Direct Testimony and Schedules
Harry W. John

Before the Minnesota Public Utilities Commission
State of Minnesota

In the Matter of the Application of Minnesota Energy Resources Corporation for Authority to Increase Rates for Natural Gas Service in Minnesota

Docket No. G011/GR-13-617

Exhibit _____

Sales Forecast, Fixed Charge Forecast and Weather Normalization of Sales

September 30, 2013

TABLE OF CONTENTS

I.	Introduction and Qualifications	2
II.	Proposed Sales Forecast	5
III.	Development of the Weather Data	21
IV.	Weather Normalization Models and Methodology	24
V.	Fixed Charge Counts	25
VI.	Daily Firm Capacity Nomination Forecast	26
VII.	Description of Technical Terms	27
VIII.	Exhibits	29
IX.	Conclusion	30

I. INTRODUCTION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Harry W. John. My business address is Integrys Energy Group, Inc. ("Integrys"), 700 North Adams Street, P.O. Box 19001, Green Bay, WI 54307-9001.

Q. BY WHOM ARE YOU EMPLOYED AND WHAT IS YOUR POSITION?

A. I am employed by Integrys Business Support ("IBS"), a wholly-owned subsidiary of Integrys. I am a Senior Load Forecaster in the Sales and Revenue Forecasting Department. Minnesota Energy Resources Corporation ("MERC") is a wholly-owned subsidiary of Integrys.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL, PROFESSIONAL, AND UTILITY BACKGROUND.

A. I hold a Ph.D. Degree in Economics from Kansas State University – Manhattan, Kansas. I also hold a Master of Arts Degree in Economics from the University of Central Missouri in Warrensburg, Missouri. My undergraduate Degree is in Economics, with a minor in Communications, from Rhode Island College in Providence, Rhode Island. In December of 2005, I was hired as a Senior Load Forecaster in the Sales and Revenue Forecasting Department at IBS. As a Senior Load Forecaster, I have carried out duties including various aspects of the development of the short-term and long-term electric and gas forecasts for Integrys' regulated utility subsidiaries, including MERC.

Q. FOR WHOM ARE YOU PROVIDING TESTIMONY?

A. I am providing testimony on behalf of MERC.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE ANY REGULATORY AGENCY?

A. Yes, I have. I have testified before the Arkansas Public Service Commission, the Security Exchange Commission ("SEC"), the United States Senate Banking Committee, and the Minnesota Public Utilities Commission in MERC's last rate case in Docket No. G007,011/GR-10-977.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my Direct Testimony is to provide an explanation of the methodology used to develop MERC's weather normalization procedure, sales forecast, fixed charge count forecast and daily firm capacity ("DFC") for the 2013 projected year and the proposed 2014 test year.

Q. DOES MERC HAVE ANY COMPLIANCE REQUIREMENTS RELATED TO THE SALES FORECAST IN THIS PROCEEDING?

A. Yes, we do. In the Minnesota Public Utilities Commission's ("Commission") September 14, 2009 Order After Reconsideration in Docket No. G007,011/GR-08-835, the Commission required MERC to:

1) Work with the Department of Commerce, Division of Energy Resources ("Department") and other interested parties in advance of its next rate case filing to ensure that it has adequate sales and revenue data, its forecasting technique is based on Industry standards, and it has sufficient evidence substantiating its data and forecasting technique;

2) Prepare summary spreadsheets that link together its test year sales and revenue estimates, the CCOSS and its rate design schedules, and provide these in its initial filing; and

3) Separate sales and revenue forecasts by individual rate classes, for each of its Purchased Gas Adjustment systems.

Additionally, in MERC's last rate case, Docket No. G007,011/GR-10-977, MERC agreed in to work with Department staff in preparing the sales forecast for its next rate case and to provide sales forecasting data 30 days prior to the filing of MERC's next rate case. See Direct Testimony of Adam Heinen at 76; Rebuttal Testimony of Harry John at 5.

Q. HAS MERC COMPLIED WITH THESE REQUIREMENTS?

A. Yes, we have. First, MERC has had informal discussions with the Department about MERC's data and new forecasting methodology described in Section II. PROPOSED SALES FORECAST of this testimony. The second filing requirement is discussed in the Direct Testimony of Seth S. DeMerritt. The third requirement is found in, Exhibit ___ (HWJ-1), Schedule E-1, which provides separate sales forecasts by individual revenue classes for each Purchased Gas Adjustment ("PGA") system. The revenue forecasts for each revenue class are included in the Direct Testimony and Exhibits of Gregory J. Walters. Additionally, MERC has provided sales forecast data to the Department and the Office of the Attorney General ("OAG") in advance of this filing as agreed in MERC's previous rate case. This filing was in the form of MERC responses to pre-filed data requests submitted to the Department on August 20th and the OAG on August 22, 2013.

II. PROPOSED SALES FORECAST

Q. PLEASE EXPLAIN HOW MERC'S PROPOSED 2014 GAS SALES FORECAST WAS DEVELOPED.

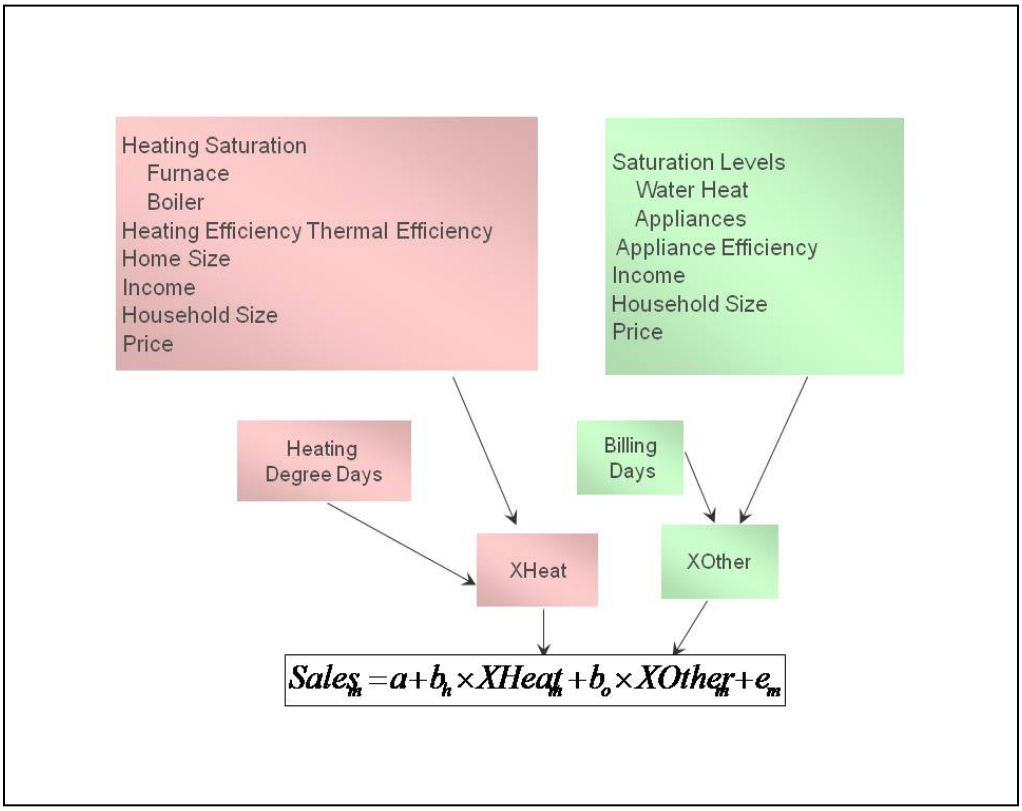
A. MERC'S proposed 2014 sales forecast was developed in MetrixND, and is included here as Exhibit _____ (HWJ-1), Schedule E-1. MetrixND is a statistical software package developed by Itron, a utility consulting firm. The model design considers billing sales, price, structural changes, appliance saturation and efficiencies trends. It then imposes a model structure through a Statistical Adjusted End-use ("SAE") specification. Instead of constructing a regression model with many explanatory variables, this approach constructs a model with two high level end-use variables: Heating and Other Use. The model structure then embeds forecast drivers into these two constructed variables. The forecast drivers include Heating Degree Days ("HDD"), price, income, household size (people per household), and end-use saturation and efficiency trends.

The estimated average use per customer regression model using the constructed end-use variables is:

$$AvgUse_t = B_0 + B_1 XHeat_t + B_2 XOther_t + e_t$$

The SAE model structure incorporates elasticity of demand, which is customers' behavior in response to changes in various explanatory variables, such as price, heating, cooling, income, etc. Customer behavior is based on research performed by Itron. MERC can focus on customer behavior by capturing the appropriate impacts of changes in the economic conditions and their interrelationship with other end-use variables. The graphic below explains in more detail the economic and various end-use saturation and efficiency variables developed from the Energy Information

Administration (EIA) energy efficiency variables.



The XHeat variable has two components:

$$XHeat_{y,m} = HeatIndex_{y} \times HeatUse_{y,m}$$

HeatIndex is expanded below:

$$HeatIndex_y = Structural\ Index_y \times \sum_{Type} Weight^{Type} \times \frac{\left(Sat_y^{Type} / Eff_y^{Type} \right)}{\left(Sat_{01}^{Type} / Eff_{01}^{Type} \right)}$$

HeatUse is expanded below:

$$HeatUse_{y,m} = \left(\frac{HDD_{y,m}}{HDD_{01}} \right) \times \left(\frac{HHSize_{y,m}}{HHSize_{01}} \right)^a \times \left(\frac{Income_{y,m}}{Income_{01}} \right)^b \times \left(\frac{Price_{y,m}}{Price_{01}} \right)^c$$

Where *Y:* represents year

M: represents month

a, b and c: represent elasticities

01: represents the base year 2001

Factors impacting XHeat are:

1. Heating Saturation

    Furnace

    Boiler

2. Heating Efficiency, Thermal Efficiency, Heating Saturation (Resistance, Heat Pump).

3. Home Size, Income, Household Size, Price and Heating Degree Days ("HDD").

Factors impacting XOther are:

1. Non-weather-sensitive end-use saturation and efficiency trends,
2. Number of billing days,
3. Household size and income
4. Price
5. Water Temperature

The explanatory variables employed in this forecast are:

1. Heating Degree Days ("HDD") variables, using 65°F as the base,
2. Trend variables,
3. Economic variables,
4. Demographic variables, and
5. Monthly binary variables.

The monthly binary variables were used to account for the strong differences in gas usage between the winter and summer months, other concurrencies not consistent with the data historical trends.

The forecast regression model specifications for each PGA's revenue class are as follows.

MERC-Consolidated		
Rate Class	**Dependent Variable**	**Independent Variable**
Residential	Residential Average Use	Constant X Heat Average Use Lagged one period XOther* Seasonal Moving Average ,SMA(1) Monthly Binary Variables (Jan, Feb, Oct, Nov, After Apr 2012)
Residential	Residential Customers	Economic Population Monthly Binary Variables (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct)
Small Commercial and Industrial	Small Commercial and Industrial Average use	X Heat X Other* Monthly Binary Variables (Feb, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, After Apr 2012)
Small Commercial and Industrial	Small Commercial and Industrial Customers	Constant Predicted Residential Customers Small C&I Customer Lagged one period Monthly Binary Variables (After May 2010, After Apr 2012)
Large Commercial	Large Commercial	Constant X VarRev**

and Industrial	and Industrial Sales	X Other* Moving Average Variable, MA(1) Seasonal Moving Average Variable, SMA(1)
Large Commercial and Industrial	Large Commercial and Industrial Customers	Constant Monthly Binary Variables (Jan, Feb, mar, Apr, Nov, Dec, After May 2010, After Apr 2012) Auto-Regressive Variable, AR(1)
Interruptible	Interruptible Sales	XVarRev** XOther* Auto-Regressive Variable, AR(1) Seasonal Auto-Regressive Variable, SAR(1)
Interruptible	Interruptible Customers	Economic Manufacturing Employment Variable Monthly Binary Variable (After Apr 2011)
Joint	Joint Sales	Constant Manufacturing Employment Normal Weather HDD 65 Monthly & Annual Binary Variables (Mar, Apr, After2012)
Joint	Joint Customers	Three Months-Moving Average
Transportation	Transportation Sales	Constant HDD 65 X Other* Auto-Regressive Variable, AR(1)
Transportation	Transportation Customers	Exponential Smoothing Model: Simple and Seasonal Trend Variables

*XOther represents Billing Day, Saturation, Water heat, Appliances, Efficiency, Income, Household Size and Real Natural Gas Price.**XVarRev represents: Normal HDD 65, Gross State Product, and Real Natural Gas Prices.

1

MERC-NNG		
Rate Class	**Dependent Variable**	**Independent Variable**
Residential	Residential Average Use	Constant X Heat Average Use Lagged one period X Other* Seasonal Moving Average Variable, SAR(1) Auto-Regressive Variable, AR(1)
Residential	Residential Customers	Economic Population Monthly Binary Variables (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct) Moving Average Variable, MA(1)
Small Commercial and Industrial	Small Commercial and Industrial Average use	Constant XHeat XOther* Monthly Binary Variables (Jun, Jul, Aug, Sep) Small C&I Average use Lagged (1)
Small Commercial and Industrial	Small Commercial and Industrial Customers	Constant Predicted Residential Customers Monthly Binary Variable (After May 2010, After Jun 2011, After Apr 2012) Non-Manufacturing Employment Variable Seasonal Auto-Regressive Variable, SAR(1) Seasonal Moving Average Variable, SMA(1)
Large Commercial and Industrial	Large Commercial and Industrial Sales	XVarRev** Monthly & Annual Binary Variables (Jan, Feb, Mar, Jun, Jul, Aug, Sep, Oct, After 2010)
Large Commercial and Industrial	Large Commercial and Industrial Customers	Constant Monthly Binary Variables (After May 2012, After Apr 2012) Manufacturing Employment, 12 Month Moving Average Auto-Regressive Variable, AR(1)

		Seasonal Auto-Regressive Variable, SAR(1)
Interruptible	Interruptible Sales	Monthly Binary Variables(Dec09, Jan, Feb) Non-Manufacturing Employment Seasonal Auto-Regressive Variable, SAR(1)
Interruptible	Interruptible Customers	Constant Monthly Binary Variable (After Apr 2011, After 2012) Moving Average Variable, MA(1)
Joint	Joint Sales	Manufacturing Employment Normal HDD 65 Monthly & Annual Binary Variables (Mar, Apr, After 2012)
Joint	Joint Customers	Three-Months Moving Average
Transportation	Transportation Sales	HDD 65 Monthly & Annual Binary Variables (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec, Year 2009) Moving Average Variable, MA(1)
Transportation	Transportation Customers	Exponential Smoothing Model: Simple and Seasonal Trend Variables

*XOther represents Billing Day, Saturation, Water Heat, Appliances, Efficiency, Income, Household Size and Real Natural Gas Price.

**XVarRev represents: Normal HDD 65, Gross State Product, and Real Natural Gas Prices.

Q. PLEASE EXPLAIN THE DIFFERENCES IN THE METHODOLOGY YOU PROPOSE IN THIS PROCEEDING COMPARED TO THE FORECASTING METHODOLOGY USED BY MERC IN THE LAST RATE CASE IN DOCKET NO. G007, 011/GR-10-977.

A. In Docket No. G007,011/GR-10-977, MERC conducted its sales forecast by PGA; namely NNG-PNG, NNG-GLGT, NNG-VGT, and NMU. Then, for each PGA the

forecast was conducted by rate schedule, namely General Services Class ("GS"), Joint Services class, Interruptible, and Transport Services. For each class MERC conducted a total sales model and a fixed charge count forecast.

However in Docket No. G007,011/GR-10-977 MERC was granted approval of its request to consolidate the four existing PGA's into two PGA's. The forecasts in this rate case were conducted based on the two PGA's and at the revenue class level within each PGA, namely Residential, Small Commercial & Industrial ("SC&I"), Large Commercial & Industrial ("LC&I"), Joint, Interruptible, Transport and Company use. In these forecasts, the Residential and SC&I models are based on a use-per-customer and customer count models. The remaining revenue classes are done at a total sales model. The Residential and SC&I use-per-customer models are Statistically Adjusted End-use models ("SAE") and include an energy efficiency index variable based on the Department of Energy-Energy Information Administration ("DOE-EIA"), end-use energy efficiency projections from the EIA's Annual Energy Outlook ("AEO"). A detailed description of the SAE model is explained under the subsection titled "PROPOSED SALES FORECAST" of this testimony.

Further, the historical data used in this forecast has been improved; MERC worked with Vertex, (the company MERC outsources it's customer billing) to build a new repository that ties to the general ledger but added variables called "Original Revenue Billing Date," and "Assigned Bill Cycle". MERC also added customer counts to the repository to enable MERC to avoid using fixed charge counts in its use-per-customer and customer

count models. These additions will assist MERC in obtaining revenue class sales data by PGA and will allow for the use of Original Revenue Billing Date and "Assigned Bill Cycle," which means that cancel rebills, prior period adjustments, etc. are put back to the original month and original billing cycle where the sales would have shown as if no bill corrections were needed. This exercise of adjusting the cancel rebills, prior period adjustments, etc., gives MERC the ability to perform the forecast as if every bill in the historical data was billed correctly.

In addition to the bill corrections that were of concern in MERC's last rate case, Docket No. G007,011/GR-10-977, there was also concern regarding MERC use of multiple data sources to prepare its sales forecast. Now that MERC has been under the operation and ownership of Integrys for over seven years, MERC has enough history to prepare its sales forecast using only the Integrys data and billing system. MERC's new models used historical billing data using Original Revenue Billing Date starting from January 2007 through January 2013 and did not use any Aquila era data.

Q. WERE THE 2012 HISTORIC SALES USED IN THIS FILING WEATHER NORMALIZED?

A. Yes, the 2012 actual calendar sales used in Exhibit___ (HWJ-1) Schedule E-1 are weather normalized based on the methodologies described in my testimony.

Q. HOW DOES THE FORECAST YOU PREPARED FOR MERC'S 2014 PROPOSED TEST YEAR SALES FOR THIS RATE FILING DIFFER FROM YOUR 2013 PROJECTED YEAR FORECAST?

A. The 2013 projected year forecast contains actual sales and fixed charge count data for the first six months of 2013, and forecasted sales and fixed charge counts for the second six months. The 2014 proposed test year contains a full 12 months of forecasted data for both sales and fixed charge counts. The last six months of 2013 and the forecast for 2014 were based on the same forecast.

Q. IF SALES OR CUSTOMER COUNT FORCAST FOR ANY CUSTOMER CLASS WERE CREATED IN WAYS OTHER THAN REGRESSION ANALYSIS, PLEASE PROVIDE A DESCRIPTION OF THE FORECAST METHOD.

A. MERC used regression analysis for all of its sales and customer forecasts except for Joint customer count forecasts. MERC used a three month moving average for the Joint customer count forecasts both for MERC-NNG and MERC-Consolidated. The number of Joint customers for these two PGA's has been stable and amounted to only 3 customers for NNG-MERC and 5 customers for MERC Consolidated.

Q. IF MERC INCLUDES, AS PART OF ITS REGRESSION MODELS, VARIABLES WITH A T-STATISTIC LESS THAN ONE, PLEASE PROVIDE A DETAILED EXPLANTION, FOR EACH INSTANCE, OF WHY MERC INCLUDES THESE VARIABLES IN ITS ANALYSIS.

A. MERC does not rely solely on the t-statistics as a measure of the overall fit of its forecasting models. MERC included variables with t-statistics less than one in its forecasting models because there are cases where the variable in question is the best or even the only way to reflect a factor that impacts the forecast period, and, therefore, inclusion of that variable improve the overall accuracy of the forecast. It is an unwarranted conclusion that the most statistically significant variable in a model is also the most important in explaining variation in the dependent variable. MERC uses the F-test—a method that includes more than one coefficient to determine the overall fit of the forecast equation rather than relying on the t-statistics of a few variables. The F-test is used most frequently in econometrics to test the overall significance of a model. MERC relies on other statistical tests such as the Log likelihood test, Akaike Information Criterion ("AIC"), Schwarz-Bayesian Criterion, and Auto Correlation Test, among others when possible.

Q. IF MERC DID NOT INCLUDE, AS PART OF ITS REGRESSION MODELS, VARIABLES WITH A T-STATISTICS GREATER THAN ONE, PLEASE PROVIDE A DETAILED EXPLANATION, FOR EACH INSTANCE, WHY MERC DID NOT INCLUDE THESE VARIABLES IN ITS ANALYSIS.

A. MERC included variables with t-statistics greater than one in its regression models. As stated earlier, MERC does not rely solely on the t-statistics but takes into account other tests such as the F- statistics, Log likelihood test, Akaike Information Criterion (AIC), Schwarz-Bayesian Criterion, and Autocorrelation Test among others when possible.

Q. IF ANY EXOGENOUS, OR POST REGRESSION, ADJUSTMENT WERE MADE TO THE SALES OR CUSTOMER COUNT MODEL OUTPUTS, PLEASE PROVIDE THE AMOUNT OF THE ADJUSTMENT AND THE JUSTIFICATION FOR THE ADJUSTMENT.

A. MERC made a post regression adjustment to its MERC-NNG Transport sales forecast, based on news reports of the closure of the Empire taconite mines. The adjustment was based on limited information and only impacted MERC-NNG Transport.

MERC made the following assumptions: the mine will curtail about half of its actual 2012 volumes of 22,000,000 therms, which will lead to a reduction of sales for MERC-NNG Transport by about 12,000,000 therms for the period March 2013 through December 2013.

The forecast assumed the mine will reduce its 2014 usage by two-thirds of its 2012 actual volumes, which will equate to about 15,000,000, therms. However, since the Empire mine is located in Michigan and outside of Minnesota's jurisdiction, the revenue generated by these sales is not included in the revenue deficiency in this case. This adjustment may have a minimal effect on the transmission allocator used on specific costs in this rate case filing.

Q. HOW DOES THIS PROCEDURE COMPARE TO THE PROCEDURE USED TO DEVELOP THE FIXED CHARGE COUNTS IN MERC'S LAST RATE CASE?

A. In Docket No. G007,011/GR-10-977, MERC conducted its forecast using fixed charge counts as a proxy for customers. The fixed charge counts were forecast by PGA; namely

NNG-PNG, NNG-GLGT, NNG-VGT, and NMU. Then, for each PGA, the fixed charge counts forecast was conducted by rate schedule, namely General Services Class (GS), Joint Services class, Interruptible, and Transport Services. The fixed charge counts forecasts were then spread to the various tariff classes using the last year of actual observation.

For this rate case filing, MERC uses customer counts within the two new PGA's, namely MERC-NNG and MERC- Consolidated by revenue class, namely Residential, SC&I, LC&I, Joint, Interruptible, and Transport.

MERC then used the growth rates from the customer counts forecast to grow the fixed charge counts projections with the 2012 fixed charge counts as the base year. To obtain monthly fixed charge counts forecasted at the tariff level for the various classes, we used the ratio of customer counts to fixed charge counts to get the monthly fixed charge forecasts spread.

MERC would also like to note that in its last rate case, Docket No. G007,011/GR-10-977, MERC's methodology of calculating fixed charge counts by dividing the fixed charge revenue by the approved fixed charge was criticized. Therefore MERC has changed its methodology for determining fixed charge counts to count the physical devices that are billed a customer charge in a given month. The number of days that the particular bill covers is then pro-rated as follows to develop the fixed charge counts;

1. 25-35 days, 1 full month – Fixed charge count = 1

2. 55-65 days, 2 full months – Fixed charge count = 2

3. 85-95 days, 3 full months – Fixed charge count = 3

4. Else prorate based on 30 day months.

Q. WHY IS CUSTOMER COUNT IN MERC'S ANNUAL JURISDICTIONAL REPORT DIFFERENT FROM THAT IN ITS HISTORY FOR 2012 USED IN ITS FORECAST?

A. There is a total MERC Corporate annual difference of 678 customer counts between what is included in MERC's Annual Jurisdictional filing for 2012, and what will be included as 2012 history in its sales forecast. The reason for any variance is that customer counts are calculated on a meter premise combination. The customer counts for Annual Jurisdictional Reports are formed from a detail level and summed up, which can cause some double counting if a customer were to switch rates in a given month, and the old account was not appropriately closed out. For example a customer can be counted twice, once in each rate schedule, because the customer would retain the same meter premise combination but would be included in two separate rates. The customer counts used for forecasting are compiled at a higher level, i.e. Residential, SC&I, and LC&I, and therefore this double counting effect does not occur.

Q. DID MERC MAKE ANY ADJUSTMENT OR CHANGES TO ITS BILLING CYCLES AND CALENDARIZATION PROCESS?

A. MERC did not make any adjustment to its billing cycles or to its calenderization process outside of correcting for cancel rebills.

Q. DID MERC MAKE ANY OTHER CHANGES TO ITS BILLING PROCESS?

A. MERC, working with Vertex, built a new repository of sales, fixed charge counts, and customer counts. The repository contains scrubbed historical data back to January 2007. The data within this new repository was used in preparing the sales forecast for this rate case filing. The new repository has all the billing data at the ratecode level for each bill cycle. Since the database includes the variables PGA and Pipeline MERC can add up the historical data by the old PGAs or the new PGAs. MERC also added a new variable to its repository called "Original Revenue Billing Date." This data does not mean a change in MERC's billing cycle data. If we query the repository by the "Actual Revenue Billing Date" it will tie to General Ledger and will include the cancel/rebills, etc. as they were booked. If MERC queries the repository by "Original Revenue Billing Date" it will have cancel/rebills, prior period adjustments, etc. moved back to the original month that the sales/fixed charges would have occurred if everything would have been billed and recorded correctly.

Historical sales and fixed charge counts used in the forecast as well as the historical sales that tie to the General Ledger were submitted as part of the Department's pre-filed data request 509. Data in this response includes both sales and fixed charge counts by bill cycle. Customer count data was not provided by bill cycle, because MERC's historical customer count data is generated as of a snapshot in time, and bill cycle data is not available in this snapshot.

Q. DO MERC "CUSTOMER" COUNTS EQUATE TO THE RELEVANT METER COUNTS?

A. MERC's customer counts do equate to its relevant meter counts. The definition of a Customer Count is defined as "The number of active and unique premise metering points that fall within a revenue class. A revenue class is a specific class of revenue that the utilities are required to report to the regulating commission. The classes differ by regulatory jurisdiction/utility. Revenue classes are defined based on groups of ECIS revenue codes and product codes. Customer counts need to be summarized by these revenue class groups."

Q. WHY IS THERE SUCH A LARGE AMOUNT OF CUSTOMERS SWITCHING FROM LC&I TO SC&I IN APRIL 2012?

A. To be compliant with MERC's tariffs, MERC performed an analysis of customer usage. It was determined that a large number of customers on the LC&I were not using the 1,500 therms annually to qualify for the LC&I tariff. Therefore, a switching of customers from LC&I to SC&I was done in April 2012.

III. DEVELOPMENT OF THE WEATHER DATA

Q. PLEASE EXPLAIN HOW THE WEATHER DATA WAS DEVELOPED TO WEATHER NORMALIZE SALES.

A. Raw weather data for seven regional weather stations (Bemidji, Cloquet, Fargo, International Falls, Minneapolis, Rochester, and Worthington) was received from Telvent DTN, a division of Schneider Electric. The data from individual weather stations were weighted to create variables for 'virtual weather stations' representative of the overall weather for each of the two MERC PGA's, MERC-Consolidated and MERC-NNG. The weather stations used for MERC-Consolidated were Bemidji, Cloquet, Fargo, and International Falls. The weather stations used for MERC-NNG were Bemidji, Cloquet, Minneapolis, Rochester, and Worthington.

The weightings were developed by first taking a snapshot of the number of Residential and Commercial and Industrial ("C&I") firm customers there were by zip code as of January 2012. Each zip code was assigned to a weather station based on the proximity to the weather station. The weightings were then calculated by taking the number of customers assigned to each weather station divided by the total number of customers. The resulting weightings were:

MERC-Consolidated:

37% Bemidji

24% Cloquet

14% Fargo

25% International Falls

MERC-NNG:

2% Bemidji

10% Cloquet

32% Minneapolis

44% Rochester

12% Worthington

Actual Degree Days were calculated by summing the hourly temperatures each day by weather station. Next, the daily average temperature was calculated for each weather station, and the number of HDD (using 65°F as the base) was determined. Finally, the weighting factors were applied to the HDD data for each day and weather station.

The calculation of normal HDDs used the same process as above. The normal HDD's were calculated by summing the normal hourly temperatures each day by weather station, based on the 20-year average weather from 1993-2012. Next, the normal daily average temperature was calculated for each weather station, and the number of HDD (using 65°F as the base) was determined. Finally, the weighting factors were applied to the Normal HDD data for each day and weather station.

Q. DO YOU PROPOSE A CHANGE IN THE WEATHER STATIONS USED TO CALCULATE MERC'S SALES FORECAST IN THIS PROCEEDING FROM THOSE USED IN MERC'S RATE CASE IN DOCKET NO. G007, 011/GR-10-977

A. The weather stations remain the same; however, the assigned weights are different because the weather stations are now assigned based on MERC's two new PGA's, MERC-NNG and MERC-Consolidated, rather than by MERC's old operating units NMU and PNG, as was the case in the last rate case Docket No. G007,011/GR-10-977.

IV. WEATHER NORMALIZATION MODELS AND METHODOLOGY

Q. PLEASE EXPLAIN THE PROCEDURE USED TO DEVELOP THE WEATHER NORMALIZED ADJUSTMENT TO SALES.

A. Normal weather was defined as the average over the 20 year period 1993-2012. This results in 7,810 HDD for MERC-NNG, and 9,301 HDD for MERC-Consolidated. The weather normalized sales are based on a mathematical model that multiplies the daily average actual sales of July and August of the previous year by the number of days in the month to determine the Total Base Load sales. The Total Base Load sales are then subtracted from actual monthly sales, resulting in Weather Sensitive Sales. The Weather Sensitive Sales are then divided by actual HDD to give the Weather Sensitive use per HDD. The final total Weather Normalized Sales is equal to Weather Sensitive use per HDD multiplied by the normal HDD for that month, plus Total Base Load Sales. The final Weather Sensitive Sales plus Base Load sales will equal actual sales if the Weather Adjustment is zero.

Q. DID MERC USE THIS PROCEDURE IN ITS LAST RATE CASE IN DOCKET NO. G007, 011/GR-10-977?

A. MERC did use this method in its previous rate case.

V. FIXED CHARGE COUNTS

Q. PLEASE EXPLAIN THE PROCEDURES USED TO DEVELOP FIXED CHARGE COUNTS FOR THE FORECASTED TEST YEAR.

A. The 2012 actual fixed charge counts, as shown on Exhibit _____ (HWJ-1), Schedule E-2, Page 1 of 1, together with the forecasted customer counts (see "II. PROPOSED SALES FORECAST", above) form the basis for the fixed charge count forecast. The projected fixed charge counts are allocated to the tariff rate class using the ratio of fixed charge counts to customer counts, with 2012 fixed charge counts as the base year. The forecasted customer growth rates are then applied to form the basis of the fixed charge counts projection. The final fixed charge counts are shown on Exhibit _____ (HWJ-1), Schedule E-2.

VI. DAILY FIRM CAPACITY ("DFC") NOMINATION FORECAST

Q. PLEASE EXPLAIN HOW TEST YEAR DFC NOMINATIONS WERE DEVELOPED.

A. The DFC nominations for 2014 are based on actual DFC nominations for 2012, as shown on Exhibit _____ (HWJ-1), Schedule E-3. No growth was forecasted for DFC nominations for the 2014 test year.

VII. DESCRIPTION OF TECHNICAL TERMS

An Autoregressive model ("AR"): This model relates the dependent variable say, for example, sales, to its own historical values. An autoregressive process is one whose behavior is determined by its own past values, plus an unpredictable shock. For both statistical forecasting and structural economic interpretation, economic time series are often modeled as autoregressions.

A Moving Average model ("MA"): This forecasting method is simply the averages of the last m observations. It is useful for time series with a slowly changing mean. That is, a moving average model is conceptually a linear regression of the current value of the series against previous (unobserved) white noise error terms or random shocks. In practice the moving average will provide a good estimate of the mean of the time series if the mean is constant or slowly changing.

A Seasonal Autoregressive model ("SAR"): Many economic and business variables are affected by seasonal factors. For example, power usage is highest in the months when temperatures are most extreme. The most common type of seasonality is variation due to the time of year, but other types of seasonality are also found in time series data. Incorporating seasonality in a forecast is useful when the time series has both trend and seasonal components.

An Exponential Smoothing technique: Smoothing always involves some form of local

averaging of data such that the nonsystematic components of individual observations cancel each other out. Thus, if there are outliers in the data (e.g., due to measurement errors), median smoothing typically produces smoother or at least more "reliable" curves.

VIII. EXHIBITS

Q. ARE THERE ANY OTHER EXHIBITS YOU WILL PRESENT?

A. Yes, I will submit the following exhibits.

Exhibit _____ (HWJ-1), Schedule E-1 provides detail regarding the 2012 Historic Year, the 2013 Projected Year, and the 2014 Proposed Test Year, including weather normalization, growth, and monthly schedules for sales.

Exhibit _____ (HWJ-1), Schedule E-2 shows the 2012 Historic Year, the 2013 Projected Year, and the 2014 Proposed Test Year annual fixed charge counts, monthly average fixed charge counts, and year end fixed charge counts.

Exhibit _____ (HWJ-1), Schedule E-3 shows the 2012 Historic Year, the 2013 Projected Year, and the 2014 Proposed Test Year Daily Firm Capacity Nominations.

IX. CONCLUSION

Q. IN YOUR OPINION, DOES THE SALES FORECAST PROVIDE A REASONABLE BASIS FOR ESTABLISHING RATES IN THIS CASE?

A. Yes, it does. The sales forecast is a reasonable estimate of the Projected and Proposed Test Years sales.

Q. DOES THIS CONCLUDE YOUR TESTIMONY ON THE SALES FORECAST, FIXED CHARGE FORECAST AND WEATHER NORMALIZATION OF SALES AT THIS TIME?

A. Yes, it does.

Minnesota Energy Resources Corporation
Proposed Test Year Throughput and Adjustments
For the 12 Months Ending, December 31, 2014

Line	Rate Class	2012 Historical Throughput (Therms)	2012 Weather Normalization (Therms)	Historical Adjusted Throughput (Therms)	2013 Growth (Therms)	2013 Forecast Throughput (Therms)	2014 Growth (Therms)	2014 Forecast Throughput (Therms)
	(col. 1)	(col. 2)	(col. 3)	(col. 4)	(col. 5)	(col. 6)	(col. 7)	(col. 8)
1	Residential	137,124,435	27,245,573	164,370,008	15,809,575	180,179,583	(14,777,726)	165,401,857
	C&I General Service Rate							
6	Small General Service	7,034,960	1,414,683	8,449,643	2,692,913	11,142,556	(945,403)	10,197,153
13	Large General Service	74,202,360	13,270,072	87,472,432	5,246,647	92,719,079	(8,184,973)	84,534,106
14	Total C&I General Service	81,237,320	14,684,755	95,922,075	7,939,560	103,861,635	(9,130,376)	94,731,259
	Interruptible & Joint							
15	Interruptible	28,020,652		28,020,652	2,581,538	30,602,190	(2,937,339)	27,664,851
22	Joint	388,885		388,885	62,875	451,760	(59,460)	392,300
23	Total Interruptible & Joint	28,409,537	0	28,409,537	2,644,413	31,053,950	(2,996,799)	28,057,151
24	Transportation	416,969,050		416,969,050	(35,785,018)	381,184,032	(6,540,722)	374,643,310
32	Total MERC-Minnesota	663,740,342	41,930,328	705,670,670	(9,391,470)	696,279,200	(33,445,623)	662,833,577
34	Company Use	174,040				248,773		145,224
37	Gas Loss and Unaccounted For	(1,067,660)				(1,949,641)		3,686,734
38	Sales Company Use + Lost Gas Total MERC	662,846,722				694,578,332		666,665,535

* Excludes sales data for Michigan taconites and South Dakota Farm Tap Customers

Minnesota Energy Resources Corporation
Proposed Weather Normalized Volumes & Revenues
For the 12 Months Ending, December 31, 2012

Line	Rate Class (col. 1)	2012 Weather Normalized Therms (col. 2)	Distribution Charge (col. 3)	2012 Weather Normalized Revenues (col. 4)
	Residential Rate			
1	Residential-NMU	3,539,334	$ 0.24189	$ 856,130
2	Residential-NNG	22,136,874	$ 0.24189	$ 5,354,688
3	Residential-Viking	652,265	$ 0.24189	$ 157,776
4	Residential-Great Lakes	917,100	$ 0.24189	$ 221,837
5	Total Residential	27,245,573		$ 6,590,432
	C&I General Service Rate			
6	Small General Service-NMU	235,010	$ 0.20637	$ 48,499
7	Small General Service-NNG	1,101,578	$ 0.20637	$ 227,333
8	Small General Service-Viking	32,458	$ 0.20637	$ 6,698
9	Small General Service-Great Lakes	45,637	$ 0.20637	$ 9,418
10	Large General Service-NMU	2,236,270	$ 0.21856	$ 488,759
11	Large General Service-NNG	10,303,358	$ 0.21856	$ 2,251,902
12	Large General Service-Viking	303,590	$ 0.21856	$ 66,353
13	Large General Service-Great Lakes	426,854	$ 0.21856	$ 93,293
14	Total C&I General Service	14,684,755		$ 3,192,255
	Interruptible & Joint			
15	Interruptible-NMU			$ -
16	Joint-NMU			$ -
17	Interruptible-NNG			$ -
18	Joint-NNG			$ -
19	Interruptible-Viking			$ -
20	Joint-Viking			$ -
21	Interruptible-Great Lakes			$ -
22	Joint-Great Lakes			$ -
23	Total Interruptible & Joint	0		$ -
	Transportation			
24	Peak Sales-NMU (Nov-Mar)			$ -
25	Off Peak Sales-NMU (Apr-Oct)			$ -
26	Peak Sales-NNG (Nov-Mar)			$ -
27	Off Peak Sales-NNG (Apr-Oct)			$ -
28	Peak Sales-Viking (Nov-Mar)			$ -
29	Off Peak Sales-Viking (Apr-Oct)			$ -
30	Peak Sales-Great Lakes (Nov-Mar)			$ -
31	Off Peak Sales-Great Lakes (Apr-Oct)			$ -
32	Total Transportation	0		$ -
	Summary			
33	MERC-NMU Total	6,010,614		$ 1,393,388
34	MERC-PNG Total	35,919,714		$ 8,389,299
35	Total MERC-Minnesota	41,930,328		$ 9,782,687

Minnesota Energy Resources Corporation
Actual Year Calender Sales
For the 12 Months Ending, December 31, 2012

All Units in Therms

Calender	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Total
MERC-NMU													
GS-Residential	5,454,421	5,277,611	3,429,266	1,472,339	1,325,575	(163,411)	178,385	307,254	396,127	1,547,035	3,287,230	5,158,729	27,670,561
GS-SC&I	345,102	385,861	220,307	61,970	80,172	(24,594)	6,092	19,539	21,652	73,784	200,131	472,996	1,863,012
GS-LC&I	3,483,182	3,469,039	2,385,912	891,560	1,110,336	32,463	282,195	526,293	400,230	1,075,972	2,111,037	3,034,714	18,802,933
SVI	1,059,711	990,528	886,246	217,875	333,649	(10,647)	94,198	72,423	123,716	250,203	795,700	1,008,523	5,822,125
LVI-TP	516,086	931,817	(146,193)	273,296	360,299	250,169	144,095	277,126	312,677	584,097	421,664	461,385	4,386,518
Transport-SVI	16,987	53,060	40,757	18,203	193,602	108,755	210,264	707,889	390,774	374,623	(1,539,466)	391,176	966,624
Transport-LVI TP	1,075,571	980,519	666,239	647,583	374,412	455,233	654,354	(30,484)	1,148,291	636,010	779,374	847,563	8,234,665
Transport-LVI ML	240,470	440,239	91,018	221,289	161,664	130,190	141,031	182,730	95,914	156,432	179,846	192,724	2,233,547
Transport-SVJ	213,696	179,489	204,822	127,941	(76,474)	24,220	(6,453)	5,915	16,548	37,592	53,965	91,911	873,172
Transport-LVJ TP	149,663	210,698	200,740	122,778	139,332	90,912	109,075	129,377	116,495	145,292	202,142	182,889	1,799,393
Transport-SLVI TP	3,142,496	2,625,738	4,011,370	2,668,262	3,425,839	2,434,526	2,483,836	4,223,720	2,396,917	3,889,673	3,700,952	2,158,124	37,161,453
MERC-NMU Total	15,697,385	15,544,599	11,990,484	6,723,096	7,428,406	3,327,816	4,297,072	6,421,782	5,419,341	8,770,713	10,192,575	14,000,734	109,814,003
Total Calendar Throughput (MERC-NMU)	15,697,385	15,544,599	11,990,484	6,723,096	7,428,406	3,327,816	4,297,072	6,421,782	5,419,341	8,770,713	10,192,575	14,000,734	109,814,003
Total Transportation @ Customer Meter (MERC-NMU)	4,838,883	4,489,743	5,214,946	3,806,056	4,218,375	3,243,836	3,592,107	5,219,147	4,164,939	5,239,622	3,376,813	3,864,387	51,268,854
Total GCR Sales @ Customer Meter (MERC-NMU)	10,858,502	11,054,856	6,775,538	2,917,040	3,210,031	83,980	704,965	1,202,635	1,254,402	3,531,091	6,815,762	10,136,347	58,545,149
Company Use Gas (MERC-NMU)	7,550	3,201	5,951	13,779	1,561	17,307	131	148	17,630	8,790	10,633	12,237	98,918
Gas Lost & Unaccounted For (MERC-NMU)	403,009	(8,758)	(615,056)	237,512	(114,016)	(10,162)	(113,274)	(55,673)	(216,469)	(14,353)	161,297	316,654	(29,290)
Total GCR Gas @ Gate Station (MERC-NMU)	11,269,061	11,049,299	6,166,433	3,168,331	3,097,576	91,125	591,822	1,147,110	1,055,563	3,525,528	6,987,692	10,465,238	58,614,777

	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Total
MERC-PNG													
GS-1 Residential	21,440,913	20,649,099	14,365,561	517,538	4,840,725	509,025	1,944,230	2,067,584	2,326,367	5,050,675	11,649,238	17,632,419	102,993,374
GS-1 SC&I	997,849	987,117	638,873	(104,930)	141,435	(7,655)	34,196	62,634	82,527	265,304	482,291	970,966	4,550,607
GS-1 LC&I	9,778,697	9,664,868	6,913,706	523,204	2,132,135	541,511	1,228,213	1,167,502	1,683,926	2,843,386	5,013,777	7,876,623	49,367,548
SVI - 1	1,936,773	1,900,310	1,520,100	(194,254)	648,778	141,989	229,894	193,759	370,509	1,284,574	1,160,874	1,711,428	10,904,734
LVI - 1 TP	594,476	547,187	487,944	224,711	262,906	243,897	206,828	614,373	4,343	1,092,975	297,935	602,224	5,179,799
LVI - 1 ML	(815)	1,926	1,572	627	(538)	(121)	29	68	44,367	3,524	30,307	(10,828)	70,118
SVJ - 1	22,620	30,201	20,898	3,853	10,421	16,920	(2,480)	256	3,114	12,667	10,709	25,081	154,260
Transport - SVI-1	84,915	65,746	81,822	74,376	69,932	52,146	70,179	56,606	60,553	66,740	61,038	51,937	795,990
Transport - LVI-1 TP Exempt		3,673,741	1,581,523	2,008,124	1,577,021	2,406,010	2,371,622	3,037,240	1,771,098	1,465,994	1,861,556	1,710,170	23,464,099
Transport - LVI-1 TP Applicable	3,994,412	826,296	2,371,673	1,359,322	2,204,451	2,087,554	3,304,334	3,633,868	2,043,604	2,422,836	5,082,161	478,058	29,808,569
Transport - LVI-1 ML	224,477	177,595	216,331	185,763	121,901	86,876	115,928	118,924	84,866	98,578	176,179	214,219	1,821,637
Transport - SVJ-1	182,008	139,379	157,912	27,621	(11,515)	(3,775)	1,461	35,245	19,088	36,052	55,226	156,162	794,864
Transport - LVJ-1 TP	1,558,830	1,982,556	1,642,249	1,082,660	1,126,001	991,250	686,535	1,321,656	13,488	1,068,677	1,609,867	1,302,112	14,385,881
Transport - SLVI Exempt													-
Transport - SLVI Applicable	21,528,199	15,884,132	18,923,797	13,744,139	13,266,629	12,950,578	13,823,586	16,500,150	14,129,520	15,875,592	17,547,373	21,570,698	195,744,393
Transport - SLVJ	2,222,847	1,084,584	1,835,607	2,607,146	9,159,398	8,213,265	5,736,124	6,695,284	223,490	3,067,756	4,208,093	4,680,011	49,733,605
Transport for Resale	38,932	39,062	27,368	2,508	10,521	(6,284)	852	1,784	2,188	7,431	27,872	34,480	186,714
GS-4 Residential	535,502	584,185	416,869	49,475	100,108	(10,050)	23,301	32,107	38,054	162,482	349,161	543,254	2,824,448
GS-4 SC&I	42,719	58,011	34,081	(1,400)	7,182	891	1,905	2,557	3,799	12,381	31,891	63,831	257,848
GS-4 LC&I	381,105	425,937	311,710	81,731	90,393	40,188	61,649	64,631	67,652	130,129	242,910	384,380	2,282,415
SVI - 4	112,687	115,241	91,357	15,507	30,821	10,073	19,774	16,853	20,615	34,691	76,795	115,268	659,682
LVI - 4	172,140	190,133	131,212	21,401	18,868	7,580	8,655	18,307	8,464	37,004	117,250	152,968	883,982
SVJ - 4	16,480	13,010	16,249	1,289	(6,042)	7,336	(4,871)	(101)	297	3,542	11,713	13,063	71,965
Transport - SVI-4	125,397	112,147	119,428	52,869	187,120	68,754	67,467	64,480	62,936	94,274	93,589	182,260	1,230,721
Transport-SVJ-4													-
Transport - LVJ-4	82,559	117,708	135,125	66,657	86,994	81,886	66,331	80,640	97,415	75,937	117,091	146,868	1,155,211
GS-5 Residential	690,876	744,898	508,859	114,025	150,937	(33,367)	10,950	29,846	49,342	219,520	434,966	715,200	3,636,052
GS-5 SC&I	62,457	81,882	47,715	6,214	7,775	(4,938)	1,464	2,927	4,013	15,485	50,212	88,287	363,493
GS-5 LC&I	709,660	660,542	492,529	113,579	179,957	26,547	70,055	88,094	102,317	214,385	428,454	663,345	3,749,464
SVI - 5	19,305	25,284	17,353	1,693	6,360	321	2,565	88	2,475	2,645	14,172	21,433	113,694
SVJ - 5	11,801	22,263	25,132	13,542	11,037	4,868	6,305	5,619	4,753	12,581	21,748	23,011	162,660
Transport LVI - 5 TP	60,085	46,470	51,751	43,330	12,073	16,164	17,508	16,812	22,688	24,980	35,033	45,865	392,759
Transport LVJ - 5 TP	195,256	181,405	152,047	41,414	72,910	(63,850)	13,187	17,402	20,374	28,585	130,626	179,994	969,350
Transport - SVI-5	47,111	43,509	32,222	10,230	21,422	9,080	8,562	6,844	9,752	23,809	28,905	52,759	294,205
Transport LVJ - ML (3M Cottage Grove)	522,018	778,376	631,259	697,349	664,500	184,562	123,245	454,804	632,702	599,274	487,302	648,804	6,424,195
Transport LVI - TP (Pro Corn)	1,095,935	822,233	1,092,118	1,155,634	988,150	1,214,647	948,069	950,291	1,074,020	889,191	1,134,188	1,034,320	12,398,796
Transport LVI - TP (Agra Resources)	1,193,354	942,076	1,049,102	961,326	889,628	(991,610)						2,278,892	6,322,768
Transport LVI - TP (Flex Agra Resources)	-	-	-	-	-	1,583,480	1,745,517	57,731	1,845,440	926,540	1,174,029	(1,133,760)	6,198,977
Transport LVJ - TP (Swift)	687,989	636,301	758,306	584,794	513,776	489,985	482,196	466,535	623,989	672,176	770,458	751,728	7,437,553
Transport LVJ - TP (Spectro)	367,643	342,621	335,324	316,283	349,142	217,297	368,068	326,597	286,687	152,894	256,364	472,727	3,791,647
Transport LVI - TP	293,008	289,834	270,321	120,056	175,797	132,401	138,690	124,049	154,382	142,178	186,470	321,076	2,348,262
Taconite Mines (Michigan)	6,363,797	7,280,333	7,595,646	7,183,575	12,286,808	8,597,118	5,453,260	3,829,853	7,278,825	10,306,119	15,326,573	14,466,932	105,968,839
Pooling													-
MERC-PNG Total	78,394,017	72,168,198	65,102,651	33,712,981	52,405,917	39,811,869	39,385,383	42,163,899	35,274,039	49,443,563	70,794,396	81,238,265	659,895,178
Total Calendar Throughput (MERC-PNG)	78,394,017	72,168,198	65,102,651	33,712,981	52,405,917	39,811,869	39,385,383	42,163,899	35,274,039	49,443,563	70,794,396	81,238,265	659,895,178
Total Transportation @ Customer Meter (MERC-PNG)	34,504,975	28,185,771	31,465,285	25,141,601	31,485,851	29,719,736	30,089,461	33,966,942	23,178,280	27,739,494	35,043,420	35,179,380	365,700,196
Total GCR Sales @ Customer Meter (MERC-PNG)	37,525,245	36,702,094	26,041,720	1,387,805	8,633,258	1,495,015	3,842,662	4,367,104	4,816,934	11,397,950	20,424,403	31,591,953	188,226,143
Company Use Gas (MERC-PNG)	11,373	16,915	13,437	6,338	5,276	2,536	1,332	505	920	1,892	5,135	9,463	75,122
Gas Lost & Unaccounted For (MERC-PNG)	2,012,658	(40,662)	(3,339,465)	1,191,003	(804,364)	(121,568)	(1,038,224)	(365,535)	(1,408,982)	(80,912)	1,120,321	1,837,359	(1,038,370)
Total GCR Gas @ Gate Station (MERC-PNG)	39,549,276	36,678,347	22,715,692	2,585,146	7,834,170	1,375,983	2,805,770	4,002,074	3,408,872	11,318,930	21,549,859	33,438,775	187,262,895
Total Calendar Throughput (Total MERC)	94,091,402	87,712,797	77,093,135	40,436,077	59,834,323	43,139,685	43,682,455	48,585,681	40,693,380	58,214,276	80,986,971	95,238,999	769,709,181
Total Transportation @ Customer Meter (Total MERC)	39,343,858	32,675,514	36,680,231	28,947,657	35,704,226	32,963,572	33,681,568	39,186,089	27,343,219	32,979,116	38,420,233	39,043,767	416,969,050
Total GCR Sales @ Customer Meter (Total MERC)	48,383,747	47,756,950	32,817,258	4,304,845	11,843,289	1,578,995	4,547,627	5,569,739	6,071,336	14,929,041	27,240,165	41,728,300	246,771,292
Company Use Gas (Total MERC)	18,923	20,116	19,388	20,117	6,837	19,843	1,463	653	18,550	10,682	15,768	21,700	174,040
Gas Lost & Unaccounted For (Total MERC)	2,415,667	(49,420)	(3,954,521)	1,428,515	(918,380)	(131,730)	(1,151,498)	(421,208)	(1,625,451)	(95,265)	1,281,618	2,154,013	(1,067,660)
Total GCR Gas @ Gate Station (Total MERC)	50,818,337	47,727,646	28,882,125	5,753,477	10,931,746	1,467,108	3,397,592	5,149,184	4,464,435	14,844,458	28,537,551	43,904,013	245,877,672

Minnesota Energy Resources Corporation
Projected Calender Sales
For the 12 Months Ending, December 31, 2013

All Units in Therms

Calender	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Total
MERC-NMU													
GS-Residential	6,743,439	6,198,568	4,200,240	2,813,432	3,034,708	566,939							23,557,326
GS-SC&I	481,202	578,026	336,698	254,047	221,050	(89,246)							1,781,777
GS-LC&I	4,224,200	3,833,223	3,072,288	2,079,045	2,079,767	(405,948)							14,882,575
SVI	1,167,229	1,145,761	1,087,343	869,865	30,658	160,148							4,461,004
LVI-TP	546,740	311,975	807,913	148,692	430,403	267,661							2,513,384
Transport-SVI	324,621	139,932	203,950	89,965	185,321	22,840							966,629
Transport-LVI TP	732,366	1,089,835	737,192	669,500	773,920	441,932							4,444,745
Transport-LVI ML	297,102	306,338	461,350	256,752	280,510	173,913							1,775,965
Transport-SVJ	84,821	124,787	77,897	60,350	51,491	43,748							443,094
Transport-LVJ TP	249,831	251,605	238,695	169,764	162,581	81,533							1,154,009
Transport-SLVI TP	4,032,337	4,306,087	4,090,483	4,609,805	2,403,185	4,820,727							24,262,624
MERC-PNG													
GS-1 Residential	26,621,923	24,763,728	19,358,271	13,943,297	7,739,230	(1,828,538)							90,597,911
GS-1 SC&I	1,710,232	1,685,171	1,188,125	858,651	335,462	(284,800)							5,492,841
GS-1 LC&I	11,596,513	11,540,199	9,199,742	6,663,751	3,402,643	(634,978)							41,767,870
SVI - 1	2,222,804	2,282,874	1,868,289	576,436	2,292,094	(892,531)							8,349,966
LVI - 1 TP	635,561	617,996	379,589	504,132	368,573	132,895							2,638,746
LVI - 1 ML	1,360	3,412	2,359	1,895	286	(397)							8,915
SVJ - 1	14,655	39,850	23,541	20,498	47,664	(15,939)							130,269
Transport - SVI-1	46,379	60,884	82,728	44,367	67,518	96,948							398,824
Transport - LVI-1 TP Exempt	1,894,995	2,213,123	2,039,466	1,650,224	1,423,524	2,504,004							11,725,336
Transport - LVI-1 TP Applicable	3,024,620	3,089,221	2,328,989	2,293,839	3,271,466	1,345,774							15,353,909
Transport - LVI-1 ML	227,604	261,639	239,250	234,675	152,451	69,798							1,185,417
Transport - SVJ-1	173,762	207,706	169,868	118,503	66,316	20,275							756,430
Transport - LVJ-1 TP	1,367,203	1,557,973	1,369,407	1,223,966	396,752	372,904							6,288,205
Transport - SLVI Exempt	19,509,792	17,483,411	18,290,707	16,355,181	13,366,660	13,836,941							98,842,692
Transport - SLVI Applicable	(59,975)	7,733	26,897	197,310	(88,563)	176,105							259,507
Transport - SLVJ	(1,151,917)	3,753,163	68,372	1,614,903	2,596,963	2,058,953							8,940,437
Transport for Resale	44,688	34,475	37,504	25,563	18,217	(5,334)							155,113
GS-4 Residential	734,515	579,007	575,542	282,581	353,886	(143,529)							2,382,002
GS-4 SC&I	89,482	86,256	62,779	44,217	22,094	(12,887)							291,941
GS-4 LC&I	505,112	465,978	377,156	296,460	135,594	(7,049)							1,773,251
SVI - 4	131,813	112,014	101,056	68,615	45,993	(2,290)							457,201
LVI - 4	210,876	233,084	169,378	111,619	89,458	53,419							867,834
SVJ - 4	17,935	17,052	12,208	(477)	11,465	(2,742)							55,441
Transport - SVI-4	124,431	187,192	162,276	118,567	75,791	46,471							714,728
Transport-SVJ-4													-
Transport - LVJ-4	132,573	97,992	184,749	141,098	118,096	68,804							743,312
GS-5 Residential	938,587	801,404	602,156	473,963	427,046	(117,753)							3,125,403
GS-5 SC&I	154,548	126,276	95,295	76,812	30,643	(19,668)							463,906
GS-5 LC&I	816,273	761,654	590,075	511,240	217,550	(140)							2,896,652
SVI - 5	29,693	28,331	19,633	13,788	9,174	(2,558)							98,061
SVJ - 5	24,986	26,286	15,353	19,687	16,391	6,360							109,063
Transport LVI - 5 TP	52,758	42,948	42,661	35,299	33,823	17,368							224,857
Transport LVJ - 5 TP	223,326	179,499	189,251	115,764	78,322	(59,860)							726,302
Transport - SVI-5	20,339	88,593	20,541	31,877	25,268	10,695							197,313
Transport LVJ - ML (3M Cottage Grove)	496,523	390,689	468,395	505,205	493,142	652,152							3,006,106
Transport LVI - TP (Pro Corn)	978,634	932,797	989,300	993,377	895,396	1,220,866							6,010,370
Transport LVI - TP (Agra Resources)	970,625	820,983	1,205,782	1,195,033	1,274,608	(1,259,370)							4,207,661
Transport LVI - TP (Flex Agra Resources)	-	-	-	-	-	2,357,025							2,357,025
Transport LVJ - TP (Swift)	680,263	604,014	775,135	693,561	476,115	482,451							3,711,539
Transport LVJ - TP (Spectro)	378,441	279,137	350,468	259,536	(308,340)	-							959,242
Transport LVI - TP	296,639	194,661	118,539	76,622	125,062	(81,700)							729,823
Taconite Mines (Michigan)	13,082,729	6,984,399	13,373,914	8,388,551	4,161,237	7,291,527							53,282,357
GS-1 Small C&I (South Dakota)													-
Pooling													-
Total MERC	107,855,188	101,928,941	92,488,795	72,801,403	53,918,664	33,533,919	-	-	-	-	-	-	462,526,910

	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Total
NNG SALES													
GS-NNG Residential Sales							2,750,551	2,685,371	4,629,873	7,699,947	13,515,160	20,864,967	52,145,869
GS-NNG SC&I Sales							18,154	(12,990)	35,637	264,460	725,866	1,271,959	2,303,086
GS-NNG LC&I Sales							1,470,044	1,442,629	1,787,839	4,129,166	5,987,589	8,951,164	23,768,431
SVI-NNG Sales							380,762	319,683	418,296	856,679	1,186,416	1,534,424	4,696,260
LVI-NNG Sales							294,225	482,866	311,464	663,124	545,550	603,221	2,900,450
SVJ-NNG Sales							8,071	8,149	9,212	11,596	14,315	17,376	68,719
CONSOLIDATED SALES													
GS-CONSOLIDATED Residential Sales							213,471	272,699	500,411	1,242,240	2,385,458	3,756,793	8,371,072
GS-CONSOLIDATED SC&I Sales							23,380	15,021	32,908	102,464	237,499	397,733	809,005
GS-CONSOLIDATED LC&I Sales							336,305	388,047	706,001	1,248,863	2,037,491	2,913,593	7,630,300
SVI-CONSOLIDATED Sales							99,334	77,518	103,655	164,461	385,013	577,226	1,407,207
LVI-CONSOLIDATED Sales							189,639	225,237	311,286	467,736	466,176	543,088	2,203,162
SVJ-CONSOLIDATED Sales							304	873	6,293	16,077	26,543	38,178	88,268
NNG TRANSPORT													
SVI-NNG Transport							139,417	352,067	378,270	365,510	210,945	86,317	1,532,526
LVI-NNG Transport - CIP Applicable							2,273,057	2,638,738	2,389,669	2,470,312	3,448,418	2,053,790	15,273,984
LVI-NNG Transport - CIP Exempt							1,782,806	2,102,933	1,932,976	1,716,823	1,619,117	1,492,764	10,647,419
SVJ-NNG Transport							18,705	17,726	17,658	27,434	36,836	88,294	206,653
LVJ-NNG Transport							732,073	892,830	502,459	764,559	1,055,894	979,897	4,927,712
SLVI-NNG Transport-CIP Exempt							11,005,544	11,052,739	12,743,651	13,923,936	14,205,801	15,750,669	78,682,340
SLVI-NNG Transport-CIP Applicable							154,387	1,122,576	117,663	332,757	135,264	136,073	1,998,720
SLVJ-NNG Transport-CIP Exempt							5,090,014	5,491,978	2,860,404	2,857,468	2,901,691	3,694,295	22,895,850
Transport for Resale							1,988	1,714	1,894	4,459	14,084	21,119	45,258
LVJ-NNG Flex Transport (Cust "A")							224,037	293,040	435,653	511,395	453,474	488,542	2,406,141
LVI-NNG Flex Transport (Cust "B")							837,112	800,193	907,932	899,260	916,316	872,388	5,233,201
LVI-NNG Flex Transport (Cust "C")												945,467	945,467
LVI-NNG Flex Transport (Cust "D")							819,997	903,376	1,031,605	910,710	972,346		4,638,034
LVJ-NNG Flex Transport (Cust "E")							411,275	392,999	487,499	572,987	604,344	604,229	3,073,333
LVJ-NNG Flex Transport (Cust "F")							260,875	261,352	268,917	215,214	212,833	299,082	1,518,273
LVI-NNG Flex Transport (Cust "G")							120,778	110,313	127,890	134,504	144,271	202,999	840,755
CONSOLIDATED TRANSPORT													
SVI-CONSOLIDATED Transport							144,842	123,740	112,793	149,511	176,236	291,163	998,285
LVI-CONSOLIDATED Transport							743,786	419,066	808,443	752,091	831,854	1,066,849	4,622,089
SVJ-CONSOLIDATED Transport							21,157	12,613	14,099	23,509	32,923	63,428	167,729
LVJ-CONSOLIDATED Transport							207,632	200,252	213,632	219,669	321,326	476,245	1,638,756
SLVI-CONSOLIDATED Transport-CIP Exempt							2,701,601	3,179,621	2,789,954	3,130,237	3,340,828	3,208,052	18,350,293
SLVI-CONSOLIDATED Transport-CIP Applicable													-
													-
Taconite Mines (Michigan)							6,919,075	5,761,901	6,828,848	7,301,102	8,247,756	9,390,425	44,449,107
													-
Total MERC	107,855,188	101,928,941	92,488,795	72,801,403	53,918,664	33,533,919	40,394,398	42,036,870	43,824,784	54,150,260	67,395,633	83,681,809	794,010,664
Company Use Gas	44,030	44,293	36,219	23,640	39,235	15,415	4,465	4,364	4,807	6,487	8,757	17,061	248,773
Gas Lost & Unaccounted For	1,172,414	(985,127)	938,858	(131,634)	(1,540,656)	(3,061,144)	201,994	210,206	219,148	270,784	337,022	418,494	(1,949,641)
Total GCR Gas @ Gate Station	109,071,632	100,988,107	93,463,872	72,693,409	52,417,243	30,488,190	40,600,857	42,251,440	44,048,739	54,427,531	67,741,412	84,117,364	792,309,796
Michigan	13,082,729	6,984,399	13,373,914	8,388,551	4,161,237	7,291,527	6,919,075	5,761,901	6,828,848	7,301,102	8,247,756	9,390,425	97,731,464
Minnesota	94,772,459	94,944,542	79,114,881	64,412,852	49,757,427	26,242,392	33,475,323	36,274,969	36,995,936	46,849,158	59,147,877	74,291,384	696,279,200

Minnesota Energy Resources Corporation
Proposed Test Year Calender Weather Normalized Sales
For the 12 Months Ending, December 31, 2014

All Units in Therms

Calender	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Total
NNG SALES													
GS-NNG Residential Sales	25,286,463	23,247,961	18,895,348	11,793,287	6,469,916	3,360,408	2,690,718	2,714,687	4,607,783	8,062,942	13,935,607	20,875,827	141,940,947
GS-NNG SC&I Sales	1,628,549	1,498,435	1,198,787	694,441	308,502	126,976	44,759	11,961	54,369	279,370	740,656	1,286,150	7,872,955
GS-NNG LC&I Sales	11,788,933	10,565,300	8,140,289	5,361,833	3,634,231	1,609,927	1,486,814	1,468,444	1,828,338	4,189,824	6,068,339	9,058,781	65,201,053
SVI-NNG Sales	2,275,675	2,314,585	1,636,317	1,000,687	785,947	513,976	438,219	353,126	473,254	844,321	1,150,203	1,453,420	13,239,730
LVI-NNG Sales	668,454	681,046	529,088	439,392	357,137	384,637	338,623	533,380	352,387	653,558	528,898	571,376	6,037,976
SVJ-NNG Sales	18,610	16,640	15,105	12,070	9,794	8,406	8,073	8,152	9,216	11,599	14,319	17,380	149,364
CONSOLIDATED SALES													
GS-CONSOLIDATED Residential Sales	4,390,090	3,844,876	3,225,264	2,077,360	1,176,328	388,367	200,008	258,420	512,377	1,283,161	2,415,561	3,689,098	23,460,910
GS-CONSOLIDATED SC&I Sales	484,571	397,357	312,290	183,997	82,326	29,913	22,251	14,164	34,299	107,361	245,954	409,715	2,324,198
GS-CONSOLIDATED LC&I Sales	3,326,809	2,900,462	2,355,461	1,539,334	885,195	443,143	249,900	290,224	720,529	1,399,086	2,202,035	3,020,875	19,333,053
SVI-CONSOLIDATED Sales	681,198	537,261	565,676	348,708	226,447	89,775	101,194	78,743	104,974	168,492	395,180	589,560	3,887,208
LVI-CONSOLIDATED Sales	556,549	506,008	367,686	316,925	260,281	242,873	193,189	228,804	315,243	479,204	478,481	554,694	4,499,937
SVJ-CONSOLIDATED Sales	43,275	39,647	38,044	22,141	9,020	2,457	313	885	6,307	16,092	26,559	38,196	242,936
NNG TRANSPORT													
SVI-NNG Transport	88,045	84,920	84,422	84,565	121,601	81,802	139,416	352,061	378,263	365,504	210,941	86,314	2,077,854
LVI-NNG Transport - CIP Applicable	4,271,514	2,712,410	2,497,203	2,065,637	1,859,586	1,753,996	2,273,017	2,638,685	2,389,622	2,470,267	3,448,351	2,053,751	30,434,039
LVI-NNG Transport - CIP Exempt	1,768,706	1,807,827	1,582,841	1,796,282	1,416,027	1,619,393	1,782,774	2,102,891	1,932,938	1,716,792	1,619,086	1,492,736	20,638,293
SVJ-NNG Transport	206,871	235,294	209,637	144,697	41,883	25,001	18,705	17,725	17,658	27,434	36,835	88,292	1,070,032
LVJ-NNG Transport	1,310,850	1,654,790	1,539,750	1,334,186	1,033,256	886,704	732,060	892,812	502,449	764,545	1,055,874	979,878	12,687,154
SLVI-NNG Transport-CIP Exempt	17,931,493	17,530,582	17,084,412	15,569,099	12,102,037	10,925,821	11,005,348	11,052,517	12,743,400	13,923,685	14,205,527	15,750,371	169,824,292
SLVI-NNG Transport-CIP Applicable	1,350,125	275,778	69,199	92,842	47,092	1	154,385	1,122,553	117,660	332,751	135,261	136,070	3,833,717
SLVJ-NNG Transport-CIP Exempt	1,684,384	1,406,405	1,514,120	2,043,900	4,616,870	5,422,165	5,089,923	5,491,868	2,860,347	2,857,417	2,901,635	3,694,225	39,583,259
Transport for Resale	30,768	35,161	29,202	16,748	11,497	3,184	1,988	1,714	1,894	4,459	14,084	21,118	171,817
LVJ-NNG Flex Transport (Cust "A")	459,452	621,073	584,860	642,536	547,487	338,390	224,033	293,035	435,644	511,386	453,465	488,533	5,599,894
LVI-NNG Flex Transport (Cust "B")	1,087,000	967,795	962,021	1,060,970	859,505	888,116	837,097	800,177	907,914	899,243	916,299	872,372	11,058,509
LVI-NNG Flex Transport (Cust "C")	1,135,766	1,052,032	981,255	979,015	784,061							945,449	5,877,578
LVI-NNG Flex Transport (Cust "D")						610,996	819,982	903,358	1,031,585	910,693	972,327		5,248,941
LVJ-NNG Flex Transport (Cust "E")	678,758	664,789	664,617	631,627	481,286	423,666	411,267	392,991	487,489	572,976	604,333	604,218	6,618,017
LVJ-NNG Flex Transport (Cust "F")	338,564	337,981	310,080	310,643	280,509	220,730	260,871	261,347	268,912	215,210	212,829	299,076	3,316,752
LVI-NNG Flex Transport (Cust "G")	260,649	277,668	255,916	193,329	154,880	126,670	120,776	110,310	127,887	134,502	144,268	202,995	2,109,850
CONSOLIDATED TRANSPORT													
SVI-CONSOLIDATED Transport	229,737	247,661	217,049	160,528	238,315	176,067	145,802	123,499	112,453	151,207	176,697	278,384	2,257,399
LVI-CONSOLIDATED Transport	1,101,666	1,386,164	993,691	973,406	730,295	678,303	748,717	418,253	806,003	760,621	834,028	1,020,025	10,451,172
SVJ-CONSOLIDATED Transport	79,264	85,673	84,129	65,241	50,464	39,545	21,297	12,589	14,057	23,775	33,009	60,646	569,689
LVJ-CONSOLIDATED Transport	441,731	528,037	477,771	369,565	313,922	224,641	209,009	199,863	212,987	222,161	322,167	455,343	3,977,197
SLVI-CONSOLIDATED Transport-CIP Exempt	3,199,948	3,191,232	3,431,804	3,166,901	3,097,712	2,893,218	2,719,515	3,173,448	2,781,529	3,165,740	3,349,558	3,067,250	37,237,855
SLVI-CONSOLIDATED Transport-CIP Applicable													-
													-
Taconite Mines (Michigan)	5,562,913	6,236,783	5,851,465	5,028,599	5,632,280	5,290,462	6,383,788	5,132,931	6,232,906	6,721,309	7,587,443	8,707,145	74,368,024
													-
Total MERC	94,367,380	87,889,633	76,704,799	60,520,491	48,625,689	39,829,729	39,873,831	41,455,617	43,382,673	54,246,687	67,435,809	82,869,263	737,201,601

Minnesota Energy Resources Corporation
Proposed Test Year Fixed Charge Counts
For the 12 Months Ending, December 31, 2014

Line	Rate Class (col. 1)	Fixed Charge Counts 2012 Total Annual Per Books (col. 2)	2013 Growth (col. 3)	Fixed Charge Counts 2013 Forecast (col. 4)	2014 Growth (col. 5)	Fixed Charge Counts 2014 Forecast (col. 6)
	Residential Rate					
1	Residential	2,275,562	29,290	2,304,852	6,188	2,311,040
	C&I General Service Rate					
6	Small General Service	125,609	6,476	132,085	(573)	131,512
13	Large General Service	128,758	(3,450)	125,308	845	126,153
14	Total C&I General Service	254,367	3,026	257,394	271	257,665
	Interruptible & Joint					
15	Interruptible	5,400	68	5,467	11	5,478
16	Joint	98	(1)	97	(1)	96
23	Total Interruptible & Joint	5,497	67	5,564	10	5,574
	Transportation					
24	Transportation	1,956	27	1,983	9	1,992
31	Total MERC-Minnesota	2,537,383	32,410	2,569,793	6,478	2,576,271

Minnesota Energy Resources Corporation
Proposed Test Year Fixed Charge Count Including Additional Meters
For the 12 Months Ending, December 31, 2012

	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Total	Average
MERC-NMU														
GS-Residential	35,978	35,418	36,040	35,412	35,437	35,825	35,567	35,269	35,253	35,572	35,697	35,423	426,892	35,574
GS-SC&I	2,373	2,353	2,352	2,346	2,620	2,643	2,629	2,611	2,600	2,615	2,618	2,614	30,373	2,531
GS-LC&I	3,102	3,057	3,086	3,080	2,757	2,792	2,775	2,754	2,762	2,776	2,788	2,770	34,497	2,875
SVI	104	98	101	100	92	82	99	100	98	98	97	96	1,166	97
LVI-TP	12	13	12	12	12	11	12	13	13	13	12	11	145	12
Transport-SVI	4	4	4	4	12	10	10	10	10	10	10	11	99	8
Transport-LVI TP	10	10	10	10	10	11	11	11	11	11	11	11	127	11
Transport-LVI ML	1	1	1	1	1	1	1	1	1	1	1	1	12	1
Transport-SVJ	14	14	14	14	8	8	8	8	8	8	8	8	120	10
Transport-LVJ TP	3	3	3	3	3	3	3	3	3	3	3	3	36	3
Transport-SLVI TP	9	9	9	9	9	9	9	9	9	9	9	9	108	9
MERC-NMU Total	41,610	40,979	41,632	40,991	40,961	41,394	41,124	40,789	40,768	41,117	41,254	40,957	493,575	41,131

	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Total	
MERC-PNG														
GS-1 Residential	144,991	145,143	144,927	144,902	145,015	145,372	144,698	144,908	144,574	144,982	144,804	145,861	1,740,177	145,015
GS-1 SC&I	6,497	6,481	6,512	6,477	7,405	7,400	7,345	7,372	7,338	7,315	7,344	7,442	84,929	7,077
GS-1 LC&I	7,676	7,644	7,659	7,652	6,692	6,702	6,682	6,696	6,665	6,679	6,674	6,734	84,155	7,013
SVI - 1	278	279	271	262	252	228	266	266	265	264	265	260	3,154	263
LVI - 1 TP	48	48	48	49	47	41	48	48	48	50	49	49	574	48
LVI - 1 ML	5	5	4	6	5	5	5	5	5	5	5	5	60	5
SVJ - 1	3	3	3	3	3	4	3	3	3	3	3	3	37	3
Transport - SVI-1	3	3	3	3	3	3	3	3	3	3	3	3	36	3
Transport - LVI-1 TP Exempt	-	2	2	2	2	2	2	2	2	2	2	2	22	
Transport - LVI-1 TP Applicable	42	40	40	40	43	43	43	44	44	44	44	33	500	42
Transport - LVI-1 ML	3	3	3	3	3	4	3	3	3	3	3	3	37	3
Transport - SVJ-1	12	12	12	12	11	9	9	10	10	10	10	15	132	11
Transport - LVJ-1 TP	19	19	19	19	16	16	16	16	16	16	16	27	215	18
Transport - SLVI Exempt	12	12	12	12	12	12	12	12	12	12	12	12	144	
Transport - SLVI Applicable	2	2	2	2	2	2	2	2	2	2	2	2	24	2
Transport - SLVJ	2	2	2	2	2	2	2	2	2	(6)	10	2	24	2
Transport for Resale	1	1	1	1	1	1	1	1	1	1	1	1	12	1
GS-4 Residential	4,040	3,989	3,991	3,976	3,968	3,950	3,941	3,961	3,954	3,984	3,869	4,015	47,639	3,970
GS-4 SC&I	337	338	336	339	378	376	375	375	379	377	377	390	4,377	365
GS-4 LC&I	381	379	381	377	339	336	336	335	334	331	322	334	4,184	349
SVI - 4	20	20	20	20	21	15	20	20	19	18	18	18	230	19
LVI - 4	1	1	1	1	1	1	1	1	1	1	1	1	12	1
SVJ - 4	2	2	2	2	2	2	2	2	3	2	2	2	25	2
Transport - SVI-4	8	8	8	8	10	9	9	9	9	9	9	9	105	9
Transport-SVJ-4													-	-
Transport - LVJ-4	3	3	3	3	3	3	3	3	3	3	3	3	36	3
GS-5 Residential	5,105	5,176	5,121	5,091	5,096	5,051	5,035	5,023	4,951	5,035	4,990	5,179	60,854	5,071
GS-5 SC&I	464	467	465	468	510	509	507	507	502	507	507	517	5,931	494
GS-5 LC&I	519	529	522	523	477	478	478	480	475	479	476	484	5,922	493
SVI - 5	5	5	5	5	5	4	5	5	5	5	5	5	58	5
SVJ - 5	3	3	3	3	3	3	3	3	3	3	3	3	36	3
Transport LVI - 5 TP	1	1	1	1	2	1	1	1	1	1	1	1	13	1
Transport LVJ - 5 TP	1	1	1	1	1	1	1	1	1	1	1	1	12	1
Transport - SVI-5	3	3	3	3	3	3	3	3	3	3	3	3	36	3
Transport LVJ - ML (3M Cottage Grove)	1	1	1	1	1	1	1	1	1	1	1	1	12	1
Transport LVI - TP (Pro Corn)	1	1	1	1	1	1	1	1	1	1	1	1	12	1
Transport LVI - TP (Agra Resources)	1	1	1	1	1	-	-	-	-	-	-	1	6	1
Transport LVI - TP (Flex Agra Resources)	-	-	-	-	-	1	-	1	1	1	1	-	5	0
Transport LVJ - TP (Swift)	1	1	1	1	1	1	1	1	1	1	1	1	12	1
Transport LVJ - TP (Spectro)	3	3	3	3	3	3	3	3	3	3	3	3	36	3
Transport LVI - TP	2	2	2	2	2	2	2	2	2	2	2	2	24	2
Taconite Mines (Michigan)	2	2	2	2	2	2	2	2	2	2	2	2	24	2
													-	-
Pooling													-	-
MERC-PNG Total	170,498	170,637	170,394	170,280	170,345	170,599	169,869	170,133	169,646	170,156	169,845	171,430	2,043,831	170,305

Summary														
MERC-NMU Total	41,610	40,979	41,632	40,991	40,961	41,394	41,124	40,789	40,768	41,117	41,254	40,957	493,575	41,131
MERC-PNG Total	170,498	170,637	170,394	170,280	170,345	170,599	169,869	170,133	169,646	170,156	169,845	171,430	2,043,831	170,305
Total MERC	212,107	211,616	212,027	211,271	211,306	211,993	210,993	210,921	210,414	211,273	211,099	212,386	2,537,407	211,437
Michigan	2	2	2	2	2	2	2	2	2	2	2	2	24	2
Minnesota	212,105	211,614	212,025	211,269	211,304	211,991	210,991	210,919	210,412	211,271	211,097	212,384	2,537,383	211,435

Minnesota Energy Resources Corporation
Proposed Test Year Fixed Charge Count Including Additional Meters
For the 12 Months Ending, December 31, 2013

	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Total	Average
MERC-NMU														
GS-Residential	37,093	37,140	36,054	36,151	35,563	35,996							217,998	18,166
GS-SC&I	2,729	2,740	2,626	2,609	2,587	2,715							16,005	1,334
GS-LC&I	2,886	2,897	2,792	2,775	2,762	2,893							17,006	1,417
SVI	100	103	100	101	101	103							608	51
LVI-TP	11	11	11	10	10	10							64	5
Transport-SVI	10	10	10	10	10	10							60	5
Transport-LVI TP	11	11	11	11	11	11							66	6
Transport-LVI ML	1	1	1	1	1	1							6	1
Transport-SVJ	8	8	8	8	8	8							48	4
Transport-LVJ TP	3	3	3	3	3	3							18	2
Transport-SLVI TP	9	9	9	9	9	9							54	5
														-
MERC-PNG														-
GS-1 Residential	151,005	149,906	146,071	146,167	146,354	146,640							886,144	73,845
GS-1 SC&I	7,638	7,739	7,403	7,419	7,409	7,440							45,048	3,754
GS-1 LC&I	6,958	6,998	6,741	6,741	6,767	6,776							40,981	3,415
SVI - 1	261	267	265	252	265	264							1,573	131
LVI - 1 TP	48	52	48	48	48	50							294	24
LVI - 1 ML	5	5	5	5	5	5							30	2
SVJ - 1	3	3	3	3	4	3							19	2
Transport - SVI-1	3	3	3	3	4	4							20	2
Transport - LVI-1 TP Exempt													-	-
Transport - LVI-1 TP Applicable	41	39	39	39	51	54							263	22
Transport - LVI-1 ML	3	3	3	3	3	3							18	2
Transport - SVJ-1	14	13	13	13	12	12							77	6
Transport - LVJ-1 TP	21	24	24	24	14	12							119	10
Transport - SLVI Exempt													-	-
Transport - SLVI Applicable	14	14	14	14	14	14							84	7
Transport - SLVJ	2	2	2	2	2	2							12	1
Transport for Resale	1	1	1	1	1	1							6	1
GS-4 Residential	4,116	4,123	3,859	3,998	3,941	3,990							24,028	2,002
GS-4 SC&I	402	400	381	384	394	395							2,357	196
GS-4 LC&I	341	345	320	332	334	336							2,007	167
SVI - 4	18	17	17	17	17	17							103	9
LVI - 4	1	1	1	1	1	1							6	1
SVJ - 4	2	2	2	2	2	2							12	1
Transport - SVI-4	9	9	9	9	8	9							53	4
Transport-SVJ-4													-	-
Transport - LVJ-4	3	3	3	3	3	3							18	2
GS-5 Residential	5,357	5,526	5,026	5,026	4,975	5,055							30,964	2,580
GS-5 SC&I	539	537	500	506	507	501							3,089	257
GS-5 LC&I	508	503	471	476	475	477							2,909	242
SVI - 5	5	5	5	5	5	5							30	3
SVJ - 5	3	3	3	3	3	3							18	2
Transport LVI - 5 TP	1	1	1	1	1	1							6	1
Transport LVJ - 5 TP	1	1	1	1	1	1							6	1
Transport - SVI-5	3	3	3	3	3	3							18	2
Transport LVJ - ML (3M Cottage Grove)	1	1	1	1	1	1							6	1
Transport LVI - TP (Pro Corn)	1	1	1	1	1	1							6	1
Transport LVI - TP (Agra Resources)	1	1	1	1	1	-							5	0
Transport LVI - TP (Flex Agra Resources)	-	-	-	-	-	1							1	0
Transport LVJ - TP (Swift)	1	1	1	1	1	1							6	1
Transport LVJ - TP (Spectro)	3	3	3	3	-	-							12	1
Transport LVI - TP	2	1	1	1	1	-							6	1
Taconite Mines (Michigan)	2	2	2	2	2	2							12	1
													-	-
Pooling													-	-
Total MERC	220,198	219,493	212,872	213,198	212,694	213,842	-	-	-	-	-	-	1,292,298	107,691

	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Total	Average
NNG SALES														
GS-NNG Residential Sales							162,746	162,172	162,404	162,569	162,402	163,907	976,200	81,350
GS-NNG SC&I Sales							8,323	8,301	8,332	8,269	8,255	8,355	49,835	4,153
GS-NNG LC&I Sales							7,911	7,899	7,898	7,912	7,846	7,945	47,411	3,951
SVI-NNG Sales							317	320	312	313	311	318	1,891	158
LVI-NNG Sales							60	61	59	61	60	62	363	30
SVJ-NNG Sales							3	3	3	3	3	3	18	2
														-
CONSOLIDATED SALES														-
GS-CONSOLIDATED Residential Sales							28,278	28,181	28,074	28,186	28,277	28,522	169,518	14,127
GS-CONSOLIDATED SC&I Sales							2,633	2,643	2,610	2,614	2,620	2,631	15,751	1,313
GS-CONSOLIDATED LC&I Sales							2,503	2,507	2,483	2,492	2,498	2,512	14,995	1,250
SVI-CONSOLIDATED Sales							75	77	76	76	75	79	458	38
LVI-CONSOLIDATED Sales							8	8	8	8	8	8	48	4
SVJ-CONSOLIDATED Sales							5	5	5	5	5	5	30	3
														-
NNG TRANSPORT														-
SVI-NNG Transport							8	8	8	8	8	8	48	4
LVI-NNG Transport - CIP Applicable							49	49	49	49	51	48	295	25
LVI-NNG Transport - CIP Exempt							2	2	2	2	2	2	12	1
SVJ-NNG Transport							11	11	11	11	11	13	68	6
LVJ-NNG Transport							16	16	16	16	16	17	97	8
SLVI-NNG Transport-CIP Exempt							12	12	12	12	12	13	73	6
SLVI-NNG Transport-CIP Applicable							2	2	2	2	2	2	12	1
SLVJ-NNG Transport-CIP Exempt							2	2	2	2	2	2	12	1
Transport for Resale							1	1	1	1	1	1	6	1
LVJ-NNG Flex Transport (Cust "A")							1	1	1	1	1	1	6	1
LVI-NNG Flex Transport (Cust "B")							1	1	1	1	1	1	6	1
LVI-NNG Flex Transport (Cust "C")												1	1	0
LVI-NNG Flex Transport (Cust "D")							1	1	1	1	1		5	0
LVJ-NNG Flex Transport (Cust "E")							1	1	1	1	1	1	6	1
LVJ-NNG Flex Transport (Cust "F")							3	3	3	3	3	3	18	2
LVI-NNG Flex Transport (Cust "G")							2	2	2	2	2	2	12	1
														-
CONSOLIDATED TRANSPORT														-
SVI-CONSOLIDATED Transport							18	18	18	18	18	18	108	9
LVI-CONSOLIDATED Transport							11	11	11	11	11	11	66	6
SVJ-CONSOLIDATED Transport							7	7	7	7	7	7	42	4
LVJ-CONSOLIDATED Transport							7	7	7	7	7	7	42	4
SLVI-CONSOLIDATED Transport-CIP Exempt							9	9	9	9	9	9	54	5
SLVI-CONSOLIDATED Transport-CIP Applicable													-	-
													-	-
Taconite Mines (Michigan)							2	2	2	2	2	2	12	1
													-	-
Total MERC	220,198	219,493	212,872	213,198	212,694	213,842	213,028	212,343	212,430	212,674	212,528	214,516	2,569,817	214,151
Michigan	2	2	2	2	2	2	2	2	2	2	2	2	24	2
Minnesota	220,196	219,491	212,870	213,196	212,692	213,840	213,026	212,341	212,428	212,672	212,526	214,514	2,569,793	214,149

Minnesota Energy Resources Corporation
Proposed Test Year Fixed Charge Count Including Additional Meters
For the 12 Months Ending, December 31, 2011

	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Total	Average
NNG SALES														
GS-NNG Residential Sales	165,238	163,546	162,966	164,565	164,125	164,223	163,914	163,331	163,560	163,718	163,540	165,050	1,967,776	163,981
GS-NNG SC&I Sales	8,471	8,332	8,280	7,952	8,387	8,369	8,376	8,355	8,385	8,329	8,307	8,407	99,950	8,329
GS-NNG LC&I Sales	8,043	7,905	7,879	8,300	7,963	7,976	7,982	7,974	7,971	7,982	7,907	8,008	95,890	7,991
SVI-NNG Sales	318	317	312	315	308	296	317	320	312	313	311	318	3,757	313
LVI-NNG Sales	58	57	57	61	61	60	60	61	59	61	60	62	717	60
SVJ-NNG Sales	3	3	3	3	3	3	3	3	3	3	3	3	36	3
CONSOLIDATED SALES														
GS-CONSOLIDATED Residential Sales	29,114	28,655	28,236	29,018	28,778	28,736	28,483	28,385	28,276	28,387	28,475	28,721	343,264	28,605
GS-CONSOLIDATED SC&I Sales	2,670	2,639	2,607	2,561	2,649	2,646	2,640	2,649	2,616	2,621	2,627	2,637	31,562	2,630
GS-CONSOLIDATED LC&I Sales	2,553	2,514	2,499	2,606	2,515	2,518	2,514	2,518	2,494	2,502	2,508	2,522	30,263	2,522
SVI-CONSOLIDATED Sales	77	75	75	76	76	71	75	77	76	76	75	79	908	76
LVI-CONSOLIDATED Sales	8	8	8	8	8	8	8	8	8	8	8	8	96	8
SVJ-CONSOLIDATED Sales	5	5	5	5	5	5	5	5	5	5	5	5	60	5
NNG TRANSPORT														
SVI-NNG Transport	4	4	4	4	8	8	8	8	8	8	8	8	80	7
LVI-NNG Transport - CIP Applicable	48	47	46	46	50	50	49	49	49	49	51	48	582	49
LVI-NNG Transport - CIP Exempt	2	2	2	2	2	2	2	2	2	2	2	2	24	2
SVJ-NNG Transport	16	16	16	16	11	11	11	11	11	11	11	13	154	13
LVJ-NNG Transport	19	20	20	20	17	16	16	16	16	16	16	17	209	17
SLVI-NNG Transport-CIP Exempt	12	13	12	12	13	12	12	12	12	12	12	13	147	12
SLVI-NNG Transport-CIP Applicable	2	2	2	2	2	2	2	2	2	2	2	2	24	2
SLVJ-NNG Transport-CIP Exempt	2	2	2	2	2	2	2	2	2	2	2	2	24	2
Transport for Resale	1	1	1	1	1	1	1	1	1	1	1	1	12	1
LVJ-NNG Flex Transport (Cust "A")	1	1	1	1	1	1	1	1	1	1	1	1	12	1
LVI-NNG Flex Transport (Cust "B")	1	1	1	1	1	1	1	1	1	1	1	1	12	1
LVI-NNG Flex Transport (Cust "C")	1	1	1	1	1							1	6	1
LVI-NNG Flex Transport (Cust "D")						1	1	1	1	1	1		6	1
LVJ-NNG Flex Transport (Cust "E")	1	1	1	1	1	1	1	1	1	1	1	1	12	1
LVJ-NNG Flex Transport (Cust "F")	3	3	3	3	3	3	3	3	3	3	3	3	36	3
LVI-NNG Flex Transport (Cust "G")	2	2	2	2	2	2	2	2	2	2	2	2	24	2
CONSOLIDATED TRANSPORT														
SVI-CONSOLIDATED Transport	17	17	17	17	18	18	18	18	18	18	18	18	212	18
LVI-CONSOLIDATED Transport	11	11	11	11	11	11	11	11	11	11	11	11	132	11
SVJ-CONSOLIDATED Transport	9	9	9	9	7	7	7	7	7	7	7	7	92	8
LVJ-CONSOLIDATED Transport	7	7	7	7	7	7	7	7	7	7	7	7	84	7
SLVI-CONSOLIDATED Transport-CIP Exempt	9	9	9	9	9	9	9	9	9	9	9	9	108	9
SLVI-CONSOLIDATED Transport-CIP Applicable													-	-
													-	-
Taconite Mines (Michigan)	2	2	2	2	2	2	2	2	2	2	2	2	24	2
													-	-
Total MERC	216,728	214,227	213,096	215,639	215,047	215,078	214,543	213,852	213,931	214,171	213,994	215,989	2,576,295	214,691
Michigan	2	2	2	2	2	2	2	2	2	2	2	2	24	2
Minnesota	216,726	214,225	213,094	215,637	215,045	215,076	214,541	213,850	213,929	214,169	213,992	215,987	2,576,271	214,689

Minnesota Energy Resources Corporation
Proposed Test Year Daily Firm Capacity Nominations
For the 12 Months Ending, December 31, 2014

Line	Rate Class (col. 1)	DFC Nomination 2012 Total Annual Per Books (col. 2)	2013 Growth (col. 3)	DFC Nomination Charge Counts 2013 Forecast (col. 4)	2014 Growth (col. 5)	DFC Nomination Charge Counts 2014 Forecast (col. 6)
	Residential Rate					
1	Residential	-	-	-	-	-
	C&I General Service Rate					
6	Small General Service	-	-	-	-	-
13	Large General Service	-	-	-	-	-
14	Total C&I General Service	0	0	0	0	0
	Interruptible & Joint					
15	Interruptible	-	-	-	-	-
16	Joint	38,010	1,110	39,120	(1,200)	37,920
23	Total Interruptible & Joint	38,010	1,110	39,120	(1,200)	37,920
	Transportation					
24	Transportation	4,881,110	8,020	4,889,130	69,230	4,958,360
31	Total MERC-Minnesota	4,919,120	9,130	4,928,250	68,030	4,996,280

Minnesota Energy Resources Corporation
Proposed Test Year Daily Firm Capacity Nominations
For the 12 Months Ending, December 31, 2012

	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Total
MERC-NMU													
GS-Residential													-
GS-SC&I													-
GS-LC&I													-
SVI													-
LVI-TP													-
Transport-SVI													-
Transport-LVI TP													-
Transport-LVI ML													-
Transport-SVJ	13,520	13,520	13,520	13,520	4,630	4,630	4,630	4,630	4,630	4,630	4,630	4,630	91,120
Transport-LVJ TP	7,560	7,560	7,560	7,560	7,560	7,560	7,560	7,560	7,560	7,560	7,560	7,560	90,720
Transport-SLVI TP													-
MERC-NMU Total	21,080	21,080	21,080	21,080	12,190	12,190	12,190	12,190	12,190	12,190	12,190	12,190	181,840

	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Total
MERC-PNG													
GS-1 Residential													-
GS-1 SC&I													-
GS-1 LC&I													-
SVI - 1													-
LVI - 1 TP													-
LVI - 1 ML													-
SVJ - 1	950	950	950	950	950	1,040	950	950	950	950	950	950	11,490
Transport - SVI-1													-
Transport - LVI-1 TP Exempt													-
Transport - LVI-1 TP Applicable													-
Transport - LVI-1 ML													-
Transport - SVJ-1	6,840	6,840	6,840	6,840	5,640	5,140	5,140	6,020	6,020	6,020	6,520	7,020	74,880
Transport - LVJ-1 TP	27,070	27,070	27,070	27,070	20,220	20,220	20,220	20,220	20,220	20,220	20,220	42,570	292,390
Transport - SLVI Exempt													-
Transport - SLVI Applicable													-
Transport - SLVJ	341,200	341,200	341,200	341,200	341,200	341,200	341,200	341,200	341,200	(1,023,600)	1,706,000	341,200	4,094,400
Transport for Resale													-
GS-4 Residential													-
GS-4 SC&I													-
GS-4 LC&I													-
SVI - 4													-
LVI - 4													-
SVJ - 4	70	70	70	70	70	70	70	70	70	70	70	70	840
Transport - SVI-4													-
Transport-SVJ-4													-
Transport - LVJ-4	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	60,000
GS-5 Residential													-
GS-5 SC&I													-
GS-5 LC&I													-
SVI - 5													-
SVJ - 5	2,140	2,140	2,140	2,140	2,140	2,140	2,140	2,140	2,140	2,140	2,140	2,140	25,680
Transport LVI - 5 TP													-
Transport LVJ - 5 TP	50	50	50	50	50	50	50	50	50	50	50	50	600
Transport - SVI-5													-
Transport LVJ - ML (3M Cottage Grove)	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	60,000
Transport LVI - TP (Pro Corn)													-
Transport LVI - TP (Agra Resources)													-
Transport LVI - TP (Flex Agra Resources)													-
Transport LVJ - TP (Swift)	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	72,000
Transport LVJ - TP (Spectro)	9,000	9,000	9,000	9,000	-	-	-	-	-	-	-	9,000	45,000
Transport LVI - TP													-
Taconite Mines (Michigan)													-
GS-1 Small C&I (South Dakota)													-
Pooling													-
MERC-PNG Total	403,320	403,320	403,320	403,320	386,270	385,860	385,770	386,650	386,650	(978,150)	1,751,950	419,000	4,737,280
Total MERC	424,400	424,400	424,400	424,400	398,460	398,050	397,960	398,840	398,840	(965,960)	1,764,140	431,190	4,919,120

Minnesota Energy Resources Corporation
Proposed Test Year Daily Firm Capacity Nominations
For the 12 Months Ending, December 31, 2013

	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Total
MERC-NMU													
GS-Residential													-
GS-SC&I													-
GS-LC&I													-
SVI													-
LVI-TP													-
Transport-SVI													-
Transport-LVI TP													-
Transport-LVI ML													-
Transport-SVJ	4,630	4,630	4,630	4,630	4,630	4,630							27,780
Transport-LVJ TP	7,560	7,560	7,560	7,560	7,560	7,560							45,360
Transport-SLVI TP													-
MERC-PNG													
GS-1 Residential													-
GS-1 SC&I													-
GS-1 LC&I													-
SVI - 1													-
LVI - 1 TP													-
LVI - 1 ML													-
SVJ - 1	950	950	950	950	2,150	950							6,900
Transport - SVI-1													-
Transport - LVI-1 TP Exempt													-
Transport - LVI-1 TP Applicable													-
Transport - LVI-1 ML													-
Transport - SVJ-1	8,720	7,870	7,870	7,870	7,020	8,600							47,950
Transport - LVJ-1 TP	27,570	35,070	35,070	35,070	19,970	17,970							170,720
Transport - SLVI Exempt													-
Transport - SLVI Applicable													-
Transport - SLVJ	341,200	341,200	341,200	341,200	341,200	341,200							2,047,200
Transport for Resale													-
GS-4 Residential													-
GS-4 SC&I													-
GS-4 LC&I													-
SVI - 4													-
LVI - 4													-
SVJ - 4	70	70	70	70	70	70							420
Transport - SVI-4													-
Transport-SVJ-4													-
Transport - LVJ-4	5,000	5,000	5,000	5,000	5,000	5,000							30,000
GS-5 Residential													-
GS-5 SC&I													-
GS-5 LC&I													-
SVI - 5													-
SVJ - 5	2,140	2,140	2,140	2,140	2,140	2,140							12,840
Transport LVI - 5 TP													-
Transport LVJ - 5 TP	50	50	50	50	50	50							300
Transport - SVI-5													-
Transport LVJ - ML (3M Cottage Grove)	5,000	5,000	5,000	5,000	5,000	5,000							30,000
Transport LVI - TP (Pro Corn)													-
Transport LVI - TP (Agra Resources)													-
Transport LVI - TP (Flex Agra Resources)													-
Transport LVJ - TP (Swift)	6,000	6,000	6,000	6,000	6,000	6,000							36,000
Transport LVJ - TP (Spectro)	9,000	9,000	9,000	9,000	-	-							36,000
Transport LVI - TP													-
Taconite Mines (Michigan)													-
GS-1 Small C&I (South Dakota)													-
Pooling													-
Total MERC	417,890	424,540	424,540	424,540	400,790	399,170	-	-	-	-	-	-	2,491,470

	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Total
NNG SALES													-
GS-NNG Residential Sales													-
GS-NNG SC&I Sales													-
GS-NNG LC&I Sales													-
SVI-NNG Sales													-
LVI-NNG Sales													-
SVJ-NNG Sales							950	950	950	950	950	950	5,700
CONSOLIDATED SALES													-
GS-CONSOLIDATED Residential Sales													-
GS-CONSOLIDATED SC&I Sales													-
GS-CONSOLIDATED LC&I Sales													-
SVI-CONSOLIDATED Sales													-
LVI-CONSOLIDATED Sales													-
SVJ-CONSOLIDATED Sales							2,210	2,210	2,210	2,210	2,210	2,210	13,260
NNG TRANSPORT													-
SVI-NNG Transport													-
LVI-NNG Transport - CIP Applicable													-
LVI-NNG Transport - CIP Exempt													-
SVJ-NNG Transport							7,770	7,770	7,770	7,770	7,770	13,820	52,670
LVJ-NNG Transport							20,220	20,220	20,220	20,220	20,220	42,570	143,670
SLVI-NNG Transport-CIP Exempt													-
SLVI-NNG Transport-CIP Applicable													-
SLVJ-NNG Transport-CIP Exempt							341,200	341,200	341,200	341,200	341,200	341,200	2,047,200
Transport for Resale													-
LVJ-NNG Flex Transport (Cust "A")							5,000	5,000	5,000	5,000	5,000	5,000	30,000
LVI-NNG Flex Transport (Cust "B")													-
LVI-NNG Flex Transport (Cust "C")													-
LVI-NNG Flex Transport (Cust "D")													-
LVJ-NNG Flex Transport (Cust "E")							6,000	6,000	6,000	6,000	6,000	6,000	36,000
LVJ-NNG Flex Transport (Cust "F")												9,000	9,000
LVI-NNG Flex Transport (Cust "G")													-
CONSOLIDATED TRANSPORT													-
SVI-CONSOLIDATED Transport													-
LVI-CONSOLIDATED Transport													-
SVJ-CONSOLIDATED Transport							3,380	3,380	3,380	3,380	3,380	6,720	23,620
LVJ-CONSOLIDATED Transport							12,610	12,610	12,610	12,610	12,610	12,610	75,660
SLVI-CONSOLIDATED Transport-CIP Exempt													-
SLVI-CONSOLIDATED Transport-CIP Applicable													-
Total MERC	417,890	424,540	424,540	424,540	400,790	399,170	399,340	399,340	399,340	399,340	399,340	440,080	4,928,250

Minnesota Energy Resources Corporation
Proposed Test Year Daily Firm Capacity Nominations
For the 12 Months Ending, December 31, 2014

	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Total
NNG SALES													
GS-NNG Residential Sales													-
GS-NNG SC&I Sales													-
GS-NNG LC&I Sales													-
SVI-NNG Sales													-
LVI-NNG Sales													-
SVJ-NNG Sales	950	950	950	950	950	950	950	950	950	950	950	950	11,400
CONSOLIDATED SALES													
GS-CONSOLIDATED Residential Sales													-
GS-CONSOLIDATED SC&I Sales													-
GS-CONSOLIDATED LC&I Sales													-
SVI-CONSOLIDATED Sales													-
LVI-CONSOLIDATED Sales													-
SVJ-CONSOLIDATED Sales	2,210	2,210	2,210	2,210	2,210	2,210	2,210	2,210	2,210	2,210	2,210	2,210	26,520
NNG TRANSPORT													
SVI-NNG Transport													-
LVI-NNG Transport - CIP Applicable													-
LVI-NNG Transport - CIP Exempt													-
SVJ-NNG Transport	13,820	13,820	13,820	13,820	8,270	7,770	7,770	7,770	7,770	7,770	7,770	13,820	123,990
LVJ-NNG Transport	42,570	42,570	42,570	42,570	20,220	20,220	20,220	20,220	20,220	20,220	20,220	42,570	354,390
SLVI-NNG Transport-CIP Exempt													-
SLVI-NNG Transport-CIP Applicable													-
SLVJ-NNG Transport-CIP Exempt	341,200	341,200	341,200	341,200	341,200	341,200	341,200	341,200	341,200	341,200	341,200	341,200	4,094,400
Transport for Resale													-
LVJ-NNG Flex Transport (Cust "A")	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	60,000
LVI-NNG Flex Transport (Cust "B")													-
LVI-NNG Flex Transport (Cust "C")													-
LVI-NNG Flex Transport (Cust "D")													-
LVJ-NNG Flex Transport (Cust "E")	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	6,000	72,000
LVJ-NNG Flex Transport (Cust "F")	9,000	9,000	9,000	9,000								9,000	45,000
LVI-NNG Flex Transport (Cust "G")													-
CONSOLIDATED TRANSPORT													
SVI-CONSOLIDATED Transport													-
LVI-CONSOLIDATED Transport													-
SVJ-CONSOLIDATED Transport	6,720	6,720	6,720	6,720	3,380	3,380	3,380	3,380	3,380	3,380	3,380	6,720	57,260
LVJ-CONSOLIDATED Transport	12,610	12,610	12,610	12,610	12,610	12,610	12,610	12,610	12,610	12,610	12,610	12,610	151,320
SLVI-CONSOLIDATED Transport-CIP Exempt													-
SLVI-CONSOLIDATED Transport-CIP Applicable													-
Taconite Mines (Michigan)													
Total MERC	440,080	440,080	440,080	440,080	399,840	399,340	399,340	399,340	399,340	399,340	399,340	440,080	4,996,280