

Minnesota Public Utilities Commission
Staff Briefing Papers

Meeting Date: November 24, 2014..... *Agenda Item #13

Company: Minnesota Energy Resources Corporation (MERC)

Docket Nos. G-011/M-08-1328

In the Matter of a Petition by Minnesota Energy Resources Corporation (MERC-PNG Northern Natural) for Approval of Changes in Contract Demand Entitlements for the 2008-2009 Heating Season Supply Plan effective November 1, 2008.

G-007/M-08-1329

In the Matter of a Petition by Minnesota Energy Resources Corporation (MERC-NMU) for Approval of Changes in Contract Demand Entitlements for the 2008-2009 Heating Season Supply Plan effective November 1, 2008.

G-011/M-08-1330

In the Matter of a Petition by Minnesota Energy Resources Corporation (MERC-PNG Great Lakes) for Approval of Changes in Contract Demand Entitlements for the 2008-2009 Heating Season Supply Plan effective November 1, 2008.

G-011/M-08-1331

In the Matter of a Petition by Minnesota Energy Resources Corporation (MERC-PNG Viking) for Approval of Changes in Contract Demand Entitlements for the 2008-2009 Heating Season Supply Plan effective November 1, 2008.

Issue: Should the Commission approve MERC's proposed demand entitlement capacity (levels) and cost changes to meet its Design Day and Reserve Margin requirements as described in the listed dockets, effective November 1, 2008?

Staff: Bob Brill 651-201-2242
Bob Harding 651-201-2237

Relevant Documents

G-011/M-08-1328 (MERC-PNG NNG)

MERC Initial Petition	November 3, 2008
MERC Initial Petition Revised Spreadsheet	November 5, 2008
Department of Commerce (Department) Comments	March 4, 2009
Department Supplemental Comments	March 13, 2009
MERC Reply Comments	March 30, 2009
Department Reply Comments	June 17, 2009
Second Set of MERC Reply Comments	August 12, 2009
Second Set of Department Reply Comments.....	September 16, 2009

G-007/M-08-1329 (MERC-NMU)

MERC Initial Petition	November 3, 2008
MERC Initial Petition Revised Spreadsheet	November 5, 2008
Department of Commerce (Department) Comments	March 4, 2009
MERC Reply Comments	March 30, 2009
Department Reply Comments.....	June 17, 2009
Second Set of MERC Reply Comments	August 12, 2009
Second Set of Department Reply Comments.....	September 21, 2009

G-011/M-08-1330 (MERC-PNG GLGT)

MERC Initial Petition	November 3, 2008
MERC Initial Petition Revised Spreadsheet	November 5, 2008
Department of Commerce (Department) Comments	March 4, 2009
MERC Reply Comments	March 30, 2009
MERC Reply Comments Correction to Attachment 4	August 12, 2009
Department Reply Comments.....	August 19, 2009
Second Set of MERC Reply Comments	September 17, 2009

G-011/M-08-1331 (MERC-PNG VGT)

MERC Initial Petition	November 3, 2008
MERC Initial Petition Revised Spreadsheet	November 5, 2008
Department of Commerce (Department) Comments	February 9, 2009
MERC Reply Comments	March 6, 2009
MERC Reply Comments Update to Reply Comments.....	March 30, 2009
Department Reply Comments.....	August 18, 2009
Second Set of MERC Reply Comments	September 17, 2009

The attached materials are workpapers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless otherwise noted.

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Statement of the Issue

Should the Commission approve MERC's proposed demand entitlement capacity (levels) and cost changes to meet its Design Day and Reserve Margin requirements as described in the listed dockets, effective November 1, 2008?

Introduction

MERC has entered into various natural gas supply and interstate pipeline contracts to provide natural gas to its customers. MERC annually reviews and updates these contracts to ensure continued system reliability of natural gas supply deliveries to its customers.

MERC's annual demand entitlement¹ petitions seek Commission approval to recover certain cost and capacity changes in these interstate pipeline transportation entitlements, supplier reservation fees, and other demand-related contract costs and to implement the rate impact of these petitions through its Purchased Gas Adjustment (PGA)² charges.

PUC staff reviewed MERC's Demand Entitlement Petitions and the several rounds of *Comments* filed by MERC and the Department. The Department and MERC have worked together and either resolved or agreed to defer to the following year all of the issues raised by the Department. PUC staff generally agrees with the Department's recommendations with minor qualifications.

For its briefing papers, PUC staff is consolidating all of MERC's 4 PGA areas³ into one discussion, but will discuss issues related to a particular PGA area separately.

Minnesota Rules

Minnesota Rule, part 7825.2910, subpart 2⁴ require gas utilities to make a filing whenever there is a change to its demand-related entitlement services provided by a supplier or transporter of natural gas.

¹ *Demand entitlements* can be defined as reservation charges paid by the Local Distribution Company (LDC) to an interstate natural gas pipeline to reserve pipeline capacity used to store and transport the natural gas supply for delivery to its system and contract charges associated with the LDC procuring its gas supply; these costs are recovered through the LDC's PGA.

² The Purchased Gas Adjustment is a mechanism used by regulated utilities to recover its cost of energy. Minn. Rules 7825.2390 through 7825.2920 enable regulated gas and electric utilities to adjust rates on a monthly basis to reflect changes in its cost of energy delivered to customers based upon costs authorized by the Commission in the utility's most recent general rate case.

³ MERC has four separate PGA areas, 08-1329 MERC-NMU, 08-1331 MERC-PNG Viking, 08-1330 MERC-PNG GLGT, and 08-1328 MERC-PNG NNG.

⁴ Filing upon a change in demand, is included in the Automatic Adjustment of Charges rule parts 7825.2390 through 7825.2920 and requires gas utilities to file to increase or decrease demand, to redistribute demand percentages among classes, or to exchange one form of demand for another.

Should the Commission approve MERC's proposed demand entitlement capacity (levels) and cost changes to meet its Design Day and Reserve Margin requirements as described in the listed dockets, effective November 1, 2008?

MERC

MERC calculated its 2008-2009 Design Day (DD) requirements at 306,842 Mcf/day.

Table 1 - Design Day (DD) requirements⁵ by PGA areas (reflected in Mcf/day)

Total MERC	MERC-NMU	MERC-PNG Viking	MERC-PNG GLGT	MERC-PNG NNG
306,842	63,726	7,420	10,299	225,397

Table 2 - DD requirements by interstate pipeline (reflected in Mcf/day)

Pipeline	Total	MERC- NMU	MERC-PNG Viking	MERC-PNG GLGT	MERC-PNG NNG
NNG	247,188	21,791			225,397
Viking	17,549	10,129	7,420		
GLGT	34,494	24,195		10,299	
Centra	7,611	7,611			
Total	306,842	63,726	7,420	10,299	225,397

To transport its DD requirements, MERC used a series of interstate pipeline contracts to meet its annual total system transportation and storage requirements for each PGA area, i.e. demand entitlements. The 2008-2009 demand entitlement contract levels were modified from the previous 2007-2008 levels, which resulted in 309,745 Mcf/day for transportation.

Table 3 - Transportation Demand Entitlements⁶ by PGA area (reflected in Mcf/day)

Total MERC	MERC-NMU	MERC-PNG Viking	MERC-PNG GLGT	MERC-PNG NNG
309,745	64,835	7,625	10,500	226,785

The Commission approved MERC's 2007-2008 demand entitlement contract costs of \$21,373,445, MERC proposed to recover 2008-2009 demand entitlement costs of \$21,833,983 or a \$460,538 increase. See Table 4 below:

⁵ Includes Transportation only, does not include Storage Entitlements.

⁶ Ibid.

Table 4 - Transportation Demand Entitlement Costs, as filed by MERC

PGA area	2007-2008 Demand Cost of Gas	2008-2009 Demand Cost of Gas	Difference
MERC-NMU	\$4,286,538	\$4,284,662	(1,876)
MERC-PNG Viking	\$484,327	\$385,977	(98,350)
MERC-PNG GLGT	\$378,651	\$404,586	25,935
MERC-PNG NNG	\$16,223,929	\$16,758,758	\$534,829
Total	\$21,373,445	\$21,833,983	\$460,538

(PUC staff has summarized MERC's transportation Design Day (DD) requirements and demand entitlements in *Appendix A*, and its demand entitlement costs in *Appendix B*.)

Reserve Margin Changes

The Reserve Margin is the difference between MERC's DD requirements and its transportation demand entitlements. MERC stated that its reserve margin in each PGA area is appropriate given the need to balance the uncertainty of DD conditions, customer demand during these conditions, and the need to protect against the potential firm gas supply loss; maintain system reliability.

Table 5 - Reserve Margins⁷ by PGA areas.

	MERC-NMU	MERC-PNG Viking	MERC-PNG GLGT	MERC-PNG NNG
Quantities in Mcf ⁸	1,109	205	201	1,388
As a Percentage ⁹	1.74%	2.76%	1.95%	0.62%

Table 6 - Reserve Margin – MERC total system

All Dockets-Total MERC	Quantities in Mcf
Total MERC Reserve Margin	2,903
Total MERC DD requirements	306,842
Reserve Margin as a percentage	0.95%

Department

The Department reviewed MERC's proposed Design Day (DD) requirements, demand entitlements, and resulting reserve margins.

The Department summarized MERC's proposed DD requirements by PGA area, for a total increase of 25,886 Mcf/day, see Table 6:

⁷ See Appendix A for calculation

⁸ Calculated by taking the Total Demand Entitlements contracts and subtracting the total DD requirements

⁹ Calculated by dividing the difference between the total Demand Entitlements contracts and the total DD requirements by the total DD requirements

Table 6 – MERC’s DD requirements

PGA area	2007-2008	2008-2009	Difference	% increase/(decrease)
MERC-NMU	61,008	63,726	2,718	4.46%
MERC-PNG Viking	8,135	7,420	(715)	(8.79%)
MERC-PNG GLGT	9,550	10,299	749	7.84%
MERC-PNG NNG	202,263	225,397	23,134	11.44%
Total	280,956	306,842	25,886	9.21%

MERC’s proposed changes to its 2008-2009 demand entitlement and Reserve Margin levels in its 4 PGA areas are summarized in Tables 7 and 8.

Table 7 – Demand Entitlement Comparison by PGA area

Comparison in Mcf	2007-2008 Demand Entitlement Levels	2008-2009 Demand Entitlement Levels	Difference
Docket No. 08-1329 (NMU)	64,420	64,835	415
Docket No. 08-1331 (Viking)	8,541	7,625	(916)
Docket No. 08-1330 (GLGT)	10,000	10,500	500
Docket No. 08-1328 (NNG)	226,785	226,785	0
Total	309,746	309,745	(1)

Table 8 – Reserve Margin Comparison by PGA area

Comparison in Percentage	2007-2008 Demand Entitlement Filing	2008-2009 Demand Entitlement Filing	Difference
Docket No. 08-1329 (NMU)	5.59%	1.74%	(3.85%)
Docket No. 08-1331 (Viking)	4.98%	2.76%	(2.22%)
Docket No. 08-1330 (GLGT)	4.71%	1.95%	(2.76%)
Docket No. 08-1329 (NNG)	12.12%	0.62%	(11.50%)

The Department was concerned primarily about:

- MERC’s methodology for its estimates of its Design-Day requirements.
- MERC’s DD results for MERC-PNG-NNG, MERC-PNG-GLGT, and MERC-NMU DD where the requirements increased, while its DD requirement for MERC-PNG-Viking decreased.
- Two extreme cold weather events that occurred during the 2008-2009 heating season.

The Department has stated in previous dockets that a typical Reserve Margin range is between 5% - 7%.

As a result, and after several rounds of comments, the Department recommended that for all 4 MERC PGA areas that the Commission:

- approve MERC's demand entitlement level without endorsing its design-day study analysis subject to the Commission's decisions in the pending 2007-2008 demand entitlement petitions;
- approve the PGA recovery of costs associated with the Company's proposed demand entitlement level effective November 1, 2008, subject to the Commission's pending decisions in the pending 2007-2008 demand entitlement petitions; and
- require MERC-PNG to provide additional evidence supporting the estimative power of its design-day study in its next demand entitlement filing.

The Department also recommended for the MERC-PNG-GLGT and MERC-PNG-Viking PGA areas that the Commission:

- require MERC to provide in its future demand entitlement filings the individual PGA system specific number of joint customers (sales versus transportation) who elect to take firm service, and identify the associated interstate pipeline contracts and units of contracted demand from the Company for each month during the intervening twelve month period between filings.

PUC Staff Comment

PUC staff has reviewed the 2008-2009 demand entitlement petitions for all of MERC's PGA areas and appreciates all the party comments. Staff believes that all issues have been resolved by the parties in the various rounds of *Comments* and *Reply Comments*. PUC staff believes that the Department's analysis covers most of the relevant factors and will not repeat their comments.

PUC staff agrees with the Department's recommendations. From its review of the record, PUC staff is concerned that MERC's reserve margins decreased from the 2007-2008 demand entitlement petitions. For example, the MERC-PNG NNG reserve margin decreased from the 2007-2008 demand entitlement petition level of 12.12% to 0.62% in this petition. PUC staff believes that this difference is partially explained by MERC's treatment of its Joint Rate Service volumes being added back to its actual DD requirements before calculating its reserve margins.¹⁰

Previously, MERC stated that it did not purchase firm interstate pipeline capacity specifically to serve its joint customers. The joint customer contract is for firm service, but this customer can vary the term of service and can cancel the contract with 90 days' notice. Because of this variability, MERC does not plan for these contracted volumes, but serves these joint customers out of its reserve margin.¹¹

¹⁰ See MERC's initial petitions, p. 12

¹¹ See PUC staff briefing papers dated July 24, 2014 in the 2007-2008 demand entitlement petitions, p. 11

MERC's joint customer treatment led PUC staff to believe that a comparison cannot be made between the 2007-2008 and 2008-2009 demand entitlement petitions for MERC's DD requirements, demand entitlements, and Reserve Margins because of the Joint Rate Service volume treatment in the 2008-2009 demand entitlement petitions.

Staff's understanding is that MERC's design day analysis and estimates in 2008-2009 were complicated by the fact the MERC was required to start telemetering for all of its interruptible and transportation customers.¹² Because of the lack of telemetering on its system, MERC did not have daily data that distinguished between firm and interruptible loads. MERC's estimates of its design day requirements at that time may not have been as accurate as it could have been. In testimony in its rate case, MERC reported that it has completed the installation of all the telemetering for its interruptible and transportation customers (i.e. Small Volume, Large Volume, and Super Large Volume).¹³

Should the Commission approve MERC's proposed allocation method for assigning storage demand charges to firm and interruptible customers?

In Docket No. 06-1208, the Commission requested MERC to submit its proposal on storage classification and allocation. On March 7, 2008, MERC submitted its proposal to allocate all storage demand charges to both firm and interruptible sales customers through its commodity charges. In the 2008-2009 demand entitlement petitions, the parties continue the discussion of assigning storage demand costs to MERC's commodity costs. MERC's initial petitions do not reflect the assignment of demand storage costs to the commodity factors. The Department recommended to the Commission that MERC be required to reflect the storage demand costs in its commodity factors.

In its September 16 and 19, 2009 *Comments*, the Department recommendations that apply only to MERC-NMU (docket 08-1329) and PNG-NNG (docket 08-1328) PGA areas were as follows:

- approve MERC's proposed cost recovery proposal submitted on August 12, 2009 which moves FDD storage costs to the commodity cost recovery portion of the Purchased Gas Adjustment (PGA); and
- require MERC-PNG to refund to its ratepayers, through the true-up factor, the difference between its proposed cost recovery proposal submitted on August 12, 2009 and MERC-PNG's cost recovery proposal submitted on November 5, 2008 and charged in its rates to its customers through the PGA since November 1, 2008.

¹² The Commission ordered telemetering in Docket No. 08-835

¹³ Walters, Direct Testimony, p. 33, Docket G-011/GR-13-617

However, in its August 6, 2014 Order on MERC's 2007-2008 demand entitlements, the Commission approved MERC's storage classification and allocation proposal,¹⁴ effective November 1, 2014.

PUC Staff Comment

PUC staff considers this issue to be resolved on a going forward basis for all outstanding MERC demand entitlement petitions, thus, will not revisit it in the 2008-2009 demand entitlement petitions briefing papers. The Commission approved MERC's March 7, 2008 storage classification and allocation proposal,¹⁵ effective November 1, 2014. PUC staff believes that the Department's recommendations are unnecessary since the Commission made its decision on storage cost recovery in its August 6, 2014 Order in MERC's 2007-2008 demand entitlement petitions.

Staff did not include this issue in the decision alternatives at the end of these briefing papers because it believes this issue has been addressed and resolved. If the Commission issues informal letter orders adopting the Department's recommendations in these dockets, it may want to make clear in its order that it is not adopting that part of the Department's recommendation.

(Staff is working on bringing the filings from 2009-2014 to the Commission now that this issue is resolved.)

MERC's FT0011 Contract (MERC-PNG-GLT, Docket 08-1330)

MERC-NMU and MERC-PNG-GLGT (2007-2008)

In MERC's 07-1402 and 07-1404 demand entitlement petitions there were significant comments filed regarding this contract. The Department concluded that these demand costs were not reasonable and recovery was denied.¹⁶

MERC-PNG-GLGT (2008-2009, Docket 08-1330)

In its August 19, 2009 response comments, the Department recommended MERC remove all costs and volumes associated with this contract from the base cost of gas filings in MERC's 2008 rate case. In its September 17, 2009 response comments, MERC indicated that it agreed to do as ordered by the Commission, in the Commission's September 14, 2009 Order After Reconsideration, in MERC 2008 rate case.

¹⁴ For further detail, see the July 15, 2014 PUC staff briefing papers for Docket Nos. 07-1402, 07-1403, 07-1404, and 07-1405

¹⁵ Ibid.

¹⁶ In Docket No 08-836, the Department noted that MERC included volumes related to the FT0011 contract in its base cost of gas calculations. The Department believed that the inclusion of these cost were unreasonable. The Department recommended that the Commission require MERC-NMU and MERC-PNG GLGT, in its final compliance in Docket No. G007,011/MR-08-836, to remove all costs and volumes related to the FT0011 contract from its final base cost of gas calculations. Review of MERC's compliance filing in Docket No. 08-836 revealed that MERC did remove the volumes and costs associated with the FT0011 contract.

PUC Staff Comment

Staff believes this issue has been completely resolved. If the Commission issues an informal order adopting the Department's recommendation in docket 08-1330, it should qualify its adoption of the Department's recommendation by fifth bullet point in the cover letter to the Department's August 19, 2009 response comments.

Staff did not include this issue in the decision alternatives at the end of these briefing papers because it believes this issue has been addressed and resolved. If the Commission issues informal letter orders adopting the Department's recommendations in these dockets, it may want to make clear in its order that it is not adopting that part of the Department's recommendation.

Decision Alternatives

The following Decision Alternatives apply to all of the MERC dockets addressed in these briefing papers. Those dockets were:

Docket Nos. G-011/M-08-1328 (MERC-PNG-NNG)

Docket Nos. G-007/M-08-1329 (MERC-NMU)

Docket Nos. G-011/M-08-1330 (MERC-NNG-GLGT)

Docket Nos. G-011/M-08-1331 (MERC-NNG-VGT)

1. MERC is seeking Commission Approval for Demand Entitlement petitions effective November 1, 2008 for its 4 PGA areas; MERC-NMU, MERC-PNG-Viking, MERC-PNG-GLGT, and MERC-PNG-NNG.

MERC and the Department do not have any issues remaining on the following resolved issues:

- Design Day Requirements Estimates
 - Demand Entitlement Estimates without endorsing MERC's design-day study analysis
 - Reserve Margin Calculation
 - Declining Design Day requirement use per customer
 - Peak day send-out use per customer
 - Storage Contracts Usage and cost recovery
 - PGA Cost Recovery
 - FT0011 contract volumes and cost elimination from PGA recovery
- A. Approve MERC's request for interstate pipeline and other capacity changes to meet its Design Day and Reserve Margin requirements without endorsing MERC's design-day study analysis as described in the listed dockets, and
 - B. Approve MERC's request to recover the associated cost changes in its pipeline demand entitlement contracts and supplier reservation fees as requested by MERC.

Staff Note: Staff did not include decision alternatives that specifically address MERC's allocation of storage costs (generally in all four dockets and in particular, dockets 08-1328 and 08-1329) and MERC's FT0011 Contract (in docket 08-1330) because it believes these issues have been addressed in previous Commission orders and are resolved. If the Commission issues informal orders adopting the Department's recommendations in these dockets, the Commission may want to make clear in its informal orders that it is not adopting those parts of the Department's recommendations that address these issues.

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MERC-PNG NNG (08-1328) Transportation Demand Entitlements Changes

Quantities in Mcf

MERC-PNG NNG	07-1405 Level ¹⁷	08-1328 Level ¹⁸	Difference
	(1)	(2)	(3)
TF-12 Base and Variable	59,804	62,596	2,792
TF5	29,619	26,827	(2,792)
TFX-12	18,409	18,409	0
TFX-5	90,130	90,130	0
Windom	2,500	2,500	0
LSP Peaking Service	26,323	26,323	0
Total Demand Entitlement	226,785	226,785	0
Forecasted DD Requirement	202,263	225,397	23,134
Demand Entitlements Surplus/Storage	24,522	1,388	(23,134)
Reserve Margin	12.12%	0.62%	(11.50%)

¹⁷ Source of this information is Docket 07-1405 Initial Petition dated November 1, 2007, Attachments 3 and 4 p. 2.

¹⁸ Source of this information is Docket 08-1328 Initial Petition dated November 1, 2008, Attachments 3 and 4, p. 2.

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MERC-NMU (08-1329) Transportation Demand Entitlements Changes

Quantities in Mcf

MERC-NMU	07-1402 Level ¹⁹	08-1329 Level ²⁰	Difference
	(1)	(2)	(3)
NNG TF 12 B&V	12,756	9,296	(3,460)
NNG TF 5	1,991	5,451	3,460
NNG TFX 5	6,139	6,139	0
LS Power	2,777	2,777	0
GLGT FT	10,130	10,130	0
GLGT FT (12)	1,178	1,178	0
GLGT FT (5)	2,138	2,138	0
GLGT FT	4,500	4,000	(500)
VGT FT-A	7,966	7,966	0
VGT FT-A (3)	0	5,902	
NNG-TF Chisago	782	926	144
NNG-TF Chisago	1,765	2,089	324
NNG-TFX12Chisago	1,963	2,324	361
NNG-TFX 5 Chisago	476	563	87
Centra FT-1	9,858	9,858	0
VGT Capacity Release	4,987	0	
Total Demand Entitlement	64,420	64,835 ²¹	415
Forecasted DD Requirement	61,008	63,726	2,718
Demand Entitlements Surplus/Storage	3,412	1,109	(2,303)
Reserve Margin	5.59%	1.74%	(3.85%)

[PUC staff note: The VGT FT-A (3) volumes are not included in the Total Demand Entitlement volume.]

¹⁹ Source of this information is Docket 07-1402 Initial Petition dated November 1, 2007, Attachments 3 and 4 p. 2.

²⁰ Source of this information is Docket 08-1329 Initial Petition dated November 1, 2008, Attachments 3 and 4, p. 2.

²¹ Include only the VGT RT-A (3) demand entitlements and not the NNG-TF, NNG-TFX12, NNG-TFX 5 volumes, which total to 5,902 (backhaul arrangement)

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MERC-PNG GLGT (08-1330) Transportation Demand Entitlements Changes

Quantities in Mcf

MERC-PNG GLGT	07-1404 Level ²²	08-1330 Level ²³	Difference
	(1)	(2)	(3)
FT0017	4,105	4,105	0
FT0075	1,973	1,973	0
FT0155 (12)	2,422	2,422	0
FT0155 (5)	1,500	1,500	0
FT8466	0	500	500
Total Demand Entitlement	10,000	10,500	500
Forecasted DD Requirement	9,550	10,299	749
Demand Entitlements Surplus/Storage	450	201	(249)
Reserve Margin	4.71%	1.95%	(2.76%)

²² Source of this information is Docket 07-1404 Initial Petition dated November 1, 2007, Attachments 3 and 4 p. 2.

²³ Source of this information is Docket 08-1330 Initial Petition dated November 1, 2008, Attachments 3 and 4, p. 2.

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MERC-PNG Viking (08-1331) Transportation Demand Entitlements Changes

Quantities in Mcf

MERC-PNG Viking	07-1403 Level ²⁴	08-1331 Level ²⁵	Difference
	(1)	(2)	(3)
AF0012	3,527	3,527	0
AF0016	1,000	1,000	0
AF0102	2,000	2,000	0
NNG-TF Chisago 112495	316	172	(144)
NNG-TF Chisago 112495	713	389	(324)
NNG-TFX12Chisago112486	793	432	(361)
NNG-TFX 5 Chisago112486	192	105	(87)
Total Demand Entitlement	8,541	7,625	(916)
Forecasted DD Requirement	8,135	7,420	(715)
Demand Entitlements Surplus/Storage	405	205	(200)
Reserve Margin	4.98%	2.76%	(2.22%)

²⁴ Source of this information is Docket 07-1403 Initial Petition dated November 1, 2007, Attachments 3 and 4 p. 2.

²⁵ Source of this information is Docket 08-1331 Initial Petition dated November 1, 2008, Attachments 3 and 4, p. 2.

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MERC-PNG NNG (08-1328) **Transportation** Demand Entitlements PGA Costs

MERC-PNG NNG	Contract Number	07-1405 Demand Costs ²⁶	08-1328 Demand Costs ²⁷	Difference
	(1)	(2)	(3)	(4)
TF-12 Base and Variable		\$5,452,825	\$6,227,986	\$775,161
TF5		\$2,244,084	\$2,003,752	(\$240,332)
TFX-12		\$1,689,365	\$1,689,365	\$0
TFX-5		\$6,303,269	\$6,303,269	\$0
TFX	112486	\$11,366	\$11,366	\$0
TFX	112486	\$11,366	\$11,366	\$0
TFX7	111866	\$168,437	\$168,437	\$0
Windom		\$0	\$0	\$0
LSP Peaking Service		\$343,217	\$343,217	\$0
Total Demand Entitlement Costs		\$16,223,929	\$16,758,758	\$534,829

²⁶ Source of this information is Docket 07-1405 Initial Petition dated November 1, 2007, Attachment 4, p. 2.

²⁷ Source of this information is Docket 08-1328 Initial Petition dated November 1, 2008, Attachment 4, p. 2.

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MERC-NMU (08-1329) Transportation Demand Entitlements PGA Costs, as adjusted

MERC-NMU	Contract Number	07-1402 Demand Costs ²⁸	08-1329 Demand Costs ²⁹	Difference
	(1)	(2)	(3)	(4)
NNG TF 12 B&V	112495	\$1,338,116	\$966,064	(\$372,052)
NNG TF 5	112495	\$150,848	\$412,995	\$262,147
NNG TFX 5	112486	\$465,121	\$465,121	\$0
LS Power		\$36,211	\$36,211	\$0
GLGT FT	FT0016	\$420,354	\$420,354	\$0
GLGT FT (12)	FT0155	\$48,882	\$48,882	\$0
GLGT FT (5)	FT0155	\$36,966	\$36,966	\$0
GLGT FT	FT8466	\$186,732	\$165,984	(\$20,748)
VGT FT-A	AF0012	\$331,427	\$331,427	\$0
VGT FT-A		\$0	\$111,167	\$111,167
VGT – Cap. Release	RF0361	\$68,222	\$0	(\$68,222)
NNG-TF Chisago	112495	\$71,130	\$84,181	\$13,051
NNG-TF Chisago	112495	\$133,755	\$158,296	\$24,541
NNG-TFX12Chisago	112486	\$226,869	\$268,494	\$41,625
NNG-TFX 5 Chisago	112486	\$36,057	\$42,672	\$6,615
Centra FT-1		\$536,214	\$536,214	\$0
Union Balancing		\$54,000	\$54,000	\$0
Centra MN Pipelines		\$145,634	\$145,634	\$0
Total Demand Entitlement Costs		\$4,286,538	\$4,284,662	(\$1,876)

²⁸ Source of this information is Docket 07-1402 Initial Petition dated November 1, 2007, Attachment 4, p. 2.

²⁹ Source of this information is Docket 08-1329 Initial Petition dated November 1, 2008, Attachment 4, p. 2.

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MERC-PNG GLGT (08-1330) **Transportation** Demand Entitlements PGA Costs

MERC-PNG GLGT	Contract Number	07-1404 Demand Costs ³⁰	08-1330 Demand Costs ³¹	Difference
	(1)	(2)	(3)	(4)
FT-A	FT0017	\$170,341	\$170,341	\$0
FT-A	FT0075	\$81,872	\$81,872	\$0
FT-A	FT0155	\$100,503	\$100,503	\$0
FT-A	FT0155	\$25,935	\$25,935	\$0
FT-A	FT8466	\$0	\$25,935	\$25,935
Total Demand Entitlement Costs		\$378,651	\$404,586	\$25,935

³⁰ Source of this information is Docket 07-1404 Initial Petition dated November 1, 2007, Attachment 4, p. 2.

³¹ Source of this information is Docket 08-1330 Initial Petition dated November 1, 2008, Attachment 4, p. 2.

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MERC-PNG Viking (08-1331) **Transportation** Demand Entitlements PGA Costs

MERC-PNG Viking	Contract Number	07-1403 Demand Costs ³²	08-1331 Demand Costs ³³	Difference
	(1)	(2)	(3)	(4)
FT-A	AF0012	\$146,742	\$146,742	\$0
FT-A	AF0014	\$11,421	\$11,421	\$0
FT-A	AF0016	\$41,605	\$41,605	\$0
FT-A	AF0102	\$83,210	\$83,210	\$0
NNG-TF Chisago 112495	112495	\$28,712	\$15,661	(\$13,051)
NNG-TF Chisago 112495	112495	\$53,990	\$29,449	(\$24,541)
NNG-TFX12Chisago112486	112486	\$91,576	\$49,950	(\$41,626)
NNG-TFX 5 Chisago112486	112486	\$14,554	\$7,939	(\$6,615)
Capacity Release	RF0361	\$12,517	\$0	(\$12,517)
Total Demand Entitlement Costs		\$484,327	\$385,977	(\$98,350)

Summary of demand entitlement costs for all PGA areas

	2007-2008 Demand Costs	2008-2009 Demand Costs	Difference
MERC-NMU	\$4,286,538	\$4,284,662	(\$1,876)
MERC-PNG Viking	\$484,327	\$385,977	(\$98,350)
MERC-PNG GLGT	378,651	\$404,586	25,935
MERC-PNG NNG	\$16,223,929	\$16,758,758	\$534,829
Total	\$21,373,445	\$21,833,983	\$460,538

³² Source of this information is Docket 07-1403 Initial Petition dated November 1, 2007, Attachment 4, p. 2.

³³ Source of this information is Docket 08-1331 Initial Petition dated November 1, 2008, Attachment 4, p. 2.