

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

November 1, 2008

Burl W. Haar Executive Secretary Minnesota Public Utilities Commission 121 Seventh Place East, Suite 350 St. Paul, MN 55101 PUBLIC DOCUMENT – TRADE SECRET DATA HAS BEEN EXCISED

F	Re:	In the Matter of the Petition of Minnesota Energy Resources Corporation – NMU for Approval of a Change in Demand Entitlement;
		Docket No
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Dear Dr. Haar:

In accordance with Minnesota Rule 7825.2910, subpart 2, please find the public and nonpublic versions of Minnesota Energy Resources Corporation's (MERC) request to change demand entitlement. In particular, MERC proposes to change demand levels by type on all systems for the Northern Minnesota Utilities (NMU) customers effective November 1, 2008.

Please note that page 17 of the Petition and Attachments 5 and 10 contain financial information with independent economic value that is not generally known to, and not readily ascertainable by, competitors of MERC, who could obtain economic value from its disclosure. MERC maintains this information as secret. Accordingly this data qualifies as trade secret data as defined in Minn. Stat. § 13.37, subd. 1(b), and MERC requests that the data be treated as trade secret information.

In accordance with Minnesota Rule 7825.2910, subpart 3, a Notice of Availability has been sent to all intervenors in Aquila Networks-NMU's previous two rate cases.

Please feel free to contact me at (612) 340-2881 if you have any questions regarding this matter.

Sincerely yours

Michael J. Akern

Enclosures

cc: Service List

STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

David C. Boyd		Chair	
J. Dennis O'Brien		Commissioner	
Thomas Pugh		Commissioner	
Phyllis A. Reha		Commissioner	
Betsy Wergin		Commissioner	
In the Matter of the Petition of)		
Minnesota Energy Resources)		
Corporation – NMU for Approval of a)	Docket No.	
Change in Demand Entitlement	ĺ		

FILING UPON CHANGE IN DEMAND

Pursuant to Minnesota Rule 7825.2910, subpart 2 (Filing Upon Change in Demand), Minnesota Energy Resources Corporation - NMU (MERC or the Company), hereby petitions the Minnesota Public Utilities Commission (Commission) for approval of changes in demand entitlements for MERC's NMU customers. MERC requests that the Commission approve the requested changes to be recovered in the Purchased Gas Adjustment (PGA) effective on November 1, 2008.

This filing includes the following attachments:

Attachment 1: Notice of Availability.

Attachment 2: One paragraph summary of the filing in

accordance with Minn. R. 7829.1300, subp. 1.

Attachment 3: Petition for Change in Demand with

Attachments.

Attachment 4: Affidavit of Service and Service List.

The following information is provided in accordance with Minn. R. 7829.1300:

1. Summary of Filing

Pursuant to Minn. R. 7829.1300, subp. 1, a one-paragraph summary of the filing is attached.

2. <u>Service</u>

Pursuant to Minn. R. 7829.1300, subp. 2, MERC has served a copy of this filing on the Department of Commerce and the Office of the Attorney General – Residential Utilities Division. The summary of the filing has been served on all parties on the attached service list. Additionally, pursuant to Minn. R. 7825.2910, subp. 3, a Notice of Availability has been sent to all intervenors in Aquila Networks – NMU's previous two rate cases.

3. General Filing Information

A. Name, Address, and Telephone Number of the Utility

Minnesota Energy Resources Corporation 2665 145th Street West Box 455 Rosemount, MN 55068-0455 (651) 322-8901

B. Name, Address, and Telephone Number of Attorney for the Utility

Michael J. Ahern Dorsey & Whitney LLP 50 S. Sixth Street, Suite 1500 Minneapolis, MN 55402-1498 (612) 340-2881

C. Date of the Filing and Proposed Effective Date

Date of filing: November 3, 2008

Proposed Effective Date: November 1, 2008

D. Statute Controlling Schedule for Processing the Filing

Minnesota Statutes and related rules do not provide an explicit time frame for action by the Commission.

E. Utility Employee Responsible for the Filing

Gregory J. Walters 519 First Avenue SW P.O. Box 6538 Rochester, MN 55903-6538 (507) 529-5100

If additional information is required, please contact Michael J. Ahern at: (612) 340-2881.

DATED: November 3, 2008

Respectfully Submitted,

DORSEY & WHITNEY LLP

Michael J. Ahern

Suite 1500, 50 South Sixth Street Minneapolis, MN 55402-1498 Telephone: (612) 340-2600

Attorney for Minnesota Energy Resources Corporation

All Intervenors

Notice of Availability

Please take notice that Minnesota Energy Resources Corporation-NMU has filed a petition with the Minnesota Public Utilities Commission for approval of a change in demand entitlements.

To obtain copies, or if you have any questions, please contact:

Gregory J. Walters Minnesota Energy Resources Corporation 519 1st Ave SW Rochester, MN 55902 507-529-5100.

Please note that this filing is also available through the eDockets system maintained by the Minnesota Department of Commerce and the Minnesota Public Utilities Commission. You can access this document by going to eDockets through the websites of the Department of Commerce or the Public Utilities Commission or going to the eDockets homepage at:

https://www.edockets.state.mn.us/EFiling/home.jsp

Once on the eDockets homepage, this document can be accessed through the Search Documents link and by entering the date of the filing.

STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

David C. Boyd J. Dennis O'Brien Thomas Pugh Phyllis A. Reha Betsy Wergin	Chair Commissioner Commissioner Commissioner Commissioner
In the Matter of the Petition of Minnesota Energy Resources Corporation – NMU for Approval of a))) Docket No.
Change in Demand Entitlement)

SUMMARY OF FILING

Pursuant to Minnesota Rule 7825.2910, subpart 2 (Filing Upon Change in Demand), Minnesota Energy Resources Corporation - NMU (MERC or the Company), hereby petitions the Minnesota Public Utilities Commission (Commission) for approval of changes in demand entitlements for MERC's NMU customers. MERC requests that the Commission approve the requested changes to be recovered in the Purchased Gas Adjustment (PGA) effective on November 1, 2008.

PUBLIC DOCUMENT - TRADE SECRET DATA EXCISED

STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

David C. Boyd	Chair
J. Dennis O'Brien	Commissioner
Thomas Pugh	Commissioner
Phyllis A. Reha	Commissioner
Betsy Wergin	Commissioner
In the Matter of the Petition of) Minnesota Energy Resources) Corporation – NMU For Approval) of a Change in Demand Entitlement)	FILING UPON CHANGE IN DEMAND DOCKET NO

PETITION FOR CHANGE IN DEMAND

I. <u>INTRODUCTION</u>

Pursuant to Minnesota Rule 7825.2910, subpart 2 (Filing Upon Change in Demand), Minnesota Energy Resources Corporation - NMU (MERC or the Company), a division of Integrys Energy Group, Inc. (TEG), hereby petitions the Minnesota Public Utilities Commission (Commission) approve changes in demand entitlements for MERC's NMU customers. MERC requests that the Commission approve the requested changes to be recovered in the Purchased Gas Adjustment (PGA) effective on November 1, 2008.

II. DISCUSSION

A. MERC's NMU Design Day Requirements

MERC's 2008-2009 NMU design day requirements increased 2,718 Mcf (or approximately 4.455 percent) from 61,008 Mcf to 63,726 Mcf.

Table 1: MERC's Proposed Reserve Margins For the 2008-2009 Heating Season NMU (NNG, GLGT, VGT & Centra)

	Reserve Margin 2008-2009	Reserve Margin 2007-2008	
	Heating Season	Heating Season	Change
NNG Zone E-F	1.74%	5.59%	-3.85%

As shown in Table 1 and Attachment 3, MERC's proposed system wide reserve margin for NMU for the 2008-2009 heating season is positive.

For the Demand Entitlement filing effective November 1, 2008, the total Design Day requirement for Northern Natural Gas (NNG), which includes PNG and NMU is 247,188 Dth as calculated in Attachments 5 and Attachments 7 under the NNG-PNG Entitlement Allocation.

For the Demand Entitlement filing effective November 1, 2008, the total Design Day capacity on Northern Natural Gas (NNG), which includes PNG and NMU is 250,448 Dth as calculated in Attachments 5 and Attachments 7 under the NNG-PNG Entitlement Allocation.

The difference between the total Design Day requirement and total Design Day capacity results in a 1.32% positive reserve margin.

B. Forecast Methodology for MERC Demand Entitlement Nov. 1, 2008

Peakday

Purpose

Gather data and perform analysis used in the "Petition for Change in Demand" for

Minnesota Energy Resources Corporation – PNG and Minnesota Energy Resources Corporation

– NMU for "Approval of a Change in Demand Entitlement" to be sent to the Minnesota Public

Utilities Commission, otherwise known as the "MERC Demand Entitlement Filings".

Background

MERC is composed of two service areas:

- 1. PNG Peoples Natural Gas (company approximately 170,000 customers)
- 2. NMU Northern Minn Utility (company approximately 40,000 customers)

Which are served by <u>four pipelines</u>:

- 3. VGT Viking Gas Transmission system (serves both PNG and NMU)
- 4. NNG- Northern Natural Gas pipeline (serves both PNG and NMU)
- 5. GLGT Great Lakes Gas Transmission pipeline (serves both PNG and NMU)
- 6. Centra Centra pipeline (serves NMU)

Four Petitions for Change in Demand are filed (one for each of PGAC):

- A. PNG customers served off of VGT = PNG VGT
- B. PNG customers served off of GLGT = PNG GLGT

- C. PNG customers served off of NNG = PNG NNG
- D. All NMU customers served off NNG, GLGT, VGT & Centra = NMU

Weather data is obtained from six weather stations:

- 1. International Falls
- 2. Bemidji
- 3. Cloquet
- 4. Fargo
- 5. Minneapolis
- 6. Rochester

For analytical purposes, data is subdivided, analyzed and regressed by the following eight demand areas:

	Demand Area		
	(Service Area / Pipeline)	PGAC	Weather Station(s)
1	NMU-Centra	NMU	International Falls
2	NMU-GLGT *	NMU	Bemidji & Cloquet
3	NMU-NNG	NMU	Cloquet
4	NMU-VGT *	NMU	Bemidji & Fargo
5	NMU-GLGT&VGT*	NMU	Bemidji & Fargo
6	PNG-GLGT	PNG-GLGT	Bemidji & Cloquet
7	PNG-NNG	PNG-NNG	Minneapolis, Rochester & Cloquet
8	PNG-VGT	PNG-VGT	Bemidji & Fargo

^{*} Thief River Falls is included only in NMU-GLGT&VGT

2008 Analytical Approach

Summary

- 1. Obtain daily weather data for each weather station as shown in Attachment 13
- 2. Obtain daily total throughput volumes by pipeline
- 3. Perform total throughput peak day regressions
- 4. Subtract interruptible, transport, and joint interruptible expected peak day load volumes based on monthly billing data

- 5. Add back Daily Firm Capacity (DFC) customer selections
- 6. Apply sales forecast growth rates

Detail

The Peak Day Forecasting Team (the Team) followed a data-driven approach for the MERC 2008/09 Peak Day Forecast. Since the forecast is for a peak day, the best daily data available is required to provide the best estimate. Theoretically, the peak day regression should be performed using daily net firm load by service area, pipeline, and weather station. A review of the data available indicated that the two best daily data sources are the daily weather data by weather station and the daily throughput data by Town Border Station (TBS) and pipeline meter. (Some pipeline meters are dedicated to a TBS, and some are dedicated to individual customers.)

Most of the interruptible, transportation, and joint interruptible data available is from monthly billing record excerpts provided by ADS/Vertex, an external vendor that has been providing billing services to MERC-PNG and MERC-NMU.

The Team proposed an approach different from the one used last year that would:

- Make the best use of the best available data.
- Isolate the effects the monthly billing cycle data has on the Peak Day forecast so that the new process can be easily updated as better data is available.
- Provide a basis for future risk adjustment to the forecast.

The MERC 2009 Peak Day Process consisted of:

- I. Data Preparation
- II. Regression Generation of Net Daily Metered Volumes

III. Adjusting the Regression Results to a Firm peak day estimate

I. The **Data Preparation** Steps consisted of:

- Identify the coldest Adjusted Heating Degree Day (AHDD) in the last 20 years for each weather station.
- Determine the most recent three, four, and five years of December through February daily total metered throughput for the eight demand areas by weather station.
- Subtract the daily pipeline meter readings for all non-firm customers with daily pipeline meter readings available for all three, four, or five December through February years from the total throughput for each demand area and weather station. Use the resulting net daily metered volumes for regressions. Examples of non-firm customer meter readings subtracted from the demand area total daily throughputs are paper mills, direct-connects, taconites, and off-system end users. (see "Adjusting the Regression Results to a Firm Peak Day Estimate" below)
- Determine how to map the monthly billing data to the eight demand areas.
 Each daily weather station data file was searched to find the coldest Adjusted Heating
 Degree Day (AHDD) in the last 20 years. This 1-in-20 approach is consistent with prior years. The results are provided in the following table:

		Avg.	Avg.		
Station	Date	Temp	Wind	<u>HDD</u>	<u>AHDD</u>
Bemidji	2/1/1996	-34	8	99	107
Cloquet	2/2/1996	-31	7	96	103
Fargo	1/18/1996	-16	34	81	109
International					
Falls	2/2/1996	-34	8	99	107
Minneapolis	2/2/1996	-25	8	90	97
Rochester	2/2/1996	-27	10	92	101

The daily throughput data was provided by pipeline and meter, with each meter on each pipeline mapped to one of the weather stations shown in the above chart. Each meter was also designated as either PNG or NMU. As noted above, some of the meters represented a TBS. Some meters were dedicated to a customer who is not a firm service customer of either PNG or NMU. For example, certain transportation, interruptible, direct-connect, and taconite customers have their own meter, but are not counted as firm service customers.

In a more nearly ideal world, the Team would have also had <u>daily</u> telemetered data from each interruptible, transportation, and joint interruptible customer mapped to each of the eight demand areas and related weather stations. This was the case for a handful of paper mills, direct-connects, taconites, and off-system end users. The rest of the interruptible, transportation, and joint interruptible data was available based on monthly billing cycle data that introduces billing lag, meter read lag (not all meters were read every month resulted in billing cycle estimates and reversals), and other potential errors into their volumes.

The Team was faced with the choice of either:

Trying to "invent" daily meter readings from this monthly data and subtract the
estimated daily meter readings from the actual metered daily throughput to arrive at a
daily firm load estimate, or

2. Generate regressions of the daily throughput data available less the known daily meter readings for non-firm customers and adjust those regressions for the estimated peak day impact of the other non-firm customers who do not have daily readings.

The Team's consensus was that the second approach introduced much less error into the data and regressions than trying to guess how to allocate monthly billing cycle data to daily when the load factors and relative temperature sensitivity of the non-daily-metered customers was not known. Using only the daily metered data for the regressions makes the best use of the best data available and provides insights into the total daily metered load that could be active on a peak day even if supply access at the non-firm pipeline meters were shut off.

II. The Regression Generation of Net Daily Metered Volumes consisted of:

- For each of the eight Demand Areas (Service Area / Pipeline):
 - 1. Gather the net daily metered volumes and weather station $AHDD^{1}$.
 - 2. If more than one weather station is represented in a given demand area, weight each weather station's AHDD by the total December through February metered volumes attributable to that weather station. This weighting is computed separately for the five-year, four-year, and three-year regressions as the relative load attributed to the different weather stations changes based on factors such as customer growth (or loss) and conservation.

² Temperature and weather data was obtained from Weather Bank/DTN via TherMaxx then converted to HDD and AHDD in an Excel spreadsheet by MERC – Gas Supply. Temperature and wind data is from midnight to midnight.

- 3. Add indicator variables for day-type and month. Day-type variables are used to isolate load that changes by day of the week, such as commercial or industrial customers who may change their consumption on weekends when they run fewer shifts. Month indicator variables are used to isolate load that changes based on winter month, such as businesses that are open extra hours in December and resume normal operating hours in January.
- 4. Perform three ordinary least squares linear regressions for each of the 5-year, 4-year, and 3-year time frames:
 - All: Use the weighted AHDD and all indicator variables to determine which are statistically significant.
 - Significant or S: Use only the independent variables that the "All" run showed to be statistically significant, i.e. those having T-Stats higher than 2.0 or less than minus 2.0.
 - AHDD: Use only the AHDD variable.
- 5. Summarize the Baseload and Use/AHDD from each regression.
- 6. Calculate a point estimate from each regression based on the baseload value plus the Use/AHDD coefficient times the coldest AHDD in 20 years (weighted if using more than one weather station).

After reviewing the results of the above regressions internally, the 3-year regressions using statistically significant independent variables were selected as being the most representative of the current system customers. The results of the 3-Year Significant, or "3-Yr S" regressions were then checked for reasonableness by comparing the point estimate against every day of the original five years of data, adding the

estimated heat load required to weather-adjust the actual data to design AHDD conditions. For a perfectly normal distribution based on a perfectly homogeneous population, the point estimate would have 50% of the adjusted data above it, and 50% of the adjusted data below it. In practice, perfectly normal distributions and perfectly homogeneous populations are rare. For instance, over a five year time period, customers may be added or lost, and the customers that are present for all five years may change their preferences for usage (such as setting the thermostat higher or lower or by adding insulation or adopting other conservation measures). Taking those factors into consideration, the results of the reasonableness test were reasonable, with the AHDD-adjusted actual daily metered volumes exceeding the "3-Yr S" point estimates an average of 46% of the time (PNG-GLGT was lowest with 34.7% and NMU-VGT was highest with 59.1%).

III. Adjusting the Regression Results to a Firm Peak Day Estimate consisted of:

A. Subtract interruptible, transport, and joint interruptible expected peak day load volumes based on monthly billing data

In order to determine firm peak day load, volumes contained in the daily pipeline meter readings for interruptible, joint interruptible and transportation customers needed to be isolated and removed. While it would have been ideal to have daily billing data for all customers, most of the interruptible, transportation, and joint interruptible data was, in most cases, only available from monthly billing records². An unfortunate, but unavoidable consequence was that this data was based on monthly billing cycles that introduce billing lag, meter read lag (not all meters

² Individual daily volumes were available for a handful of paper mills, direct-connects, taconites, and off-system end users.

were read every month resulted in billing cycle estimates and reversals), and other potential errors into their volumes.

A database of volumes billed for all customers from July 2006 through February 2008 was obtained. The database contained detail by customer class³, calendar month, (service) area, city, location, zip code and responsibility center. The billing database was provided by ADS/Vertex, an outside firm that has been providing billing services to MERC. Sales and Revenue Forecasting had previously adjusted the billing data to properly fit the appropriate calendar month of consumption by apportioning billed volumes, i.e. for a bill covering February 15 to March 15, volumes were split evenly between February and March.

Volumes for the interruptible, transportation and joint interruptible customer classes (INTER, TRANS and JINTER classes) needed to be mapped to the appropriate regression demand area, and were then summed. This billing data included consumption that was billed, but not included in the daily metered volumes for several large specific customers (paper mills, direct-connects, taconites, and off-system end users), and therefore needed to be removed from the gross interruptible, transportation and joint interruptible totals. Such customers were identified, mapped to the demand areas, summed and subtracted from the interruptible, transportation and joint interruptible customer classes totals. The following peak demand estimation method based on the highest monthly total from the winter of 2008 was then used to calculate the amount to subtract from the results of the data regressions for each demand area:

The MERC-PNG and MERC-NMU tariff General Rules, Regulations, Terms, and Conditions Section 1.N "Maximum Daily Quantity (MDQ)" on Original Sheet No. 8.04:

³ Transportation, Interruptible, Joint Interruptible, Residential, Large Commercial & Industrial and Small Commercial & Industrial

N. Maximum Daily Quantity (MDQ):

The amount calculated by dividing the volumes consumed by a particular customer during the highest historical peak month of usage for that customer by twenty (20). Company will estimate a peak month for new customers. A Maximum Daily Quantity may also be established through direct measurement or other means (i.e. estimating the peak day requirements after installation of new processing equipment or more energy efficient heating systems) if approved by [the] Company.

B. Add back Daily Firm Capacity (DFC) customer selections

While interruptible, joint interruptible and transportation customer volumes were removed (as described above), in order to determine firm peak day load, daily firm capacity selections needed to be added back. The Sales and Revenue Forecasting department provided historical monthly DFC data for 59 "joint interruptible" customers from January 2007 through May 2008 that showed the volume that each customer has selected to receive as firm service from MERC each month. Assistance was required from MERC Gas Supply to properly assign these 59 customers to the appropriate regression demand area. Once assigned, the daily firm capacity volumes were summed by month for each demand area. The total volumes for January 2008 were than added back to the adjusted regression results.

C. Apply Sales Forecast Growth Rates

The throughput volumes used in the data regressions were from 2008 and needed to be adjusted to properly forecast 2009. The sales forecast "MERC Fcst 200806", as approved by the

Gas Planning Committee, was used to determine a growth rate for each demand area. Because the Peak Day Forecast is based on firm load, General Service volumes (GS - residential, commercial and industrial firm) were used as a proxy to calculate growth rates. These growth rates were then applied to the adjusted regression results.

Major Differences from 2007 Approach to the 2008 Approach

- 1. In 2007, estimates of the daily transport and interruptible volumes were removed from the total metered daily throughput to get estimated daily firm load before any regressions were performed. This was done by dividing monthly billing data by the number of days in the month, then subtracting these daily estimated volumes for transport and interruptible customers from total daily metered throughput. This method assumed transport and interruptible loads are not weather sensitive, but more process load. In 2008, no attempt was made to convert monthly volumes to daily amounts. Transport and interruptible volumes were backed out after regressions were performed on measured daily throughput volumes.
- 2. In 2007, changes in customer counts were used to calculate growth rates. In 2008, forecasted changes in volumes were used
- 3. In 2007, Farm Taps were handled uniquely, whereas in 2008, they were not treated different from any other customer.

Demand Area / (Service Area / Pipeline) Regression Notes

NMU-GLGT

Paper Mills = Ainsworth and Blandon in Bemidji, and Sappi and USG in Cloquet

NMU-GLGT

Direct Connects = U.S Gypsum

NMU-VGT

Note: Discussions were held regarding how best to handle Lamb Weston (RDO) and the decision was to include these volumes in the regression analysis. If 3 years of daily usage were available, consideration would have been given to excluding from the regression and then consistently removing comparable volumes along with the interruptible and transportation volumes.

PNG-NNG

Taconites / Direct Connects =

- CCI EMPIRE IND DEL PT 2 TILDEN
- CCI NORTHSHORE
- EVELETH TACONITE
- HIBBING TACONITE CO.
- U.S. STEEL
- NATIONAL STEEL PELLET
- COTTAGE GROVE TBS LS POWER
- INLAND STEEL
- HANNA MINING

PNG-NNG

OSEU (EndUsers) =

- CORRECTIONAL CTR
- GRAND CASINO HINCKLEY
- KEMPS LLC
- KERRY BIO-SCIENCE

- LAKESIDE
- LAND OF LAKES
- PRO-CORN
- SWIFT

Daily Design Day Estimate to Actual Comparison

In the 2007 demand entitlement dockets, MERC agreed to include a daily estimate utilizing the design day model which is calculated in Attachment 11, Pages 1 through 4. The daily estimate is compared to actual consumption. The actual volumes are total through-put which includes interruptible and transportation volumes that are located behind MERC citygates. This does not include any transportation volumes that are directly connected with any interstate pipeline(s). The Design Day model only calculates firm volumes. MERC does not forecast on a daily/monthly basis utilizing the Design Day model. The Design Day model is utilized to calculate the theoretical peak day.

Average Customer Counts

In the 2007 demand entitlement dockets, MERC agreed to include average customer counts which is provided in Attachment 12.

C. MERC's Specific NMU Proposed Demand-Related Changes

There are two types of demand entitlement changes. The first type is design day deliverability, which, in this case, increases the amount of firm transportation and storage capacity actually available to MERC's NMU customers during winter peak periods. The second type does not affect design day deliverability levels, but alters the capacity portfolio and the PGA costs recovered from customers.

1. Design Day Deliverability Changes

As shown in Peoples' Attachment 3, MERC PNG_NNG proposes to increase its approved total heating season entitlement by 416 Mcf/day (or approximately 0.65 percent). To obtain the proposed entitlement level, the Company proposes changes to its portfolio of capacity services identified below in Table 4.

Capacity	Propose Change
Entitlement	Increase / (Decrease)
NNG TF12B & TF12V	(3,460) Mcf/Day
NNG TF5	3,460 Mcf/Day
NNG TFX5	0 Mcf/Day
NNG LS Power	0 Mcf/Day
NNG Subtotal	0 Mcf/Day
GLGT FT0016	0 Mcf/Day
GLGT FT0155	0 Mcf/Day
GLGT FT8466	(500) Mcf/Day
VGT FA AF0012	0 Mcf/Day
VGT - Cap Release	(4,987) Mcf/Day
VGT FT-A Backhaul	5,902 Mcf/Day
NNG Chisago TF12	504 Mcf/Day
NNG Chisago TF5	412 Mcf/Day
Centra TF	0 Mcf/Day
Nexen PSO	0 Mcf/Day
Total Overall Change	416 Mcf/Day

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2. Other Demand Entitlement Changes

As shown in Attachment 6, MERC_NMU proposes an increase of Firm

Deferred Delivery (storage) in other pipeline entitlements that are not included in

peak day deliverability.

D. Financial Option Units and Premiums

- MERC entered into New York Mercantile Exchange (NYMEX) financial Call Options for the upcoming 2007/2008 winter (November through March). Please see Attachment 5.
- Total premium cost to enter into the financial Call Options on behalf of MERC's firm customers amounted to \$2,024,198 for the 2008/2009 winter. Please see Attachment 5.
- iii. MERC entered into [TRADE SECRET DATA BEGINS

 TRADE SECRET DATA ENDS] Total

 premium per contract is approximately [TRADE SECRET DATA

 BEGINS TRADE SECRET DATA ENDS] Please see

Attachment 5.

- iv. Please see Attachment 5 for the various contract dates.
- v. Please see Attachment 5 for the various contract prices.
- vi. MERC believes a diversified portfolio approach towards hedging is in the best interest of MERC's firm customers. MERC implemented a 40% fixed price (storage and physical fixed price purchases), 30% financial call

options and 30% market based prices, assuming normal weather. A dollar-cost-averaging approach is utilized in purchasing the hedging portfolio. Although this hedging strategy will most likely not provide the lowest priced supply, it does meet MERC's stated objectives of providing reliable and reasonably priced natural gas and mitigates natural gas price volatility. Please see Attachment 10, Pages 1 through 4.

E. <u>Gas Supply.</u>

The NMU 2008-2009 Winter Portfolio Plans - Minnesota Energy Resources Corporation for NNG, GLGT, VGT and Centra gas supply purchases for the Hedging Plans is in Attachment 10 pages 5 and 6.

F. PGA Cost Recovery

MERC proposes to begin recovering the costs associated with the change in demand-related costs in its monthly PGA effective November 1, 2008. Rate impacts can be found on attachment 4 and 7.

II. CONCLUSION

Based upon the foregoing, MERC respectfully requests the Minnesota Public

Utilities Commission grant the demand changes requested herein effective November 1,

2008. If any further information, clarification, or substantiation is required to support this filing please advise.

DATED: November 3, 2008

Respectfully Submitted,

DORSEY & WHITNEY LLP

Зу _

lichael J. Ahern

Suite 1500, 50 South Sixth Street Minneapolis, MN 55402-1498 Telephone: (612) 340-2600

Attorney for Minnesota Energy Resources Corporation

AFFIDAVIT OF SERVICE

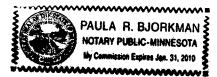
STATE OF MINNESOTA)
) ss.
COUNTY OF HENNEPIN)

Sarah J. Kerbeshian, being first duly sworn on oath, deposes and states that on the 3rd day of November, 2008, the Petition of Minnesota Energy Resources Corporation-NMU for Approval of a Change in Demand Entitlement was electronically filed with the Minnesota Public Utilities Commission and the Minnesota Department of Commerce, the Petition was provided via United States first class mail to the individuals on the attached service list at the Office of the Attorney General, and a Summary of the Filing was provided via United States first class mail to the remaining individuals on the attached service list. Additionally, a Notice of Availability was provided via United States First Class Mail to all intervenors in Aquila Networks-NMU's previous two rate cases.

Sarah J. Ech

Subscribed and sworn to before me this 3rd day of November 2008

Notary Public, State of Minnesota



Burl W. Haar MN Public Utilities Commission 350 Metro Square Building 121 Seventh Place East St. Paul, MN 55101-5147

Sharon Ferguson MN Department of Commerce 85 Seventh Place East Suite 500 St. Paul, MN 55101-2198

Julia Anderson Attorney General's Office 1400 Bremer Tower 445 Minnesota Street St. Paul, MN 55101-2131

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Michael J. Bradley Moss & Barnett 4800 Wells Fargo Center 90 South Seventh Street Minneapolis, MN 55402-4129

Marie Doyle CenterPoint Energy 800 LaSalle Avenue – Fl. 11 P.O. Box 59038 Minneapolis, MN 55459-0038

Bob Freund Rochester Post-Bulletin P.O. Box 6118 Rochester, MN 55903-61188

Jack Kegel MN Municipal Utilities Assn. 3025 Harbor Lane N. Suite 400 Plymouth, MN 55447-5142 James D. Larson Dahlen Berg & Co. 200 South Sixth Street Suite 300 Minneapolis, MN 55402

Pam Marshall Energy CENTS Coalition 823 East Seventh Street St. Paul, MN 55106

Brian Meloy Leonard, Street & Deinard 150 South Fifth Street Suite 2300 Minneapolis, MN 55402

Eric F. Swanson Winthrop & Weinstine 225 South Sixth Street Suite 350 Minneapolis, MN 55402-4629

James R. Talcott Northern Natural Gas Company 1111 South 103rd Street Omaha, NE 68124

Greg Walters Minnesota Energy Resources 519 First Avenue SW P.O. Box 6538 Rochester, MN 55903-6538

MINNESOTA ENERGY RESOURCES - NMU

DESIGN-DAY DEMAND SUMMARY NOVEMBER 1, 2008

Design Day Requirement		63,726
Total Peak Day Entitlement		64,835
Firm Peak Day Actual Sendout -Non Coincidental	(Feb. 10)	54,115
Firm Annual Throughput - Minnesota		5,727,917
No. of Firm Customers		39,112
Department Load Factor Calculation		29.00%

2006/07

MINNESOTA ENERGY RESOURCES - NMU

MINNESOTA DESIGN DAY REQUIREMENTS

2007/08 1/20 Regression Factors

NOVEMBER 1, 2008

 IDD			
 Regression	Regression	1/20 Requirements	

Group	Customer Count	Design DDD	Intercept	Slope	% of total load	Total Footnote 1	Adjustment Footnote 2	Regression Load Footnote 3	Customer Growth	Total
			NNG							
Peak	16,989	103	2,847	241		27,684	5,980	21,704	0.4%	21,791
Off Peak	16,989	55	2,847	241		16,109	3,644	12,465	0.4%	12,515
 			VGT		·		5.3.1			
VGT	5,623	109	2,702	90		12,471	5,505	6,966	0.4%	6,994
**VGT/GLGT	3,056	107	311	54	66.7%	6,093	1,410	4,683	0.4%	3,134
Peak	8,679		3,013	144				11,649		10,129
VGT	5,623	57	2,702	90		7,810	3,364	4,446	0.4%	4,464
VGT/GLGT	3,056	57	311	54	66.7%	3,391	890	2,501	0.4%	1,674
Off Peak	8,679		3,013	144		****		6,947		6,138
· · · · · · · · · · · · · · · · · · ·		•	GLGT							
**VGT/GLGT	3,056	107	311	54	33.3%	6,093	1,410	4,683	0.4%	1,567
GLGT	7,858	106	568	251		27,177	4,639	22,538	0.4%	22,628
Peak	10,914	•	879	305				27,221		24,195
VGT/GLGT	3,056	57	311	54	33.3%	3,391	890	2,501	0.4%	837
GLGT	7,858	57	568	251		14,750	2,993	1 1,757	0.4%	11,804
Off Peak	10,914		879	305				14,258		12,641
			Centra							
Peak	5,586	107	674	98		11,207	3,626	7,581	0.4%	7,611
Off Peak	5,586	57	674	98		6,285	2,340	3,945	0.4%	3,961
			Total NMU				A			
Peak	39,112		7,102	734	[.A.L. 8]	84.632	21,160	63,472	0.4%	63,726
Off Peak	39,112		7,102	734		48,345	13,231	35,114	0.4%	35,254

Footnote 1: Regression Total is based on total through-put data.

Footnote 2: Regression Adjustment substracts out Interruptible, Transportation and Joint Interruptible volumes and adds Firm Joint volumes.

Footnote 3: Total equals Regression Total minus Regression Adjustment.

Pipeline

^{**}Dual Supplied

MINNESOTA ENERGY RESOURCES - NMU

DESIGN-DAY DEMAND PER CUSTOMER NOVEMBER 1, 2008

Heating <u>Season</u>	No. of Firm <u>Customers</u>	Design Day <u>Requirements</u>	MMBtus /Customer <u>/Day</u>
08/09	39,112	63,726	1.63
07/08	38,258	61,008	1.59
06/07	38,483	61,060	1.59
05/06	38,208	62,107	1.63
04/05	39,816	60,703	1.52
03/04	37,076	62,194	1.68
02/03	36,464	54,226	1.49

Attachment 2

MINNESOTA ENERGY RESOURCES - NMU

SUMMER/WINTER USAGE - Mcf PROJECTED 12 MONTHS ENDING JUNE 2008

<u>Class</u>	Summer <u>Apr-Oct</u>	Winter <u>Nov-Mar</u>	<u>Total</u>
GS LGS IS	1,486,463 22,886 432,266	4,160,572 57,996 801,737	5,647,035 80,882 1,234,003
Total	<u>1,941,615</u>	<u>5,020,305</u>	<u>6,961,920</u>

MINNESOTA ENERGY RESOURCES - NMU

ENTITLEMENT LEVELS PROPOSED TO BE EFFECTIVE NOVEMBER 1, 2008

Type of Capacity or Entitlement		Current Amount Mcf or <u>MMBtu</u>	Proposed Change Mcf or MMBtu	Proposed Amount Mcf or MMBtu
NNG TF 12 Base & Var	iable	12,756	(3,460)	9,296
NNG TF 5		1,991	3,460	5,451
NNG TFX 5		6,139	0	6,139
LS Power		2,777	0	2,777
Peak Capacity		0	0	0
NNG Offpeak TFX*		<u>0</u>	<u>0</u>	<u>0</u>
NNG Subtotal		<u>23,663</u>	<u>0</u> 0	<u>23,663</u>
GLGT FT	FT0016	10,130	0	10,130
GLGT FT (12)	FT0155	1,178	0	1,178
GLGT FT (5)	FT0155	2,138	0	2,138
GLGT FT	FT8466	4,500	(500)	4,000
VGT FT-A	AF0012	7,966	0	7,966
VGT - Cap. Release	RF0361	4,987	(4,987)	0
VGT FT-A (3)	FTXXXX	0	5,902	5,902
NNG-TF12 Chisago	112495	782	144	926
NNG-TF5 Chisago	112495	1,765	324	2,089
NNG-TFX 12 Chisago	112486	1,963	361	2,324
NNG-TFX 5 Chisago	112486	476	87	563
CENTRA FT-1		9,858	0	9,858
Nexen PSO		0	0	0
Total Entitlement		<u>64,419</u>	<u>6,318</u>	<u>64,835</u>
Forecasted Design Day	-Adjusted	61,008	2,718	63,726
Capacity Surplus/Shorta	age	3,411	3,600	1,109
Reserve Margin		5.59%		1.74%

^{*}Not included in total firm entitlement

MINNESOTA ENERGY RESOURCES - NMU

RATE IMPACT OF THE PROPOSED DEMAND CHANGE NOVEMBER 1, 2008

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1) General Service: Av	/g. Annual Use	•		143	Mcf						
Commodity Cost	\$2.3640	\$7.3411	\$6.9558	\$6.5778	\$7.0000	196.11%	63.15%	6.42%	\$0.4222		
Demand Cost	\$1.3009	\$1.2448	\$1.0999	\$1.1201	\$1.0539	-18.99%	-19.84%	-5.91%	(\$0.0662)		
Commodity Margin	\$1.9411	\$1.9411	\$1.9411	\$2.3126	\$2.3126	19.14%	19.14%	0.00%	\$0.0000		
Total Cost of Gas	\$5.6060	\$10.5270	\$9.9968	\$10.0105	\$10.3665	84.92%	45.22%	3.56%	\$0.3560		
Avg Annual Cost	\$801.66	\$1,505.36	\$1,429.54	\$1,431.50	\$1,482.41	84.92%	45.22%	3.56%	\$50.91		
Effect of proposed commodity change on average annual bills:											
Effect of proposed de	mand change	on average and	nual bills:						(\$9.47)		

2) Large General Ser	vice: Avg. Annι	ıai Use:		6,838	Mcf							
Commodity Cost	\$2.3640	\$7.3411	\$6.9558	\$6.5778	\$7.0000	196.11%	-4.65%	6.42%	\$0.4222			
Demand Cost	\$1.3009	\$1.2448	\$1.0999	\$1.1201	\$1.0539	-18.99%	-15.34%	-5.91%	(\$0.0662)			
Commodity Margin	\$1.9411	\$1.9411	\$1.9411	\$2.3126	\$2.3126	19.14%	19.14%	0.00%	\$0.0000			
Total Cost of Gas	\$5.6060	\$10.5270	\$9.9968	\$10.0105	\$10.3665	84.92%	-1.52%	3.56%	\$0.3560			
Avg Annual Cost	\$38,333.83	\$71,983.63	\$68,358.12	\$68,451.80	\$70,886.13	84.92%	-1.52%	3.56%	\$2,434.33			
Effect of proposed commodity change on average annual bills: \$2												
Effect of proposed de	emand change	on average an	nual bills:						(\$452.68)			

3) SV Interruptible Se	ervice: Avg. Anı	nual Use:		7,982	Mcf							
Commodity Cost	\$2.3640	\$7.3411	\$6.9558	\$6.5778	\$7.0000	196.11%	-4.65%	6.42%	\$0.4222			
Commodity Margin	\$0.8500	\$0.8500	\$0.8500	\$1.0127	\$1.0127	19.14%	19.14%	0.00%	\$0.0000			
Total Cost of Gas	\$3.2140	\$8.1911	\$7.8058	\$7.5905	\$8.0127	149.31%	-2.18%	5.56%	\$0.4222			
Avg Annual Cost	\$25,654.15	\$65,381.36	\$62,305.90	\$60,587.37	\$63,957.37	149.31%	-2.18%	5.56%	\$3,370.00			
Effect of proposed commodity change on average annual bills:												

4) LV Interruptible Se	ervice: Avg. An	nual Use:		38,443	Mcf							
Commodity Cost	\$2.3640	\$7.3411	\$6.9558	\$6.5778	\$7.0000	196.11%	-4.65%	6.42%	\$0.4222			
Commodity Margin	\$0.2850	\$0.2850	\$0.2850	\$0.3395	\$0.3395	19.12%	19.12%	0.00%	\$0.0000			
Total Cost of Gas	\$2.6490	\$7.6261	\$7.2408	\$6.9173	\$7.3395	177.07%	-3.76%	6.10%	\$0.4222			
Avg Annual Cost	\$101,835.51	\$293,170.16	\$278,358.07	\$265,921.76	\$282,152.40	177.07%	-3.76%	6.10%	\$16,230.63			
Effect of proposed commodity change on average annual bills: \$1												

Note: Average Annual Average based on PNG Annual Automatic Adjustment Report in Docket No. E,G999/AA-05-1403

MINNESOTA ENERGY RESOURCES - NMU
PRESENT AVERAGE COST OF GAS EFFECTIVE:
DEMAND

1-Oct-08

DEMAND	=				Total Annual	Cost/Ccf		
Northern Natural Gas (NNG)		Rate	Entitlement	х	Cost	000000.	REFERENCE	Effective
1	112495	\$7.5776	2,653	12	\$241,240	\$0.00431	77 Revised Sheet No. 50	Oct. 1, 2008
TF12B (Max Rate)		\$9.0926	6,643	12	\$724,824		77 Revised Sheet No. 50	Oct. 1, 2008
TF12V (Max Rate)	112495	\$15.1530	5,451	5	\$412,995		77 Revised Sheet No. 50	Oct. 1, 2008
TF5 (Max Rate)	112495	•	6,139	5	\$465,121		78 Revised Sheet No. 51	Oct. 1, 2008
TFX5 (Max Rate)	112486	\$15.1530	•	3		\$0.00051	76 Nevised Sileet No. 51	Oct. 1, 2000
LS Power		\$4.3463	2,777		\$36,211	-	40 Davised Chart No. EF	Nov. 1, 2006
Storage Reservation	118657	\$1.7140	7,128	12	\$146,599	•	12 Revised Sheet No. 55	Nov. 1, 2006
Storage Cycle Volume	118657	\$0.3567	82,188	5	\$146,582	•	12 Revised Sheet No. 55	
Storage Reservation	118657	\$3.3157	524	12	\$20,864	*	12 Revised Sheet No. 55	Nov. 1, 2006
Storage Cycle Volume	118657	\$0.6901	6,047	5	\$20,865	•	12 Revised Sheet No. 55	Nov. 1, 2006
Storage Reservation	118215	\$1.7140	328	12	\$6,741	•	12 Revised Sheet No. 55	Nov. 1, 2006
Storage Cycle Volume	118215	\$0.3567	3,779	5	\$6,740		12 Revised Sheet No. 55	Nov. 1, 2006
SMS	112521	\$2.1800	2,143	12	\$56,058		12 Revised Sheet No. 55	Nov. 1, 2006
NNG Demand					\$2,284,840	\$0.04081	NNG Demand	
Viking (VGT)	·							
FT-A ZONE 1 - 1	AF0012	\$3.4671	7,966	12	\$331,427	\$0.00592	Twelfth Revised Sheet 5	Jan. 1, 2006
FT-A ZONE 1 - 1	AFXXXX	\$3.7671	5,902	5	\$111,167	\$0.00199	Twelfth Revised Sheet 5	Jan. 1, 2006
NNG-TF12 Chisago	112495	\$7.5776	926	12	\$84,181	\$0.00150	77 Revised Sheet No. 50	Oct. 1, 2008
NNG-TF5 Chisago	112495	\$15,1530	2,089	5	\$158,296	\$0.00283	77 Revised Sheet No. 50	Oct. 1, 2008
NNG-TFX 12 Chisago	112486	\$9.6288	2,324	12	\$268,494		78 Revised Sheet No. 51	Oct. 1, 2008
NNG-TFX 5 Chisago	112486	\$15.1530	563	5	\$42,672	\$0.00076	78 Revised Sheet No. 51	Oct. 1, 2008
VGT Demand		4 .5.1000	000	•	\$996,237		VGT Demand	. , -
Great Lakes (GLGT)								
FT Western Zone	FT0016	\$3.4580	10,130	12	\$ 420,354	\$0.00751	Ninth Revised Sheet 4	Aug. 1, 2007
FT Western Zone (12)	FT0155	\$3.4580	1,178		\$ 48,882	\$0.00087		Aug. 1 , 2007
	FT0155	•	2,138		\$ 36,966	\$0.00066	Ninth Revised Sheet 4	Aug. 1, 2007
FT Western Zone (5)		\$3.4580					Ninth Revised Sheet 4	Aug. 1, 2007
FT Wester Zone	FT8466	\$3.4580	4,000		\$ 165,984			Aug. 1, 2007
GLGT Demand					\$ 672,187	\$0.01200	GLGT Demand	
Centra	(40.1.(400.40)	0.000.000					05	
	(\$Cdn/103M3)	\$166.3160					Sheet 1 (N.E.B.)	
Conversion (((\$Cdm103M3)*2	?79.256)/9858)*.8788	\$4.5328	9,858	12	\$536,214	\$0.00958		
Union Balancing		\$0.4565	9,858	12	\$54,000	\$0.00096		
CENTRA MINNESOTA PIPEL	.INES	<u>\$1.2311</u>	9,858	12	<u>\$145,634</u>	\$0.00260		
Centra Demand		\$6.2204			\$735,848	\$0.01314	Centra Demand	
Nexen Exchange								
Nexen Exchange			684,604	1	\$1,211,749	\$0.02164	Contract	Apr. 1, 2007
Nexen Exchange Demand			684,604	1	<u>\$1,211,749</u>	<u>\$0.02164</u>		
AND DESCRIPTIONS AND ADDRESS.					65 000 004	En anean	KAND BENAND 2/012	
NMU DEMAND					\$5,900,861		NMU DEMAND-\$/Cdf	
For Joint Rate Demand					l	55,993,310	Annual Firm Sales in Ccf	
Northern Natural Gas (NNG)								
TF12B (Max Rate)			2,653	12				
TF12V (Max Rate)			6,643	12				
TF5 (Max Rate)			5,451	5				
TFX5 (Max Rate)			6,139	5				
Viking (VGT)								
FT-A ZONE 1 - 1			7,966	12				
NNG-TF12 Chisago			3,249	12				
NNG-TF5 Chisago			2,653	5				
Great Lakes (GLGT)			•					
FT-Western			15,308	12				
FT-Western			2,138	5				
FT-Western			2,100	7				
Centra			v	,				
CENTRA TRANSMISSION			0.959	12				
14			9,858	12	\$E 000 004			
Total Demand Weighted Vol	in Staf				\$5,900,861			
Total Demand Weighted Vol					6,300,323	60.0000	10-4	
Total Joint Demand Rate \$/N	/ICT					\$0.93660	/GCT	

PUBLIC DOCUMENT - TRADE SECRET DATA EXCISED

MINNESOTA ENERGY RESOURCES - NMU

Attachment 5

Financial Options
Heating Season 2008-2009

[TRADE SECRET DATA BEGINS

Units - Gas Daily Packages

No Gas Daily Peakers were purchased

Units - Call Option (Daily Volume)

Nove	mber	Dece	mber	<u>Jan</u>	uary	<u>Febr</u>	uary	<u>Ma</u>	arch		
Contract	Daily	Daily	Term								
<u>Date</u>	<u>Volume</u>	<u>Total</u>	Total								

Total <u>9.667</u> <u>12,581</u> <u>13,871</u> <u>12,857</u> <u>10,323</u> <u>59,298</u> <u>1,790,000</u>

Premium - Call Option (Monthly Cost)

<u>December</u> <u>November</u> <u>Total</u> <u>January</u> February March Option Option Option Premium Option Premium Option Premium Premium Premium Option Premium Premium Cost Premium Cost <u>Premium</u> <u>Cost</u> <u>Premium</u> Cost <u>Premium</u> Cost <u>Premium</u> Cost

Total \$ 0.9405 \$ 272,752 \$ 0.9620 \$ 375,175 \$ 1.1427 \$ 491,373 \$ 1.3178 \$ 491,367 \$ 1.2298 \$ 393,532 \$ 1.1308 \$ 2,024,198

MINNESOTA ENERGY RESOURCES - NMU

Attachment 6 NMU

NMU	04-1768	05-1727	06-	07-	08-	
	NMU	NMU	NMU	NMU	NMU	Proposed
	GS	GS	GS	GS	GS	Change
NNG Design Day	22,024	23,197	21,635	21,491	21,791	300
Customer Requirements moving to Transportation	22,024	125	,,	,	,,	
Adjusted Design Day	_	23,072				
Adjusted Design Day Percentages	3.58%	3.89%	100.00%	100.00%	100.00%	0.00%
Factors for All Winter Capacity	5.22%	5.67%	100.00%	100.00%	100.00%	0.00%
1 actors for All William Capacity	0.22 /0	0.0170				
NNG Allocated Entitlements in PGA						
TF12B	7,922	8,613	7,340	2,954	2,653	-301
TF12V	0	0	5,930	9,802	6,643	-3,159
TF(5)	10,740	10,611	2,102	1,991	5,451	3,460
TFX(5)	2,642	2,831	5,514	6,139	6,139	0
LS Power	_,	,	. 0	2,777	2,777	0
TFX(5)	704	766	0	´ 0	. 0	0
Peak Capacity 3 mo.	1,304	1,418	0	0	0	0
Total NNG Allocated Entitlements in PGA	23,312	24,238	20,886	23,663	23,663	0
	,_	,.	•	ŕ		
Other Pipelines Entitlements in PGA						
Viking FT-A	8,366	8,366	7,966	7,966	7,966	0
Viking FT-A Backhaul	2,900	1,900	4,625	5,902	5,902	0
Viking Chisago TF12	1,303	1,303	2,546	3,249	3,249	0
Viking Chisago TF5	1,597	2,839	2,078	2,653	2,653	0
Great Lakes FT-A (12)	11,630	13,130	11,308	15,308	15,308	0
Great Lakes FT-A (5)	0	0	2,138	2,138	2,138	0
Centra FT-1	8,358	8,358	9,858	9,858	9,858	0
Centra -Boise	2,500	1,500	0	´ 0	Ó	0
Nexen Exchange	4,600	4,600	6,000	0	0	0
Tenaska PSO GL	79,845	86,549	. 0	0	0	0
Tenaska PSO Centra	62,000	62,000	0	0	0	0
ANR Storage	4,600	0	0	0	0	0
Total Capacity	208,111	212,883	62,780	64,835	64,835	0
Total NNG Transportation	23,312	24,238	20,886	23,663	23,663	0
Total Transportation	57,066	59,734	56,780	64,835	64,835	0
Total Seasonal Transportation	15,390	15,625	7,616	10,907	14,367	3,460
Percent Seasonal on NNG	66.0%	64.5%	36.5%	46.1%	60.7%	14.6%
Other Entitlements not included in Peak Day Deliverability						
TFX Offpeak Old (Apr/Oct) one mo.	3,401	3,694	0	0	0	0
TFX (Apr/Oct) one mo.	1,941	2,108	0	0	0	0
TFX AprOct. 7 mos.	303	329	0	0	0	0
TFX May-Sept 5 mos.	523	568	0	0	0	0
FDD Storage reservation per mo.	4,974	5,402	6,343	7,619	7,980	361
FDD Storage capacity per mo.	286,756	311,440	365,682	428,702	443,063	14,361
ANR Capacity per mo.	0	0	. 0	. 0	. 0	
Nexen PSO	9,130	9,916	600,000	684,604	684,604	0
Tenaska PSO	17,902	19,443	15,807	17,763	0	
NGPL per mo.	127,398	138,365	0	0	Ō	,
SMS per mo.	1,933	2,100	1,907	2,172	2,143	-
SBA	17,508	2,100	0	2,112	2,140	
Upstream Demand per mo.	52	32	0	ő	Ö	
opostosm Domana por mo.	52	02	J	J	·	5

Attachment 7 Rate Impacts NMU

NINO					October		% Change		
	Loot	Last Demand	Last Domand	October	PGA with Proposed	% Change	% Change from Last	% Change	\$ Change
	Last Rate Case	Filing	Filing	PGA	Demand	from Last	Demand	from Oct.	from Oct.
General Service	GR-03-1372	M-06-XXXX	M-07-XXXX	2008	Changes	Rate Case	Filing	PGA	PGA
Commodity Cost	\$2.3640	\$7.3411	\$6.9558	\$6.5778	\$7.0000	196.11%	0.64%	6.42%	\$0.4222
Demand Cost	\$1.3009	\$0.9362	\$1.2448	\$1.1201	\$1.0539	-18.99%	-15.34%	-5.91%	(\$0.0662)
Margin	\$1.9411	\$1.9411	\$1.9411	\$2.3126	\$2.3126	19.14%	19.14%	0.00%	\$0.0000
Total Cost of Gas	\$5.6060	\$10.2184	\$10.1417	\$10.0105	\$10.3665	84.92%	2.22%	3.56%	\$0.3560
Average Annual Use	143	143	143	143	143				
Average Annual Cost of Gas	\$801.66	\$1,461.23	\$1,450.26	\$1,431.50	\$1,482.41	84.92%	2.22%	3.56%	\$50.91
					October				
					PGA with		% Change		
	Last	Last Demand	October	October	Proposed	% Change	from Last	% Change	\$ Change
	Rate Case	Filing	PGA	PGA	Demand	from Last	Demand	from Oct.	from Oct.
Large General Service	GR-03-1372	M-06-XXXX	M-07-XXXX	2008	Changes	Rate Case	Filing	PGA	PGA
Commodity Cost	\$2.3640	\$7.3411	\$6.9558	\$6.5778	\$7.0000	196.11%		6.42%	\$0.4222
Demand Cost	\$1.3009	\$0.9362	\$1.2448	\$1.1201	\$1.0539	-18.99%	-15.34%	-5.91%	(\$0.0662)
Margin	\$1.9411	\$1.9411	\$1.9411	\$2.3126	\$2.3126	19.14%	19.14%	0.00%	\$0.0000
Total Cost of Gas	\$5.6060	\$10.2184	\$10.1417	\$10.0105	\$10.3665	84.92%	2.22%	3.56%	\$0.3560
Average Annual Use	6,838	6,838	6,838	6,838	6,838				
Average Annual Cost of Gas	\$38,333.83	\$69,873.42	\$69,348.94	\$68,451.80	\$70,886.13	84.92%	2.22%	3.56%	\$2,434.33
					October				
					PGA with		% Change		
	Last	Last Demand	October	October	Proposed	% Change	from Last	% Change	\$ Change
	Rate Case	Filing	PGA	PGA	Demand	from Last	Demand	from Oct.	from Oct.
SV Interruptible Service	GR-03-1372	M-06-XXXX	M-07-XXXX	2008	Changes	Rate Case	Filing	PGA	PGA
Commodity Cost	\$2.3640	\$7.3411	\$6.9558	\$6.5778	\$7.0000	196.11%	0.64%	6.42%	\$0.4222
Commodity Margin	\$0.8500	\$0.8500	\$0.8500	\$1.0127	\$1.0127	19.14%		0.00%	\$0.0000
Total Cost of Gas	\$3.2140	\$8.1911	\$7.8058	\$7.5905	\$8.0127	149.31%	2.65%	5.56%	\$0.4222
Average Annual Use	7,982	7,982	7,982	7,982	7,982				
Average Annual Cost of Gas	\$25,654.15	\$65,381.36	\$62,305.90	\$60,587.37	\$63,957.37	149.31%	2.65%	5.56%	\$3,370.00
					October				
					PGA with		% Change		
	Last	Last Demand	October	October	Proposed	% Change	from Last	% Change	\$ Change
	Rate Case	Filing	PGA	PGA	Demand	from Last	Demand	from Oct.	from Oct.
LV Interruptible Service	GR-03-1372	M-06-XXXX	M-07-XXXX	2008	Changes	Rate Case	Filing	PGA	PGA
Commodity Cost	\$2.3640	\$7.3411	\$6.9558	\$6.5778	\$7.0000	196.11%		6.42%	\$0.4222
Commodity Margin	\$0.2850	\$0.2850	\$0.2850	\$0.3395	\$0.3395	19.12%		0.00%	\$0.0000
Total Cost of Gas	\$2.6490	\$7.6261	\$7.2408	\$6.9173	\$7.3395	177.07%	1.36%	6.10%	\$0.4222
Average Annual Use	38,443	38,443	38,443	38,443	38,443				•
Average Annual Cost of Gas	\$101,835.51	\$293,170.16	\$278,358.07	\$265,921.76	\$282,152.40	177.07%	1.36%	6.10%	\$16,230.63
	Commodity	Commodity	Demand	Demand	Demand	Total	Total	Average	
	Change	Change	Change	Change	Change	Change	Change	Annual	
October Change Summary	\$/Mcf	%	\$/Mcf	\$/Mcf	%	\$/Mcf	%	Change	
General Service	\$0.4222	42.22%	(\$0.0591)		-5.91%	\$0.3560	3.56%	\$50.91	
Large General Service	\$0.4222	42.22%	(\$0.0591)		-5.91%	\$0.3560	3.56%	\$2,434.33	
SV Interruptible Service	\$0.4222	\$0.4222	\$0.0000	\$0.0000	0.00%	\$0.4222	5.56%	\$3,370.00	
LV Interruptible Service	\$0.4222	\$0.4222	\$0.0000	\$0.0000	0.00%	\$0.4222	6.10%	\$16,230.63	

Change in Costs due to November 1, 2008 Change in Entitlement Levels and Related Demand Costs NMU

	Oct. 2008	Nov. 2008	Entitlement	Oct. 2008				
		Entitlements	Change	Rate	Months	Oct. 2008 Total Annual Cost	Nov. 2008 Total Annual Cost	Total Annual Cost Change
NNG Pipeline	Entitlements	Littlements	Orlange	raic	WOUTHIS	Total / William Good	Total / Illindar Goot	0.1.2.1.30
TF 12 B (Max Rate)	2,954	2,653	-301	\$ 7.5776	12	\$268,610	\$241,240	-\$27,370
TF 12 V (Max Rate)	9,802	6,643		\$ 9.0926	12	\$1,069,506	\$724,824	-\$344,682
TF 5 (Max Rate)	1,991	5,451		\$ 15.1530	5	\$150,848	\$412,995	\$262,147
TFX 5 (Max Rate)	6,139	6,139		\$ 15.1530	5	\$465,121	\$465,121	\$0
NNG 3-Party demand	0,100	0,100	ŭ	Ψ 10.1000	ŭ	*,	* ,	•-
Producer Demand	\$0	\$0	\$0			\$0	\$0	\$0
Call Options Premium	\$1,213,913	#REF!	#REF!			\$1,213,913	\$2,024,198	\$810,285
Upstream Demand Costs	4 1, 2 10,0 10	,,,,_,,				, , ,		
SMS	2,172	2,143	-29	\$ 2.1800	12	\$56,820	\$56,058	-\$762
FDD Capacity	7,619	7,652		\$ 0.3567	1	\$2,718	\$2,729	\$12
FDD Reservation Charge	87,857	88,235		\$ 1.7140	12	\$1,807,043	\$1,814,812	\$7,769
Tenaska Storage	17,763	0	-17,763		1	\$35,588	\$0	-\$35,588
Viking Pipeline	11,100	· ·	,	+ =	·	*******	*-	, ,
FTA (AF0012)	7,966	7,966	0	\$ 3,4671	12	\$331,427	\$331,427	\$0
FT-A Zone 1-1 Backhaul	4,987	0	-4,987	•	5	\$68,222	\$0	-\$68,222
FT-A Zone 1-1 Backhaul	4,307	5,902	5,902	•	5	\$0	\$111,167	\$111,167
NNG TF12 Chisago (112495)	926	926		\$ 7.5776	12	\$84,181	\$84,181	\$0
NNG TFX12 Chisago (112486)	1,963	2,324		\$ 15.1530	12	\$356,944	\$422,533	\$65,589
NNG TFX 12 Chisago (112460)	2,089	2,089			5	\$100,588	\$100,588	\$0
NNG TF5 Chisago (112486)	2,069 563	2,069 563			5	\$42,672	\$42,672	\$0 \$0
GLGTPipeline	303	303	U	φ 10.1000	3	Ψ+2,012	Ψ+2,072	ΨΟ
FT-0016	10,130	10,130	0	\$ 3.4580	12	\$420,354	\$420,354	\$0
FT-0155-12	1,178	1,178	0	*	12	\$48,882	\$48,882	\$0
FT-0155-5	2,138	2,138	_	\$ 3.4580	5	\$36,966	\$36,966	\$0 \$0
FT-	4,500	4,000		•	12	\$186,732	\$165,984	-\$20,748
T-11	-,500 0	4,000		\$ 0.1894	1	\$0	\$0	\$0
T-11	859	0		\$ 10.2780	7	\$61,802	\$0	-\$61,802
Nexen PSO	009	0			1	\$0	\$0	\$0
CENTRA Pipeline	U	U	U	Ψ 0.5005	'	ΨΟ	ΨΟ	Ψ
CENTRA Fipeline CENTRA Transmission (\$cdn/103M3)				166.31600				
Centra Transmission	9,858	9,858	0		12	\$536,214	\$536,214	\$0
Union Balancing	8,358	8,358	0	•	12	\$45,783	\$45,783	\$0
Centra MN Pipelines	9,858	9,858	0		12	\$145,634	\$145,634	\$0
NEXEN STORAGE	3,000	5,000	U	Ψ 1.2011	12	Ψ140,004	Ψ170,001	Ψ
Storage charge	669,700	684,604	14,904	\$ 1.7700	1	\$1,185,369	\$1,211,749	\$26,380
TOTAL DEMAND						\$8,721,938	\$9,446,113	\$724,175
NMU's DE Attachment 4 page 2							\$5,900,861	
Difference=incorrect TFX Offpeak rate and CENTRA	A Boise rate						-\$3,545,252	•

Attachment 9

		NNG-NMU				
	1/20		HDD	Customer	1/20	
	Design Day HDD	Regression Intercept	Slope	Growth	Regression Load	Total
Peak	103	2,847	241	0.40%	21,704	21,791
Off Peak	55	2,847	241	0.40%	12,465	12,515
	_					
		GLGT-NMU				
	1/20		HDD	Customer	1/20	
	Design Day HDD	Regression Intercept	Slope	Growth	Regression Load	Total
Peak	106	672	269	0.40%	24,099	24,195
Off Peak	57	672	269	0.40%	4,446	12,641
		VGT-NMU				
	1/20		HDD	Customer	1/20	
	Design Day HDD	Regression Intercept	Slope	Growth	Regression Load	Total
Peak	109	2,909	126	0.40%	10,088	10,129
Off Peak	57	2,909	126	0.40%	6,113	6,138
	ı	F****				
		Centra-NMU				
	1/20		HDD	Customer	1/20	
	• •	Regression Intercept	Slope	Growth	Regression Load	Total
Peak	107	674	98	0.40%	7,581	7,611
Off Peak	57	674	98	0.40%	3,945	3,961
	ſ	Total-NMU				
	1/20	I Otal-INIVIO	HDD	Customer	1/20	
		Dograpaion Intercept			Regression Load	Total
Dook		Regression Intercept 7,102	Slope 734	Growth 0.40%	63,472	63,726
Peak Off Peak	0 0	7,102 7,102	734 734	0.40%	26,969	27,077
Oli Feak	U	1,102	134	0.40%	20,303	21,011

Attachment 10, Page 1 of 6

08/09 Winter Portfolio Plan - MERC NNG-NMU Hedging Plan

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Attachment 10, Page 2 of 6

08/09 Winter Portfolio Plan - MERC GLGT-NMU Hedging Plan

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Attachment 10, Page 3 of 6

08/09 Winter Portfolio Plan - MERC VGT-NMU Hedging Plan

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Total													993,103	100.00%

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Attachment 10, Page 4 of 6

08/09 Winter Portfolio Plan - MERC Centra-NMU Hedging Plan

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Total			L									TRADE SECRE	T DATA ENDS
Total												859,587	100.00%

^{***}PUBLIC DOCUMENT - TRADE SECRET DATA EXCISED***

Attachment 10 Page 5 of 6

MINNESOTA ENERGY RESOURCES

NNG WINTER PLAN (NMU) NOVEMBER, 2008 THROUGH MARCH, 2009

[TRADE SECRET DATA BEGINS

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Total

[TRADE SECRET DATA ENDS]

424,780

Attachment 10 Page 6 of 6

MINNESOTA ENERGY RESOURCES

GLGT/VGT/Centra WINTER PLAN (NMU) NOVEMBER, 2008 THROUGH MARCH, 2009

[TRADE SECRET DATA BEGINS

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PUBLIC DOCUMENT - CONTAINS TRADE SECRET DATA EXCISED

Attachment 11

Daily Total Throughput Data - July 1, 2007 through June 30, 2008 NNG

Base	7,200
Variable	190

			Variable	190
Date	100.00% Cloquet Adjusted HDD	100.00% Weighted Adjusted HDD	Actual Total Through- Put *	Estimated Through- Put **
7/4/07	4.4	44	4.040	0.074
7/1/07	11	11	1,919	9,271
7/2/07	9	9	2,371	8,996
7/3/07	1	1	2,017	7,392
7/4/07	0	0	1,310	7,200
7/5/07	0	0	1,432	7,200
7/6/07	0	0	1,318	7,200
7/7/07	0	0	1,185	7,200
7/8/07 7/9/07	0 0	0 0	1,507 1,729	7,200 7,200
7/10/07	9	9	1,729	8,918
7/11/07	7	7	2,049	8,443
7/12/07	7	7	2,167	8,465
7/13/07	12	12	1,720	9,415
7/14/07	1	1	1,438	7,409
7/15/07	4	4	2,094	7,998
7/16/07	2	2	2,609	7,591
7/17/07	0	0	2,187	7,200
7/18/07	0	0	2,367	7,200
7/19/07	3	3	1,791	7,804
7/20/07	8	8	1,833	8,766
7/21/07	1	1	1,291	7,400
7/22/07	2	2	1,649	7,599
7/23/07	0	0	1,934	7,200
7/24/07	0	0	1,814	7,200
7/25/07	0	0	1,800	7,200
7/26/07	0	0	1,429	7,200
7/27/07	0	0	1,360	7,200
7/28/07	0	0	1,233	7,200
7/29/07 7/30/07	0 0	0 0	1,494	7,200
7/30/07	0	0	1,617 1,696	7,200 7,200
8/1/07	0	0	2,255	7,200
8/2/07	ő	ő	2,366	7,200
8/3/07	ŏ	Ŏ	1,588	7,200
8/4/07	Ö	Ö	1,411	7,200
8/5/07	1	1	1,640	7,398
8/6/07	1	1	1,752	7,396
8/7/07	0	0	1,913	7,200
8/8/07	0	0	2,273	7,200
8/9/07	0	0	1,781	7,200
8/10/07	0	0	1,249	7,200
8/11/07	0	0	1,296	7,200
8/12/07	2	2	1,779	7,607
8/13/07	6	6	2,015	8,397
8/14/07	0	0	2,043	7,200
8/15/07	0	0	2,033	7,200
8/16/07 8/17/07	5	5	2,494	8,226
8/18/07	7 13	7 13	2,055 1,691	8,623 9,617
8/19/07	8	8	2,138	8,703
8/20/07	8	8	2,423	8,650
8/21/07	Ö	ő	2,232	7,200
8/22/07	Ō	ō	2,012	7,200
8/23/07	0	0	2,188	7,200
8/24/07	6	6	1,639	8,397
8/25/07	4	4	1,494	7,975
8/26/07	1	1	1,685	7,405
8/27/07	0	0	2,137	7,200
8/28/07	0	0	2,090	7,200
8/29/07	7	7	2,250	8,623
8/30/07	9	9	2,371	8,996
8/31/07	4	4	1,876	8,006
9/1/07 9/2/07	0 0	0 0	1,346	7,200 7,200
9/3/07	5	5	1,399 1,934	8,207
9/4/07	8	8	2,014	8,650
9/5/07	0	0	1,704	7,200
9/6/07	ő	ő	1,767	7,200
9/7/07	2	2	1,565	7,629
9/8/07	14	14	2,043	9,818
9/9/07	14	14	2,387	9,843
9/10/07	12	12	2,836	9,571
9/11/07	21	21	4,728	11,133
9/12/07	23	23	3,744	11,589
9/13/07	13	13	4,591	9,708
9/14/07	29	29	5,301	12,615
9/15/07	25	25	3,614	12,034
9/16/07	8 6	8	2,344	8,811 8 307
9/17/07 9/18/07	6 2	6 2	2,273 2,208	8,397 7,595
9/19/07	15	15	3,593	10,099
9/20/07	19	19	3,457	10,825
9/21/07	3	3	2,826	7,833
9/22/07	6	6	2,445	8,431

File Name: MERC 08 09 Demand-Filing Schedules Public (2).xls Worksheet Name: NMU11.1

	_	_		
9/23/07	0	0	1,902	7,200
9/24/07	0	0	2,199	7,200
9/25/07	12	12	4,079	9,499
9/26/07	18	18	3,772	10,592
9/27/07	10	10	3,393	9,176
9/28/07	16	16	2,973	10,221
9/29/07	11	11	2,080	9,271
9/30/07	4	4	2,739	8,036
10/1/07	9	9	2,791	8,996
10/2/07	5	5	3,414	8,226
10/3/07	9	9	2,610	8,857
10/4/07	2	2	2,558	7,603
10/5/07	15	15	3,782	10,016
10/6/07	18	18	2,963	10,574
10/7/07	5	5	2,183	8,179
10/8/07	11	11	4,198	9,271
10/9/07	26	26	7,509	12,226
10/10/07	27	27	6,867	12,307
10/11/07	30	30	6,602	12,986
10/12/07	28	28		
			5,980	12,573
10/13/07	24	24	4,707	11,806
10/14/07	27	27	5,555	12,387
10/15/07	24	24	6,219	11,749
10/16/07	24	24	6,314	11,749
10/17/07	17	17	4,914	10,422
10/18/07	15	15	4,480	10,126
10/19/07	18	18	5,181	10,635
10/20/07	16	16	4,487	10,250
10/21/07	18	18	6,185	10,656
10/22/07	25	25	6,967	11,876
10/23/07	22	22	8,337	11,418
10/24/07	27	27	8,070	12,235
	20			
10/25/07		20	6,310	11,063
10/26/07	24	24	5,738	11,789
10/27/07	29	29	7,274	12,634
10/28/07	34	34	7,262	13,584
10/29/07	17	17	5,501	10,362
10/30/07	15	15	4,634	9,993
10/31/07	22	22	8,954	11,424
11/1/07	29	29	7,079	12,689
11/2/07	24	24	6,746	11,709
11/3/07	29	29	7,125	12,638
11/4/07	27	27	7,295	12,387
11/5/07	35	35	10,847	13,755
11/6/07	38	38	11,791	14,371
11/7/07	38	38	11,246	14,441
11/8/07	38	38	10,549	14,441
11/9/07	36	36	9,765	14,108
11/10/07	34			
		34	9,616	13,721
11/11/07	26	26	8,100	12,140
11/12/07	23	23	8,162	11,549
11/13/07	23	23	9,030	11,532
		34		
11/14/07	34		11,412	13,592
11/15/07	39	39	11,531	14,656
11/16/07	36	36	10,608	14,048
11/17/07	39	39	11,024	14,515
11/18/07	39	39	10,725	14,519
11/19/07	31	31	10,215	12,999
11/20/07	36	36	11,209	14,112
11/21/07	46	46	13,347	15,978
11/22/07	55	55		17,574
			13,164	
11/23/07	49	49	12,141	16,464
11/24/07	42	42	11,518	15,142
11/25/07	37	37	10,812	14,160
11/26/07	43	43		15,408
			14,747	
11/27/07	63	63	16,704	19,113
11/28/07	57	57	17,146	18,068
11/29/07	65	65	18,610	19,643
1/30/07	68	68	18,328	20,128
12/1/07	57			
		57	14,758	17,975
12/2/07	51	51	15,312	16,934
12/3/07	61	61	16,106	18,746
12/4/07	54	54	16,880	17,471
12/5/07	70	70		20,415
			18,257	
12/6/07	63	63	17,267	19,170
12/7/07	68	68	19,101	20,128
12/8/07	72	72	19,324	20,966
12/9/07	73	73	19,659	21,032
12/10/07	62	62	16,057	18,971
12/11/07	58	58	16,561	18,176
2/12/07	59	59	15,320	18,382
2/13/07	59	59	18,003	18,463
2/14/07	68	68	18,922	20,185
2/15/07	66	66	15,919	19,649
2/16/07	54	54	15,190	17,365
2/17/07	52	52	14,185	
				17,069
2/18/07	47	47	12,958	16,092
2/19/07	43	43	13,147	15,302
2/20/07	39	39	11,641	14,652
2/21/07				
	35	35	10,566	13,784
2/22/07	49	49	14,924	16,464
2/23/07	64	64	15,849	19,322
2/24/07	55	55	14,026	17,568
2/25/07	51	51		
			12,991	16,976
2/26/07	42	42	13,543	15,104
2/27/07	57	57	15,410	18,076
2/28/07	57	57	14,756	18,068

12/29/07	50	50	14,290	16,789
12/30/07	48	48	14,008	16,290
12/31/07	54	54	15,989	17,365
1/1/08	71	71	19,532	20,726
1/2/08	69	69	18,201	
1/3/08	58	58	15,899	18,167
1/4/08	48	48	13,761	16,398
1/5/08	41	41	11,701	15,055
1/6/08	34	34	10,739	13,706
1/7/08	35	35	10,801	13,854
1/8/08	40	40	12,129	14,853
1/9/08	47	47	13,167	16,062
1/10/08	42	42	12,242	15,256
1/11/08	46	46	12,986	16,024
1/12/08	47	47	13,283	16,145
1/13/08	52	52	15,401	17,023
1/14/08	63	63	18,314	19,221
1/15/08	60	60	15,720	18,572
1/16/08	57	57	17,365	17,975
1/17/08	68	68	18,657	20,211
1/18/08	78	78	22,670	22,014
1/19/08	83	83	23,092	22,940
1/20/08	79	79	22,169	22,244
1/21/08	72	72	20,883	20,966
1/22/08	69	69	20,957	20,333
1/23/08	80	80	22,581	22,385
1/24/08	76	76	20,458	21,634
1/25/08	60	60	16,449	18,661
1/26/08	49	49	15,935	16,594
1/27/08	50	50	13,283	16,685
	35	35	12,320	13,846
1/29/08	68	68	24,010	20,088
1/30/08	88	88	23,829	
1/31/08 2/1/08	70 57	70 57	20,604	20,508
2/2/08	42	42	15,456	18,068
2/3/08	42	42	13,500	15,260
2/4/08	44	44	13,398	15,104
	45	45	13,023	15,579
2/5/08 2/6/08	54	54	14,791 15,377	15,818 17,460
2/7/08	55	55	15,085	17,673
2/8/08	49	49	14,190	16,603
2/9/08	71	71	21,993	20,606
2/10/08	89	89	24,412	24,171
2/11/08	78	78	19,684	22,073
2/12/08	59	59	17,617	18,463
2/13/08	62	62	18,525	18,971
2/14/08	73	73	20,870	20,994
2/15/08	81	81	20,433	22,562
2/16/08	56	56	13,511	17,772
2/17/08	49	49	14,777	16,480
2/18/08	69	69	19,964	20,310
2/19/08	78	78	21,201	21,974
2/20/08	78	78	20,898	21,974
2/21/08	75	75	18,399	21,359
2/22/08	58	58	15,590	18,247
2/23/08	52	52	13,259	17,080
2/24/08	47	47	12,675	16,178
2/25/08	48	48	14,409	16,312
2/26/08	56	56	15,966	17,859
2/27/08	56	56	15,903	17,874
2/28/08	58	58	13,754	18,159
2/29/08	53	53	15,791	17,232
3/1/08	57	57	13,480	18,076
3/2/08	46	46	14,576	15,898
3/3/08	62	62	17,467	19,009
3/4/08	60	60	14,858	18,661
3/5/08	57	57	16,324	18,076
3/6/08	70	70	19,694	20,454
3/7/08	73	73	18,843	21,032
3/8/08	65	65	16,289	19,485
3/9/08	58	58	14,970	18,266
3/10/08	56	56	12,552	17,870
3/11/08	33	33	9,834	13,470
3/12/08	36	36	10,994	14,112
3/13/08	31	31	9,800	12,999
3/14/08	41	41	12,221	15,003
3/15/08	46	46	12,532	15,978
3/16/08	47	47	11,765	16,092
3/17/08	42	42	11,497	15,104
3/18/08	34	34	10,971	13,658
3/19/08	39	39	11,045	14,656
3/20/08	47	47	11,176	16,178
3/21/08	45	45	11,770	15,712
3/22/08	38	38	10,281	14,441
3/23/08	46	46	12,283	15,860
3/24/08	48	48	11,282	16,312
3/25/08	37	37	11,022	14,222
3/26/08	41	41	11,741	15,003
3/27/08	46	46	11,554	16,007
3/28/08	44	44	9,670	15,533
3/29/08	34	34	9,150	13,706
3/30/08	30	30	9,359	12,843
3/31/08	39	39	11,760	14,515
4/1/08	36	36	9,863	14,097
4/2/08	40	40	9,775	14,724
4/3/08	27	27	7,833	12,330

File Name: MERC 08 09 Demand-Filing Schedules Public (2).xls Worksheet Name: NMU11.1

4/4/08	29	29	6,846	
4/5/08 4/6/08	28 37	28 37	7,638 11,332	
4/7/08	37	37	10,788	
4/8/08 4/9/08	37 30	37 30	10,055 9,314	
4/10/08	40	40	11,782	
4/11/08	45 20	45	12,012	
4/12/08 4/13/08	38 35	38 35	10,292 9,237	
4/14/08	36	36	7,813	14,048
4/15/08 4/16/08	19 20	19 20	5,544 6,750	
4/17/08	24	24	6,455	11,745
4/18/08 4/19/08	29 28	29 28	6,692 6,619	
4/20/08	29	29	7,133	
4/21/08 4/22/08	22 20	22 20	5,326	
4/23/08	16	16	5,877 4,099	10,962 10,250
4/24/08	19	19	6,455	10,825
4/25/08 4/26/08	28 41	28 41	9,878 11,641	12,473 15,066
4/27/08	37	37	9,477	14,160
4/28/08 4/29/08	36 31	36 31	9,565 7,472	14,048 13,041
4/30/08	24	24	6,269	11,832
5/1/08 5/2/08	28 30	28 30	6,957 9,201	12,444
5/3/08	29	29	7,183	12,881 12,663
5/4/08	22	22	6,512	11,304
5/5/08 5/6/08	24 18	24 18	6,014 4,292	11,832 10,559
5/7/08	18	18	4,888	10,544
5/8/08 5/9/08	24 23	24 23	5,290 4,524	11,701 11,547
5/10/08	27	27	6,254	12,387
5/11/08 5/12/08	27 29	27 29	6,155	12,262
5/12/08	23	23	7,274 6,977	12,792 11,509
5/14/08	18	18	4,245	10,656
5/15/08 5/16/08	16 8	16 8	3,918 2,980	10,250 8,676
5/17/08	16	16	4,427	10,179
5/18/08 5/19/08	22 25	22 25	4,982 4,855	11,342 11,897
5/20/08	16	16	4,370	10,179
5/21/08 5/22/08	16 18	16 18	3,651 3,400	10,250
5/23/08	18	18	3,400	10,656 10,574
5/24/08	16	16	2,566	10,307
5/25/08 5/26/08	9 17	9 17	2,263 4,770	8,978 10,453
5/27/08	23	23	3,930	11,505
5/28/08 5/29/08	17 13	17 13	2,750 2,936	10,392 9,594
5/30/08	11	11	2,915	9,214
5/31/08 6/1/08	10 5	10 5	2,327 2,215	9,047 8,198
6/2/08	14	14	3,004	9,769
6/3/08 6/4/08	17 19	17 19	3,766 3,809	10,335 10,791
6/5/08	15	15	3,480	10,731
6/6/08 6/7/08	12	12	2,700	9,385
6/8/08	0 5	0 5	1,987 2,059	7,200 8,207
6/9/08	6	6	2,261	8,420
6/10/08 6/11/08	16 25	16 25	3,195 4,679	10,193 11,965
6/12/08	12	12	2,427	9,478
6/13/08 6/14/08	11 4	11 4	2,391 2,021	9,328 8,028
6/15/08	8	8	2,549	8,663
6/16/08 6/17/08	11 7	11 7	2,905	9,290
6/18/08	7	7	2,383 2,342	8,443 8,597
6/19/08	8	8	2,250	8,766
6/20/08 6/21/08	0 2	0 2	1,886 1,853	7,200 7,610
6/22/08	7	7	2,006	8,623
6/23/08 6/24/08	3 0	3 0	1,879 1,832	7,781 7,200
6/25/08	0	0	1,864	7,200
6/26/08 6/27/08	0 2	0 2	1,852 1,885	7,200 7,505
6/28/08	2	2	1,885 1,868	7,595 7,618
6/29/08 6/30/08	1 4	1	1,902	7,415
0/00/00	4	4	1,861	8,013
Totals	10,748	10,748	3,060,935	4,677,246

^{*} Volumes include interruptible and transportation volumes except for transportation volumes that are not located behind MERC citygates.

* Volumes include interruptible and transportation volumes except for transportation volumes file Name: MERC 08 09 Demand-Filing Schedules Public (2).xls

Worksheet Name: NMU11.1

^{**} Design Model numbers are used to calculate firm volumes only

Attachment 12

Customer Counts by PGAC Class - July 1, 2007 through June 30, 2008	
by PGAC Class - July 1, 2007 through June 30,	8
by P	200
by P	June 30,
by P	7 through
by P	, 1, 200
by P	ss - July
by P	SAC Cla
Customer Coun	by P
Custome	er Coun
	Custom

	Tariff	20-Inc	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08	Feb-08	Mar-08	Apr-08	Mav-08	Ro-mil.
Rate	Rate	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	Average	_
Class	Designation	Customers	Customers	Customers	Customers	Customers	Customers	Customers	Customers	Customers	Customers		Customers
Residential w/ Heat	NM001	33,736	33,423	33,052	33,590	34,128	34,342	34,712	34,715	34,796	34,879	35.178	34.322
Residential w/o Heat	NM002	22	29	19	19	19	21	23	21	L	21		
Commercial-SV	NM050/070	2,305	2,292	2,277	2,294	2,310	2,310	2,320	2,	2,5	2,3	2,3	2,320
Commercial-LV	NM052/071	2,983	2.971	3.007	3.044	3.076	3.056	3.092	3.090	3.087	3.084	3 103	3.086
ndustrial-LV	NM150	11		11	1	1	11				2,00		2,00
SV-Joint	NM100/101	0	0	0	0	0	0	0	0	0	0	C	C
SV-Interruptible	NM125	141	135	131	131	133	136	138	141	130	130	132	139
V-Intermotible	NM200/201/210/ 211	7	α	α	α		٥		0		C		3
	NM500/512/501/							71	0		٥		0
	502/522/70A/71												
ransport	∢	37	37	37	37	37	37	37	37	37	37	17	17
	NM503/511/504/												
	506/508/74L/80												
ransport	∢	18	21	15	21	20	18	25	21	25	25	0	25
ransport	NM516	1	1	10	-	_	-	_	1	-		-	_
	NM507/513/514	23	24	23	23	23	24	105	41	24	52	52	23
Transport	NM72A/73A	0	0	0	0	0	0	0	0	0	0		0
Transport	NM510	0	0	0	0	0	0	0	0	0	0	0	0
ransport	NM515	0	0	0	0	0	0	0	0	0	0	0	0
Totai		39,284	38,980	38,590	39,179	39,765	39,964	40,476	40,411	40,462	40,619	40.868	39.972
												l	