

May 21, 2019

PUBLIC DOCUMENT

Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
St. Paul, Minnesota 55101

RE: **PUBLIC Response Comments of the Minnesota Department of Commerce, Division of Energy Resources**
Docket Nos. G011/M-18-526 and G011/M-18-527

Dear Mr. Wolf:

Attached are the response comments of the Minnesota Department of Commerce, Division of Energy Resources (Department) in the following matters:

In the Matter of Minnesota Energy Resources Corporation's (MERC or the Company) Demand Entitlement Filing for its Customers Served off of the Northern Natural Gas Company (Northern) System.

In the Matter of Minnesota Energy Resources Corporation's Demand Entitlement Filing for its Customers Served off of the Consolidated System.

The petitions were filed on August 1, 2018 by:

Amber S. Lee
Regulatory and Legislative Affairs Manager
Minnesota Energy Resources Corporation
2685 145th Street West
Rosemount, MN 55068

On November 1, 2018, MERC submitted a November 1 Update in each docket.

On January 10, 2019, MERC submitted a single set of Reply Comments in both dockets. The Updates and Reply Comments were filed by:

Seth DeMerritt
Project Specialist 3
Minnesota Energy Resources Corporation
2685 145th Street West
Rosemount, MN 55068

Based on its review of MERC's November 1 Update and Reply Comments, the Department continues to recommend that the Minnesota Public Utilities Commission (Commission):

- Accept the Company's proposed level of demand entitlement for its Northern Purchased Gas Adjustment (PGA);
- Allow MERC to recover associated demand costs through the monthly PGA effective November 1, 2018 for its Northern PGA;
- Accept the Company's proposed level of demand entitlement for its Consolidated PGA; and
- Allow MERC to recover associated demand costs through the monthly PGA effective November 1, 2018 for its Consolidated PGA.

The Department is available to respond to any questions the Commission may have on this matter.

Sincerely,

/s/ ADAM J. HEINEN
Public Utilities Rates Analyst

/s/ DANIEL BECKETT
Public Utilities Rates Analyst

AJH/DB/ja
Attachment



Before the Minnesota Public Utilities Commission

PUBLIC Response Comments of the Minnesota Department of Commerce Division of Energy Resources

Docket Nos. G011/M-18-526 and G011/M-18-527

I. BACKGROUND AND INTRODUCTION

Pursuant to Minnesota Rules, part 7825.2910, subpart 2, Minnesota Energy Resources Corporation (MERC or the Company), filed petitions on August 1, 2018 with the Minnesota Public Utilities Commission (Commission) to change the levels of demand for natural gas pipeline capacity (Petition) for its customers served by the Northern Natural Gas (NNG or Northern) system and for its customers served by the Consolidated system.¹ MERC requested that the Commission approve changes in the Company's recovery of the overall level of contracted capacity.

On November 1, 2018, MERC submitted its November 1 Updates in Docket No. G011/M-18-526 (MERC-NNG Update) and in Docket No. G011/M-18-527 (MERC-CON Update) detailing final entitlement levels for the upcoming heating season. The Updates include final updated demand rates and anticipated commodity pricing. The Updates reflect that the Company did not change its total entitlement level, but MERC updated final future contracts, storage positions, and call options for the 2018-2019 heating season.

On December 31, 2018, the Minnesota Department of Commerce, Division of Energy Resources (Department) filed Comments in both dockets analyzing MERC's Petitions and Updates. In its Comments, the Department recommended that the Commission accept MERC's proposed level of demand entitlement and allow the Company to recover associated demand costs through the monthly Purchased Gas Adjustment (PGA) for both the Northern system and the Consolidated system. The Department made a minor change to the demand recovery rate for the Northern system based on an inconsistency it observed in MERC's schedules in its MERC-NNG Update. For both systems, the Department did, however, recommend that MERC provided additional discussion and information in its Reply Comments regarding the Company's Town Border Station (TBS)² level planning and how MERC maintains reliability at the TBS level along with information regarding electric generators on MERC's system.

¹ The Consolidated system is made up of customers served by Centra, Great Lakes Natural Gas Pipeline (Great Lakes), and Viking Gas Transmission Company (Viking).

² The TBS is generally the point where the natural gas is transferred to MERC from an interstate pipeline transportation company.

On January 10, 2019, MERC filed Reply Comments responding to the Department's Comments. Regarding the inconsistency in MERC's schedules, the Company provided a revised Attachment 4, Page 1. The Company also provided discussion regarding its distribution planning policies and procedures and the electric generators it serves. The Department provides its response to the Company's Reply Comments below.

The Department notes that subsequent to the Company's Reply Comments, MERC's service territory, along with the rest of Minnesota, experienced a significant cold weather event that resulted in near design-day conditions. This event marked the first time that temperatures approached weather conditions experienced in 1996, which serves as the basis for the Company's planning objective. The Department notes that MERC's system operated well during the recent cold spell. Any discussion or analysis related to performance of the MERC system, and the cold weather event, will occur in the Commission's Investigation into this matter in Docket No. E,G999/CI-19-160.

II. DEPARTMENT ANALYSIS

In response to the Department's Comments requesting additional information, the Company provided discussion on the following topics:

- Town Border Station Level Planning;
- Electric Generation on MERC's System;
- Throughput versus Maximum Daily Quantity; and
- Cost Comparison to October PGA.

The Department responds to each of these areas separately below. The Department also reviews and analyzes MERC's TBS level data in an effort to determine whether the Company is adequately planning for firm use on both a system-level and on a locational basis.

A. TOWN BORDER STATION LEVEL PLANNING

In its Comments, the Department provided extensive discussion about utility planning and the differences and nuances between natural gas and electric procurement and planning. Through this review, the Department noted certain areas that required additional clarification from MERC. In particular, the Department requested that the Company provide in its Reply Comments a detailed discussion of how MERC conducts planning at the TBS level as well as what steps it takes to maintain reliability at the TBS level and to correct instances where consumption exceeds the Maximum Daily Quantity (MDQ).

In response, MERC noted that it conducts peak-day planning at a system-wide level to ensure adequate transportation capacity and supply. Then, at the TBS level, the Company considers physical TBS capacity and contractual TBS capacity to determine whether capacity planning on a peak day is adequate. MERC explained that physical TBS capacity is determined by pipeline pressure, distribution pressure, and the physical size of the components at the specific TBS. The Company further explained that physical capacity issues are identified by MERC engineering and operations through a combination of historical performance and forecasted load additions. If the capacity limitations are related to MERC-owned equipment, the Company stated that it can address the limitations through equipment replacement and distribution system investments. On the other hand, if the capacity issue is related to adequate pressure delivery to the TBS, then MERC stated that this is generally an issue with the interstate pipeline, which would require a pipeline expansion project.³

In terms of contractual TBS capacity, the Company explained that capacity limits can be dictated by the physical capacity at which point a TBS is considered fully subscribed while, in other cases, the TBS may be able to physically meet the peak load, but the pipeline contract may not be sufficient to meet the utility's peak load. MERC stated that its gas supply department conducts a high-level review of TBSs where shortfalls may be present and then works with the interstate pipelines to determine if capacity is available to be moved to the delivery point or if system upgrades are required.⁴

The Department appreciates MERC's discussion regarding its TBS-level planning. As explained in greater detail in Section II.C below, the Department reviewed the Company's TBS-level data and observed instances where consumption exceeded maximum throughput capacity at certain TBSs. The Department discusses these observations further below.

B. ELECTRIC GENERATION

In previous dockets, the Commission expressed concerns regarding energy reliability and the integration of the natural gas and electricity markets in light of increased use of natural gas for electrical generation. Given these concerns, the Department requested TBS-level natural gas data; however, the Department did not receive updated TBS data in sufficient time to incorporate into its analysis prior to filing Comments. In its Comments, the Department stated that it would analyze these data in future comments and, in an effort to improve this future analysis, the Department requested that MERC provide in its Reply Comments the number of electric generators served, along with annual consumption, at a TBS-level and the tariff under which each takes service.

³ Reply Comments, Page 2.

⁴ *Id.*

MERC provided information regarding its electric generation in its Reply Comments, including a list of its generators, by TBS, and rate tariff schedule.⁵ The Company noted in its discussion that the Commission approved MERC's proposal to establish an Electric Generation customer class in the Commission's December 26, 2018 *Findings of Fact, Conclusions, and Order* in Docket No. G011/GR-17-563. MERC explained that this customer class is interruptible service and applicable to any customer using more than 50 percent of annual volumes for electric generation. In addition, the nomination of joint-firm service will remain available to customers who take service under this tariff.⁶

The Department reviewed the information provided in the Company's **Trade Secret** Attachment A included with its Reply Comments and provides the following analysis. Currently, MERC provides natural gas service to [TRADE SECRET DATA HAS BEEN EXCISED] electric generations of which [TRADE SECRET DATA HAS BEEN EXCISED] receive service under some type of interruptible tariff.⁷ The Department notes that all of MERC's electric generation customers are on the Company's Northern system with none being on its Consolidated system. Those generators receiving interruptible service will not, to the extent that they respond to curtailments as required by the tariff, impact natural gas system reliability since they do not receive service during peak conditions. However, it is important to note that these generators would be unavailable to produce electricity during a curtailment.

The Department also compared the TBS-level data for the Company's firm electric generators to the detailed TBS consumption data provided in discovery. Based on this review, the Department concludes that current firm electric generators have sufficient capacity available and are unlikely to impact system reliability.

The Department appreciates the information and discussion provided by the Company in Reply Comments and concludes that electric generators do not represent, at this time, a significant impact to MERC's system and firm system reliability.

C. THROUGHPUT ANALYSIS

In discussions in previous demand entitlement filings, the Commission expressed concern regarding the lack of uniformity in planning among natural gas utilities, particularly in establishing a reserve margin. In response to this concern, the Department requested detailed TBS-level data in discovery. MERC provided TBS level data prior to the Department's filing of Comments; however, based on its initial analysis, the Department observed that these data were presented in a manner that made linking the various components together difficult. The

⁵ Reply Comments, Pages 2-3 and **Trade Secret** Attachment A.

⁶ Reply Comments, Page 3.

⁷ Reply Comments, **Trade Secret** Attachment A.

Department raised these concerns with MERC and it was subsequently corrected; however, the Department did not receive these data in sufficient time to include an analysis into its Comments. The Department reviewed these data and provides a summary of its analysis below.

MERC's Northern and Consolidated systems include TBSs and communities across a significant portion of Minnesota. For the Company's Northern system, MERC splits its demand entitlement analysis into separate groups: Cloquet, Worthington, Rochester, Minneapolis, and Albert Lea. MERC's Consolidated system is in Northern Minnesota and includes the three interstate pipelines of Centra, Great Lakes, and Viking. The Department reviewed daily heating season TBS level data across each of the service areas. In particular, the Department compared MDQ and Maximum Available Throughput values at each TBS to the historical daily throughput. These are useful comparisons to help ascertain whether sufficient capacity is available at a given TBS and whether MERC may need to procure additional capacity or consider system upgrades at a specific TBS or in an area. The Department notes that MERC conducted a similar analysis before undertaking its recent upgrades in the Rochester Area.⁸

The Department analyzed the daily throughput data and observed various instances where daily throughput exceeded the MDQ and, in limited instances, where daily throughput exceeded the Maximum Available Throughput at a given TBS. The Department notes that these instances of throughput above the Maximum Available Throughput only occurred on the Company's Northern system. The fact that daily throughput exceeds the MDQ does not necessarily represent a reliability issue since additional deliverable capacity may be available at that delivery point. However, if a delivery point consistently exceeds the MDQ, it is a strong signal to MERC that additional capacity should be procured for that delivery point. On the other hand, the limited instances where daily throughput exceeded the Maximum Available Throughput raises two potential concerns: 1) firm consumption exceeds maximum reported deliverability or 2) MERC has incorrectly included non-firm consumption in the daily TBS data. In either instance, absent additional information from the Company, the Department believes these are concerns that MERC should address either through procurement of additional firm capacity at these delivery points or through improved data collection and retention. Based on these concerns, the Department issued additional discovery on this matter.

MERC clarified instances where consumption exceeded MDQ and Maximum Available Throughput at certain TBSs, and how they can occur, in its response to Department Information Request No. 7.⁹ As part of its response, MERC included the following pertinent quote from Northern's tariff:

⁸ Docket No. G011/M-15-895.

⁹ Department Attachment R-1.

The Operationally Available Capacity [Maximum Capacity] posted is an estimate of the capacity which could be scheduled at or through the group or point in the indicated direction of flow for the Gas Day and cycle referenced. Due to the dynamic nature of the pipeline operations, these capacities are subject to change without notice. Accordingly, there are no guarantees expressed or implied that these capacities will be available. The Operating Capacity may be limited by group and/or point constraints or for the resolution of operational imbalances. Further, depending on the receipt and delivery point combinations nominated and scheduled, the Operating Capacity may be less than the design capacity and greater or less than the long-term sustainable capacity. Because of the grid nature of Northern's pipeline system, the operating conditions of the pipeline and the specific receipt and delivery points nominated and scheduled, Northern may schedule quantities that are greater than the Operating Capacity posted for the nomination cycle.

The Company stated that, in addition to the dynamic nature of the system as noted in Northern's tariff, the presence of interruptible customers that can be curtailed allows MERC to safely exceed the MDQs and Maximum Capacity at specific delivery points.¹⁰

The Department appreciates the Company's clarification of this issue. MERC's explanation provides additional certainty that the instances that the Department observed are not necessarily signs of reliability issues and there are protocols in place at both the interstate pipeline and Local Distribution Company (LDC)-level to ensure reliability and stability of the system. Northern's tariff, and the Company's information provided in discovery, suggests that MERC is able move capacity between TBSs if needed to serve firm load.

Related to these issues, the Department observed that there are more TBSs in the Cloquet area that exceeded the MDQ or Maximum Available Throughput than in other areas on MERC-Northern. As noted above, this does not necessarily mean that this service area is using excessive natural gas, or that reliability may be in question, because natural gas volumes can be moved between different parts of the MERC system or available capacity may be greater than quoted from Northern. The TBS data in the Cloquet area does, however, suggest that the Company's delivery points in Northern Minnesota, served off the Northern system, may require additional entitlements and that MERC may wish to consider redistributing its entitlements throughout its Northern system. If the Company re-allocates its system, it may be able to

¹⁰ *Id.*

ensure firm reliability in the event that Northern is unable to transfer capacity between delivery points.

The Department appreciates MERC's detailed information provided on this topic and its explanation of its procurement strategies and TBS-level consumption. Based on its analysis, the Department concludes that, at this time, the Company's planning process is generally reasonable and likely ensures firm reliability on a peak day.

D. COST COMPARISON TO OCTOBER PGA

In its Comments in Docket No. G011/M-18-526, the Department reviewed MERC's rate impact calculations and observed that the Company's demand cost rate for October 2018 included in its MERC-NNG Update did not match the demand charge per therm included in MERC's October 2018 Northern PGA. The Department provided a revised schedule in its Northern system Comments and recommended that the Commission approve the Company's proposed demand costs effective November 1, 2018.

In its Reply Comments, MERC stated that the Department's revised cost comparisons did not accurately capture MERC's October 2018 PGA rates as they do not reflect the revised base cost of gas or sales approved in Docket No. G011/MR-17-564. MERC also clarified that the October PGA rates reflected in its MERC-NNG Update inadvertently included the Annual Cost Adjustment (ACA) factor, which accounts for the mismatch between the Company's filed PGA rates and the rates reflected in the Company's Supplement. MERC included a revised schedule in its Reply Comments.¹¹

The Department appreciates the clarification regarding the correct rates for the October 2018 PGA rates. The Department reviewed the Company's October 2018 PGA and its Attachment B to its Reply Comments and confirms that they reconcile. Based on the Company's clarification regarding the ACA, the Department notes that there is a minor change to the demand rate impacts shown by the Department in its Comments and earlier presented by MERC in this docket. In addition, the Department reviewed MERC's Attachment B to its Reply Comments and notes that demand costs for its Small and Large Volume Firm rate classes are incorrectly reported. The Department includes revised rate calculations in Department Attachment R-2. Based on the information in MERC's Reply Comments, the Company demand entitlement proposal results in the following annual demand cost impacts:

- annual bill increase of \$18.48 related to demand costs, or 22.42 percent, for the average General Service customer consuming 88 Dth annually;

¹¹ Reply Comments, Attachment B.

- annual bill increase of \$157.52 related to demand costs, or 22.42 percent for the average Small Volume Firm customer consuming 25 Dth annually of firm gas;
- annual bill increase of \$472.57 related to demand costs, or 22.42 percent, for the average Large Volume Firm customer consuming 75 Dth annually of firm gas; and
- no demand cost impacts related to MERC-NNG's interruptible rate classes.

Based on its analysis, the Department recommends that the Commission approve the proposed demand costs with an effective date of November 1, 2018.

III. DEPARTMENT RECOMMENDATIONS

Based on its review of MERC's Reply Comments, the Department continues to recommend that the Commission:

- Accept the Company's proposed level of demand entitlement for its Northern PGA;
- Allow MERC to recover associated demand costs through the monthly PGA effective November 1, 2018 for its Northern PGA;
- Accept the Company's proposed level of demand entitlement for its Consolidated PGA; and
- Allow MERC to recover associated demand costs through the monthly PGA effective November 1, 2018 for its Consolidated PGA.

/ja

**Minnesota Department of Commerce
Division of Energy Resources
Information Request**

Docket Number:	G011/M-18-526	<input type="checkbox"/> Nonpublic <input checked="" type="checkbox"/> Public
Requested From:	Seth DeMerritt	Date of Request: 3/21/2019
	Minnesota Energy Resources Corp.	Response Due: 4/1/2019
Type of Inquiry:	General	
Requested by:	Adam Heinen	
Email Address(es):	adam.heinen@state.mn.us	
Phone Number(s):	651-539-1825	

Request Number: 7

Topic: Distribution Planning

Reference(s): Information Request No. 18 in Docket No. G999/AA-17-493 and
Information Request No. 6 in Docket No. G011/M-18-526

Request:

In the above references, and in previous responses to discovery regarding distribution planning, MERC provided daily throughput data at the Town Border Station (TBS) and delivery point level. Based on its review of these data, the Department observed instances where the Company's daily throughput exceeded MDQs and Maximum Capacity at various TBSs or delivery points. Given these observations, please fully explain how these instances occurred and whether these instances represent a risk to system reliability and whether the data provided by MERC represents strictly firm throughput.

If this information has already been provided in initial petition or in response to an earlier Department-DER information request, please identify the specific cite(s) or Department-DER information request number(s).

MERC Response:

As explained on Northern Natural Gas' website:

The Operationally Available Capacity posted is an estimate of the capacity which could be scheduled at or through the group or point in the indicated direction of flow for the Gas Day and cycle referenced. Due to the dynamic nature of the pipeline operations, these capacities are subject to change without notice. Accordingly, there are no guarantees expressed or implied that

these capacities will be available. The Operating Capacity may be limited by group and/or point constraints or for the resolution of operational imbalances. Further, depending on the receipt and delivery point combinations nominated and scheduled, the Operating Capacity may be less than the design capacity and greater or less than the long-term sustainable capacity. Because of the grid nature of Northern's pipeline system, the operating conditions of the pipeline and the specific receipt and delivery points nominated and scheduled, Northern may schedule quantities that are greater than the Operating Capacity posted for the nomination cycle.¹

It should be noted that Operational Capacity referenced by NNG above, and Maximum Capacity are the same.

As stated by NNG, due to the grid nature of the transmission system, it is possible to schedule quantities greater than the posted operating capacity. This fact, along with the fact that MERC has interruptible customers that can be curtailed, allow MERC to safely exceed the MDQs and Maximum Capacity at specific delivery points. In the event that constraints on a specific delivery point do occur, MERC has the ability to call curtailments on interruptible customers, thereby reducing the risk to MERC's system reliability.

1

<http://www.northernnaturalgas.com/InfoPostings/Capacity/Pages/OperationallyAvailable.aspx>

MINNESOTA ENERGY RESOURCES - NNG
RATE IMPACT OF THE PROPOSED DEMAND CHANGE
NOVEMBER 1, 2018

All costs in \$/Dth	Base Cost of Gas G011/MR-17-564 Jan 1, 2018	Demand Charge Oct 1, 2017	Demand Charge Demand Filing Nov 1, 2017	Most Recent PGA Oct 1, 2018	Proposed Effective Nov 1, 2018	Result of Proposed Change			
						Change from Last Rate Case	Change from Nov 1, 2017 Demand Filing	Change from Last PGA %	Change from Last PGA \$
1) General Service Residential: Avg. Annual Use: 88				Dth					
Commodity Cost	\$3.7406	\$3.2257	\$3.0201	\$3.4787	\$3.4787	(\$0.2619)	\$0.4586	0.00%	\$0.0000
Demand Cost	\$0.9361	\$0.9288	\$0.9328	\$0.9367	\$1.1467	\$0.2106	\$0.2139	22.42%	\$0.2100
Commodity Margin	\$2.6284	\$2.4116	\$2.4116	\$2.5727	\$2.5727	(\$0.0557)	\$0.1611	0.00%	\$0.0000
Total Cost of Gas	\$7.3051	\$6.5661	\$6.3645	\$6.9881	\$7.1981	(\$0.1070)	\$0.8336	3.01%	\$0.2100
Avg Annual Cost	\$642.85	\$577.82	\$560.08	\$614.95	\$633.44	(\$9.41)	\$73.36	3.01%	\$18.48
Effect of proposed commodity change on average annual bills:				\$0.00					
Effect of proposed demand change on average annual bills:				\$18.48					
2) Small Vol. Interruptible: Avg. Annual Use: 5,110				Dth					
Commodity Cost	\$3.7406	\$3.2257	\$3.0201	\$3.8855	\$3.4787	(\$0.2619)	\$0.4586	-10.47%	(\$0.4068)
Demand Cost									
Commodity Margin	\$1.0616	\$0.9740	\$0.9740	\$1.0391	\$1.0391	(\$0.0225)	\$0.0651	0.00%	\$0.0000
Total Cost of Gas	\$4.8022	\$4.1997	\$3.9941	\$4.9246	\$4.5178	(\$0.2844)	\$0.5237	-8.26%	(\$0.4068)
Avg Annual Cost	\$24,539.24	\$21,460.47	\$20,409.85	\$25,164.71	\$23,085.96	(\$1,453.28)	\$2,676.11	-8.26%	(\$2,078.75)
Effect of proposed commodity change on average annual bills:				(\$2,078.75)					
Effect of proposed demand change on average annual bills:				\$0.00					
3) Large Vol. Interruptible: Avg. Annual Use: 16,150				Dth					
Commodity Cost	\$3.7406	\$3.2257	\$3.0201	\$3.8855	\$3.4787	(\$0.2619)	\$0.4586	-10.47%	(\$0.4068)
Demand Cost									
Commodity Margin	\$0.5808	\$0.5329	\$0.5329	\$0.5685	\$0.5685	(\$0.0123)	\$0.0356	0.00%	\$0.0000
Total Cost of Gas	\$4.3214	\$3.7586	\$3.5530	\$4.4540	\$4.0472	(\$0.2742)	\$0.4942	-9.13%	(\$0.4068)
Avg Annual Cost	\$69,790.61	\$60,701.39	\$57,380.95	\$71,932.10	\$65,362.28	(\$4,428.33)	\$7,981.33	-9.13%	(\$6,569.82)
Effect of proposed commodity change on average annual bills:				(\$6,569.82)					
Effect of proposed demand change on average annual bills:				\$0.00					
4) Small Vol. Firm: Avg. Annual Use: 5,110				Dth					
25				DTh					
Commodity Cost	\$3.7406	\$3.2257	\$3.0201	\$3.8855	\$3.4787	(\$0.2619)	\$0.4586	-10.47%	(\$0.4068)
Demand Cost	\$28.0830	\$27.8640	\$27.98	\$28.10	\$34.4019	\$0.0000	\$6.4179	22.42%	\$6.3009
Commodity Margin	\$1.0616	\$0.9740	\$0.9740	\$1.0391	\$1.0391	(\$0.0225)	\$0.0651	0.00%	\$0.0000
Demand Margin	\$3.2697	\$3.0000	\$3.0000	\$3.1449	\$3.1449	\$3.1449	\$0.1449	0.00%	\$0.0000
Total Cost of Gas	\$4.8022	\$4.1997	\$3.9941	\$4.9246	\$4.5178	(\$0.2844)	\$0.5237	-8.26%	(\$0.4068)
Total Demand Cost	\$31.3527	\$30.8640	\$30.9840	\$31.2459	\$37.5468	\$6.1941	\$6.5628	20.17%	\$6.3009
Avg Annual Cost	\$25,323.06	\$22,232.07	\$21,184.45	\$25,945.85	\$24,024.63	(\$1,298.43)	\$2,840.18	-7.40%	(\$1,921.23)
Effect of proposed commodity change on average annual bills:				(\$2,078.75)					
Effect of proposed demand change on average annual bills:				\$157.52					
5) Large Vol. Firm: Avg. Annual Use: 16,150				Dth					
75				DTh					
Commodity Cost	\$3.7406	\$3.2257	\$3.0201	\$3.8855	\$3.4787	(\$0.2619)	\$0.4586	-10.47%	(\$0.4068)
Demand Cost	\$28.0830	\$27.8640	\$27.9840	\$28.1010	\$34.4019	\$6.3189	\$6.4179	22.42%	\$6.3009
Commodity Margin	\$0.5808	\$0.5329	\$0.5329	\$0.5685	\$0.5685	(\$0.0123)	\$0.0356	0.00%	\$0.0000
Demand Margin	\$3.2697	\$3.0000	\$3.0000	\$3.1449	\$3.1449	\$0.0000	\$0.1449	0.00%	\$0.0000
Total Cost of Gas	\$4.3214	\$3.7586	\$3.5530	\$4.4540	\$4.0472	(\$0.2742)	\$0.4942	-9.13%	(\$0.4068)
Total Demand Cost	\$31.3527	\$30.8640	\$30.9840	\$31.2459	\$37.5468	\$37.5468	\$6.5628	20.17%	\$6.3009
Avg Annual Cost	\$72,142.06	\$63,016.19	\$59,704.75	\$74,275.54	\$68,178.29	(\$1,612.32)	\$8,473.54	-8.21%	(\$6,097.26)
Effect of proposed commodity change on average annual bills:				(\$6,569.82)					
Effect of proposed demand change on average annual bills:				\$472.56					

Note: Average Annual Average based on NNG Annual Automatic Adjustment Report in Docket No. E, G999/AA-17-493

Note: Commodity Cost Rates do not include ACA adjustment.

CERTIFICATE OF SERVICE

I, Sharon Ferguson, hereby certify that I have this day, served copies of the following document on the attached list of persons by electronic filing, certified mail, e-mail, or by depositing a true and correct copy thereof properly enveloped with postage paid in the United States Mail at St. Paul, Minnesota.

**Minnesota Department of Commerce
Public Response Comments**

Docket No. G011/M-18-526 and G011/M-18-527

Dated this **21st** day of **May 2019**

/s/Sharon Ferguson

[illegible]

First Name	Last Name	Email	Company Name	Address	Delivery Method	View Trade Secret	Service List Name
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Gregory	Jenner	greg.jenner@stoel.com	Stoel Rives LLP	33 South Sixth Street Ste 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_18-526_M-18-526
Linda	Jensen	linda.s.jensen@ag.state.mn.us	Office of the Attorney General-DOC	1800 BRM Tower 445 Minnesota Street St. Paul, MN 551012134	Electronic Service	No	OFF_SL_18-526_M-18-526
Sarah	Johnson Phillips	sarah.phillips@stoel.com	Stoel Rives LLP	33 South Sixth Street Suite 4200 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_18-526_M-18-526
Michael	Krikava	mkrikava@briggs.com	Briggs And Morgan, P.A.	2200 IDS Center 80 S 8th St Minneapolis, MN 55402	Electronic Service	No	OFF_SL_18-526_M-18-526
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Brian	Meloy	brian.meloy@stinson.com	STINSON LLP	50 S 6th St Ste 2600 Minneapolis, MN 55402	Electronic Service	No	OFF_SL_18-526_M-18-526
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