	1,610	24,007
15	2029	36,080				4.461%	1,610	25,617
16	2030	36,080				4.462%	1,610	27,227
17	2031	36,080				4.461%	1,610	28,836
18	2032	36,080				4.462%	1,610	30,446
19	2033	36,080				4.461%	1,610	32,056
20	2034	36,080				4.462%	1,610	33,666
21	2035	36,080				4.461%	1,610	35,275
22	2036	36,080				2.231%	805	36,080
23	2037	36,080					-	36,080
24	2038	36,080					-	36,080
25	2039	36,080					-	36,080
26	2040	36,080					-	36,080
27	2041	36,080					-	36,080
28	2042	36,080					-	36,080
29	2043	36,080					-	36,080
30	2044	36,080					-	36,080
31	2045	36,080					-	36,080
32	2046	36,080					-	36,080
33	2047	36,080					-	36,080
34	2048	36,080					-	36,080
35	2049	36,080					-	36,080
36	2050	36,080					-	36,080
37	2051	36,080					-	36,080
38	2052	36,080					-	36,080
39	2053	36,080					-	36,080
40	2054	36,080					-	36,080
41	2055	36,080					-	36,080
42	2056	36,080					-	36,080
43	2057	36,080					-	36,080
44	2058	36,080					-	36,080
45	2059	36,080					-	36,080
46	2060	36,080					-	36,080
47	2061	36,080					-	36,080
48	2062	36,080					-	36,080
						100.000%	36,080	

MERC New Area Surcharge Analysis  
 ELY LAKE EXPANSION  
 Page E-6

Yr. 4 Gross Plant Investment	9,020	Deprec. Tax
Yr 4 Surcharge	-	
Yr 4 Net Investment	9,020	Deprec. Book
Book Depreciation Rate	2.120%	
Tax Rate	41.45%	

Year	Net Plant				ADIT - Prop			
	Gross Plant	Depreciation	Accum. Res.	Net Plant	Avg Net Plant	Tax Rates	Tax Deprec.	Cum Tax Deprec.
0	2014							
1	2015							
2	2016							
3	2017	9,020				3.750%	338	338
4	2018	9,020				7.219%	651	989
5	2019	9,020				6.677%	602	1,592
6	2020	9,020				6.177%	557	2,149
7	2021	9,020				5.713%	515	2,664
8	2022	9,020				5.285%	477	3,141
9	2023	9,020				4.888%	441	3,582
10	2024	9,020				4.522%	408	3,990
11	2025	9,020				4.462%	402	4,392
12	2026	9,020				4.461%	402	4,794
13	2027	9,020				4.462%	402	5,197
14	2028	9,020				4.461%	402	5,599
15	2029	9,020				4.462%	402	6,002
16	2030	9,020				4.461%	402	6,404
17	2031	9,020				4.462%	402	6,807
18	2032	9,020				4.461%	402	7,209
19	2033	9,020				4.462%	402	7,612
20	2034	9,020				4.461%	402	8,014
21	2035	9,020				4.462%	402	8,416
22	2036	9,020				4.461%	402	8,819
23	2037	9,020				2.231%	201	9,020
24	2038	9,020					-	9,020
25	2039	9,020					-	9,020
26	2040	9,020					-	9,020
27	2041	9,020					-	9,020
28	2042	9,020					-	9,020
29	2043	9,020					-	9,020
30	2044	9,020					-	9,020
31	2045	9,020					-	9,020
32	2046	9,020					-	9,020
33	2047	9,020					-	9,020
34	2048	9,020					-	9,020
35	2049	9,020					-	9,020
36	2050	9,020					-	9,020
37	2051	9,020					-	9,020
38	2052	9,020					-	9,020
39	2053	9,020					-	9,020
40	2054	9,020					-	9,020
41	2055	9,020					-	9,020
42	2056	9,020					-	9,020
43	2057	9,020					-	9,020
44	2058	9,020					-	9,020
45	2059	9,020					-	9,020
46	2060	9,020					-	9,020
47	2061	9,020					-	9,020
48	2062	9,020					-	9,020
						100.000%	9,020	

MERC New Area Surcharge Analysis  
 ELY LAKE EXPANSION  
 Page E-7

Yr. 5 Gross Plant Investment 4,510  
 Yr 5 Surcharge -  
 Yr 5 Net Investment 4,510 Deprec. Book

Book Depreciation Rate 2.1200%

Tax Rate 41.45%

Year	Net Plant			Avg Net Plant	Tax Rates	Tax Deprec.	ADIT - Prop
	Gross Plant	Depreciation	Accum. Res.				Cum Tax Deprec.
0	2014						
1	2015						
2	2016						
3	2017						
4	2018	4,510			3.750%	169	169
5	2019	4,510			7.219%	326	495
6	2020	4,510			6.677%	301	796
7	2021	4,510			6.177%	279	1,074
8	2022	4,510			5.713%	258	1,332
9	2023	4,510			5.285%	238	1,570
10	2024	4,510			4.888%	220	1,791
11	2025	4,510			4.522%	204	1,995
12	2026	4,510			4.462%	201	2,196
13	2027	4,510			4.461%	201	2,397
14	2028	4,510			4.462%	201	2,598
15	2029	4,510			4.461%	201	2,800
16	2030	4,510			4.462%	201	3,001
17	2031	4,510			4.461%	201	3,202
18	2032	4,510			4.462%	201	3,403
19	2033	4,510			4.461%	201	3,605
20	2034	4,510			4.462%	201	3,806
21	2035	4,510			4.461%	201	4,007
22	2036	4,510			4.462%	201	4,208
23	2037	4,510			4.461%	201	4,409
24	2038	4,510			2.231%	101	4,510
25	2039	4,510				-	4,510
26	2040	4,510				-	4,510
27	2041	4,510				-	4,510
28	2042	4,510				-	4,510
29	2043	4,510				-	4,510
30	2044	4,510				-	4,510
31	2045	4,510				-	4,510
32	2046	4,510				-	4,510
33	2047	4,510				-	4,510
34	2048	4,510				-	4,510
35	2049	4,510				-	4,510
36	2050	4,510				-	4,510
37	2051	4,510				-	4,510
38	2052	4,510				-	4,510
39	2053	4,510				-	4,510
40	2054	4,510				-	4,510
41	2055	4,510				-	4,510
42	2056	4,510				-	4,510
43	2057	4,510				-	4,510
44	2058	4,510				-	4,510
45	2059	4,510				-	4,510
46	2060	4,510				-	4,510
47	2061	4,510				-	4,510
48	2062	4,510				-	4,510
					100.000%	4,510	

MERC New Area Surcharge Analysis  
 ELY LAKE EXPANSION  
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Yr. 6-15 Gross Plant Investment	13,530	Deprec. Tax
Yr 6-15 Surcharge	-	
Yr 6-15 Net Investment	13,530	Deprec. Book
Book Depreciation Rate	2.1200%	
Tax Rate	41.45%	

Year	Net Plant				Tax Rates	Tax Deprec.	ADIT - Prop Cum Tax Deprec.
	Gross Plant	Depreciation	Accum. Res.	Net Plant			
0	2014						
1	2015						
2	2016						
3	2017						
4	2018						
5	2019	13,530			3.750%	507	507
6	2020	13,530			7.219%	977	1,484
7	2021	13,530			6.677%	903	2,388
8	2022	13,530			6.177%	836	3,223
9	2023	13,530			5.713%	773	3,996
10	2024	13,530			5.285%	715	4,711
11	2025	13,530			4.888%	661	5,373
12	2026	13,530			4.522%	612	5,984
13	2027	13,530			4.462%	604	6,588
14	2028	13,530			4.461%	604	7,192
15	2029	13,530			4.462%	604	7,795
16	2030	13,530			4.461%	604	8,399
17	2031	13,530			4.462%	604	9,003
18	2032	13,530			4.461%	604	9,606
19	2033	13,530			4.462%	604	10,210
20	2034	13,530			4.461%	604	10,814
21	2035	13,530			4.462%	604	11,417
22	2036	13,530			4.461%	604	12,021
23	2037	13,530			4.462%	604	12,625
24	2038	13,530			4.461%	604	13,228
25	2039	13,530			2.231%	302	13,530
26	2040	13,530				-	13,530
27	2041	13,530				-	13,530
28	2042	13,530				-	13,530
29	2043	13,530				-	13,530
30	2044	13,530				-	13,530
31	2045	13,530				-	13,530
32	2046	13,530				-	13,530
33	2047	13,530				-	13,530
34	2048	13,530				-	13,530
35	2049	13,530				-	13,530
36	2050	13,530				-	13,530
37	2051	13,530				-	13,530
38	2052	13,530				-	13,530
39	2053	13,530				-	13,530
40	2054	13,530				-	13,530
41	2055	13,530				-	13,530
42	2056	13,530				-	13,530
43	2057	13,530				-	13,530
44	2058	13,530				-	13,530
45	2059	13,530				-	13,530
46	2060	13,530				-	13,530
47	2061	13,530				-	13,530
48	2062	13,530				-	13,530
					100.000%	13,530	



MERC New Area Surcharge Analysis  
 ELY LAKE EXPANSION  
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Income Tax Rate 41.45%  
 MPUC Factor 1.414500

Capital Structure:

	Ratios	Cost	Weighted Cost	Tax Factor	Overall Factor
Long Term Debt	44.60%	6.5526%	2.9223%		2.92%
STD	4.93%	0.1833%	0.0090%		0.01%
Common Equity	50.48%	9.7000%	4.8961%	1.4145	6.93%
Total	100.00%		7.8275%		9.86%

Income Tax Rate 41.45%

ROR 9.86%

Actual Disct Rate 7.83%

Disc Rate per MPUC 6.55%



MERC New Area Surcharge Analysis  
ELY LAKE EXPANSION

Discount Rate                    6.55%

	Surcharge	PV	Interest
1	20,100	20,100	-
2	40,200	37,729	2,471
3	56,280	49,571	6,709
4	60,300	49,845	10,455
5	62,310	48,339	13,971
6	68,340	49,757	18,583
7	68,340	46,697	21,643
8	68,340	43,825	24,515
9	68,340	41,130	27,210
10	68,340	38,601	29,739
11	68,340	36,227	32,113
12	68,340	33,999	34,341
13	68,340	31,908	36,432
14	68,340	29,946	38,394
15	68,340	28,105	40,235
16	68,340	26,376	41,964
17	68,340	24,754	43,586
18	68,340	23,232	45,108
19	68,340	21,803	46,537
20	68,340	20,462	47,878
	1,264,290	702,410	561,880

Assumptions

Construction Costs	\$744,799		
CIAC	\$ 702,850		
Costs for Service Line	\$ 902		
Customer's Sign-Up	259 (total possible)		
Year 1 - 2014	50	\$	45,100
Year 2 - 2015	50	\$	45,100
Year 3 - 2016	40	\$	36,080
Year 4 - 2017	10	\$	9,020
Year 5 - 2019	5	\$	4,510
Year 6 - 15 - 2020 through 2029	15	\$	13,530
Total Customer Connects	170		
		\$	153,340
Percentage of Total Connects Available	66%		
Total Project	\$898,139		

**Revised Exhibit D**

Proposed Customer Notice

# IMPORTANT INFORMATION

About your natural gas rates

## NEW NATURAL GAS RATES BEGIN WITH THIS BILL

For Customers Served in the  
Ely Lake Project Area

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### *An Explanation of Your Natural Gas Rates*

On DATE, the Minnesota Public Utilities Commission (MPUC) approved a New Area Surcharge for Minnesota Energy Resources customers served in the Ely Lake Project Area.

Minnesota Energy Resources is required to recover the cost of extending new natural gas service from the new customers who will be served by the extension project. The New Area Surcharge for all customers has been approved by the Commission at \$33.50 per month, which is the surcharge amount needed to recover the cost of the extension within 20 years. The surcharge will appear as a line item on your monthly bill. The surcharge will be in effect until the cost to bring natural gas service to your area has been recovered or a maximum of 20 years, whichever occurs first. You will be notified of any change to the New Area Surcharge, including termination of the New Area Surcharge.

We thank you for your interest in becoming a natural gas customer. We look forward to providing you safe and reliable natural gas service. If you have questions, comments or would like more information, you may contact our 24-Hour Customer Service at **800-889-9508** or visit our website at **[www.minnesotaenergyresources.com](http://www.minnesotaenergyresources.com)**.



AFFIDAVIT OF SERVICE

STATE OF MINNESOTA            )  
  ) ss  
COUNTY OF HENNEPIN        )

Kristin M. Stastny hereby certifies that on the 1st day of August, 2014, on behalf of Minnesota Energy Resources Corporation (MERC) she electronically filed a true and correct copy of the enclosed Revised Attachments to MERC's New Area Surcharge Petition on [www.edockets.state.mn.us](http://www.edockets.state.mn.us). Said documents were also served via U.S. mail and electronic service as designated on the attached service list.

/s/ Kristin M. Stastny  
Kristin M. Stastny

Subscribed and sworn to before me  
This 1st day of August, 2014.

/s/ Alice Jaworski  
Notary Public, State of Minnesota

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Michael	Ahern	ahern.michael@dorsey.com	Dorsey & Whitney, LLP	50 S 6th St Ste 1500  Minneapolis, MN 554021498	Electronic Service	No	OFF_SL_14-524_M-14-524
Julia	Anderson	Julia.Anderson@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota St St. Paul, MN 551012134	Electronic Service	Yes	OFF_SL_14-524_M-14-524
Michael	Bradley	mike.bradley@lawmoss.com	Moss & Barnett	Suite 4800 90 S 7th St Minneapolis, MN 55402-4129	Electronic Service	No	OFF_SL_14-524_M-14-524
Sharon	Ferguson	sharon.ferguson@state.mn.us	Department of Commerce	85 7th Place E Ste 500  Saint Paul, MN 551012198	Electronic Service	No	OFF_SL_14-524_M-14-524
Daryll	Fuentes	N/A	USG	550 W. Adams Street  Chicago, IL 60661	Paper Service	No	OFF_SL_14-524_M-14-524
Burl W.	Haar	burl.haar@state.mn.us	Public Utilities Commission	Suite 350 121 7th Place East St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_14-524_M-14-524
Amber	Lee	ASLee@minnesotaenergyresources.com	Minnesota Energy Resources Corporation	2665 145th Street West  Rosemount, MN 55068	Electronic Service	No	OFF_SL_14-524_M-14-524
John	Lindell	agorud.ecf@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012130	Electronic Service	Yes	OFF_SL_14-524_M-14-524
Brian	Meloy	brian.meloy@stinsonleonard.com	Stinson, Leonard, Street LLP	150 S 5th St Ste 2300  Minneapolis, MN 55402	Electronic Service	No	OFF_SL_14-524_M-14-524
Andrew	Moratzka	apmoratzka@stoel.com	Stoel Rives LLP	33 South Sixth Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_14-524_M-14-524
Eric	Swanson	eswanson@winthrop.com	Winthrop Weinstine	225 S 6th St Ste 3500 Capella Tower Minneapolis, MN 554024629	Electronic Service	No	OFF_SL_14-524_M-14-524

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
Gregory	Walters	gjwalters@minnesotaenergyresources.com	Minnesota Energy Resources Corporation	3460 Technology Dr. NW Rochester, MN 55901	Electronic Service	No	OFF_SL_14-524_M-14-524