

Minnesota Public Utilities Commission
Staff Briefing Papers

Meeting Date: **November 13, 2015** ****Agenda Item #5**

Company: Minnesota Energy Resource Corporation, a subsidiary of the WEC Energy Group (MERC)

Docket Nos. G-011/MR-15-748
In the Matter of the Petition of Minnesota Energy Resources Corporation (MERC) Petition to Establish a New Base Cost of Gas for MERC's General Rate Case Interim Rates, Docket No. G-011/GR-15-736

Issue: Should the Commission approve MERC's proposed interim period base cost of gas petition, Docket No. G-011/MR-15-748?

Staff: Bob Brill 651-201-2242

Relevant Documents

Docket No. G-011/MR-15-748

MERC Initial Interim Base Cost of Gas Petition..... September 30, 2015
Department of Commerce (Department) - Comments.....October 30, 2015
MERC Reply CommentsNovember 4, 2015
Department Response CommentsNovember 6, 2015

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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November 6, 2015

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Statement of the Issue

Should the Commission approve MERC's proposed interim period base cost of gas petition, Docket No. G-011/MR-15-748?

Background

On September 30, 2015, Minnesota Energy Resources Corporation (MERC) filed its general rate case in Docket No. G-011/GR-15-736.

On September 30, 2015, MERC filed its miscellaneous rate petition reflecting a new base cost of gas to coincide with the implementation of its general rate case's interim rates, Docket No. G-011/MR-15-748, pursuant to Minn. Rules Pt. 7825.2700, Subp. 2, New Base Gas Cost.

On October 30, 2015, the Department of Commerce (Department) filed *Comments* requesting further information in MERC *Reply Comments*.

On November 4, 2015, MERC filed its *Reply Comments* responding to the Department's October 30, 2015 *Comments*.

On November 6, 2015, the Department filed its *Response Comments* responding the MERC's *Reply Comments*.

Relevant Commission Rules

Minn. Rules Pt. 7825.2700, Subp. 2, New Base Gas Cost

A new base gas cost must be submitted as a miscellaneous rate change to coincide with the implementation of interim rates during a general rate proceeding. A new base gas cost must also be part of the rate design compliance filing submitted as a result of a general rate proceeding. The base gas cost must separately state the commodity base cost and the demand base cost components for each class. The base gas cost for each class is determined by dividing the estimated base period cost of purchased gas for each class by the estimated base period annual sales volume for each class.

Minn. Rules Pt. 7829.1300, Miscellaneous Tariff and Price List Filings

Minn. Rules Pt. 7825.3200 (B), Miscellaneous Rate Changes

MERC's Interim Rates Base Cost of Gas Petition

Minnesota Energy Resources Corporation (MERC) filed its interim base cost of gas miscellaneous rate petition on the same date (September 30, 2015) as its general rate case, to coincide with its proposed January 1, 2016 implementation of interim rates in its general rate case, Docket No. G-011/GR-15-736. MERC currently has three PGA districts; NNG, Consolidated, and Albert Lea.¹ In its general rate case (Docket No. 15-736), MERC is proposing to consolidate its current NNG and NNG-Albert Lea PGA districts into one PGA district.²

PUC staff believes that it may be premature for the Commission to rule on MERC's consolidation proposal, because this issue has not been fully vetted by all the general rate case parties. PUC staff believes that if the Commission approves MERC's consolidation proposal through the general rate case process MERC could make this change within its final rates compliance filing.

For each PGA district, MERC's general service firm customers pay the total interim base cost of gas PGA factor which includes both demand and commodity PGA factors. Interruptible sales service customers generally do not pay for interstate pipeline demand entitlement costs, but pay the commodity interim base cost of gas PGA factor.³ MERC's petition proposed new interim base cost of gas factors for each of its Purchased Gas Adjustment (PGA) districts.

MERC's monthly demand and commodity costs for 2016 are added together to calculate the total annual gas supply costs for each of its PGA districts. MERC's demand and commodity costs were divided by the projected annual sales⁴ for the respective PGA district in order to develop the base cost of gas demand and commodity PGA district's factors; see the following Table 1 for MERC's proposed PGA factors.

Table 1: MERC's Proposed Interim Base Cost of Gas PGA Factors

PGA District	Demand PGA Factor	Commodity PGA Factor	Total PGA Factor
	\$ per therm	\$ per therm	\$ per therm
	(1)	(2)	(3)
MERC-NNG	0.09226	0.46578	0.55804
MERC-Consolidated	0.05724	0.38521	0.44245
MERC-AL	0.14399	0.39529	0.53928

¹ The Albert Lea PGA district was acquired when MERC purchased IPL's assets, see Docket No. 14-107.

² "MERC shall continue to maintain the IPL purchased gas adjustment for transitioned IPL ratepayers until MERC's next rate case and, at that time, MERC shall reconcile the two fuel supply systems into one." Order Approving Sale of Subject To Conditions, In the Matter of a Request for the Approval of the Asset Purchase and Sale Agreement Between Interstate Power and Light Company and Minnesota Energy Resources Corporation, Docket No. G-001, G-011/PA-14-107, December 8, 2014, ordering paragraph 4

³ MERC's NNG PGA district interruptible customers do pay for the demand entitlement costs associated with MERC's Bison and NBPL costs, which is a upstream gas supply sources for MERC; NNG makes the actual delivery to MERC.

⁴ Excludes System Loss or Company Use.

Demand Costs (Demand Entitlements)

MERC

MERC's basis for its interim base cost of gas demand costs was its 2014-2015 demand entitlements petition, adjusted for certain known and measurable changes. The majority of MERC's transportation and storage contracts were approved by the Commission in its June 22, 2015 Order approving MERC's 2014-2015 demand entitlement petition in Docket Nos. 14-660 and 661. IPL's 2014-2015 demand entitlement petition was approved by the Commission on February 6, 2015 in Docket No. 14-560. MERC's 2015-2016 demand entitlement petition will be reviewed at a later date, but staff believes that the differences in MERC's 2014-2015 and 2015-2016 demand entitlement petitions are not significant.

MERC's NNG PGA district's demand PGA factors included its contracted demand entitlements priced at NNG's prevailing demand transportation rate. The Bison and NBPL transportation demand costs, storage demand costs, and demand balancing costs which have been included in NNG district's commodity PGA factor, pursuant to various Commission Orders.⁵ The remaining two PGA district's, Consolidated and Albert Lea, demand PGA factors included its contracted demand entitlements priced at each interstate pipelines' prevailing demand transportation rate, except for storage demand costs and demand balancing costs which have been included in each PGA district's commodity PGA factors, pursuant to various Commission Orders. MERC calculated its 2016 demand costs at \$25,458,209 (net of Company Gas Used and Gas Loss),⁶ see the following Table 2:

Table 2: MERC's As Filed Demand Costs⁷

By PGA District	Demand
	(1)
	\$
MERC NNG as filed	20,763,147
MERC Consolidated as filed	2,848,657
MERC NNG-Albert Lea as filed	1,846,405
Total	25,458,209

Department

In its October 30, 2015 Comments, the Department stated that MERC appears to have calculated its demand cost of gas based on its 2015 Purchased Gas Adjustment (PGA) filings.⁸ Further, the Department reviewed MERC's interim base cost of gas petition (Docket No. 15-748) and its

⁵ For storage demand costs, see the Commission's August 6, 2014 Order in Docket Nos. G-007/M-07-1402, G-007/M-07-1403, G-007/M-07-1404, and G-007/M-07-1405; for balancing demand costs see the Commission's November 14, 2013 Order in Docket No. G-999/AA-12-756; for Bison and NBPL demand costs, see the Commission's January 21, 2015 Order in Docket Nos. G-007/M-10-1166, G-007/M-10-1167, G-011/M-11-1168, and G-011/M-11-1169.

⁶ See MERC's interim base cost of gas petition, Exhibit 1, pp.25-27.

⁷ Ibid.

⁸ See Docket Nos. 15-860, 15-861, and 15-862.

general rate case petition (Docket No. 15-736) for consistent calculations. From its analysis, the Department concluded that the information was consistent between the two dockets.

Commodity Gas Cost – Weighted Average Cost of Gas

MERC

The commodity cost of gas prices were based on May 15, 2015⁹ NYMEX pricing, plus or minus the appropriate projected monthly receipt point basis differential for each receipt point.

Department

In its October 30, 2015 Comments, the Department compared MERC's estimated commodity cost of gas prices to current NYMEX market expectations and concluded that MERC estimates appear to be appropriate.

In its November 6, 2015 *Response Comments*, the Department recommended that the Commission require MERC to file an update to the NYMEX prices used in the base cost of gas calculation for use in determining the final revenue deficiency and setting base rates. MERC stated in its September 30, 2016 initial base cost of gas petition that it would agree to update the base cost of gas data, if the Commission finds it to be necessary due to a significant change in NYMEX pricing or for changes in the forecasted sales data.

PUC Staff

PUC staff agrees with the Department.

Commodity Costs – Interstate Pipelines

MERC

MERC calculated its commodity gas cost by multiplying its monthly test-year sales forecast by the appropriate interstate pipeline's commodity rates (including surcharges).

MERC's NNG district's commodity PGA factor included the Bison and NBPL transportation demand and commodity costs, all storage costs, all balancing costs, NNG's interstate pipeline's commodity costs, hedging costs, and the commodity cost of gas. MERC's Consolidated and Albert Lea's PGA district's commodity PGA factors include each PGA district's related storage costs, balancing costs, either Consolidated or Albert Lea's interstate pipeline commodity costs, hedging costs, and the commodity cost of gas.¹⁰ MERC calculated total 2016 commodity costs of \$146,352,328 (net of Company Gas Used and Gas Loss),¹¹ see the following Table 3:

⁹ MERC chose May because it was the most recently completed mid-month period corresponding to the schedule set by MERC to complete Docket No. G-011/GR-15-736. May 15, 2015 NYMEX pricing was used because a mid-month price in general avoids the end of month or beginning of month price volatility that occurs prior to or immediately after bid week in the natural gas market.

¹⁰ See MERC's interim base cost of gas petition, Exhibit 1, pp. 17-20.

¹¹ See MERC's interim base cost of gas petition, Exhibit 1, pp. 25-27.

Table 3: MERC's As Filed Commodity Costs¹²

By PGA District	Commodity
	(1)
	\$
MERC NNG as filed	118,005,600
MERC Consolidated as filed	21,903,020
MERC NNG-Albert Lea as filed	6,443,708
Total	146,352,328

MERC proposed to recover Company Use gas costs through its base distribution rates (Docket No. 15-736). Further, MERC proposed to recover its System Loss gas costs separately through its monthly PGA petitions.

Department

The Department's analysis included comparing the interim base cost of gas demand and commodity costs to its general rate case gas supply costs. The Department was unable to reconcile the demand and commodity gas supply costs between the interim base cost of gas petition and the general rate case petition.

The Department recommended that MERC provide clarifying information reconciling test-year gas costs between the general rate case and base cost of gas petitions in its *Reply Comments*. Further, the Department recommended that MERC provide the citations for any data included in the general rate case petition that were calculated in the interim base cost of gas petition in its *Reply Comments*.

In its November 4, 2015 *Reply Comments*, MERC provided the requested general rate case citations where MERC's interim base cost of gas petition's calculations were used.¹³ Further, MERC provided its test-year gas costs reconciliation between its general rate case schedules and its interim base cost of gas petition. MERC was unable to reconcile to the Department's gas costs of \$171,839,826. MERC stated its general rate schedules reflect a gas cost of \$171,811,379 and its interim base cost of gas petition reflect \$171,810,538 for a difference of \$841.

In its November 6, 2015 *Response Comments*, the Department verified MERC's provided amounts and accepts that the \$841 difference is attributable to rounding. Further, the Department was satisfied that MERC met the citation requirements ordered by the Commission.¹⁴

¹² Ibid.

¹³ MERC's general rate case citations included the Direct Testimony of Amber Lee (ASL-1), the Direct Testimony of Seth DeMerritt (SSD-18, Informational Requirement 2 (gas storage amounts), and Informational Requirement 5.

¹⁴ See March 18, 2015 Order, Docket No. G011/GR-13-617.

PUC Staff

PUC staff agrees with the Department's statements and that MERC's interim total base cost of gas calculation is \$171,810,538 (see Table 2 and 3).¹⁵

MERC's Response to PUC Staff Information Requests

PUC staff analyzed MERC's interim base cost of gas petition, Exhibit 1 (Docket No. 15-748) and was unable to reconcile MERC's calculations to staff's calculations for MERC's demand and commodity amounts. PUC staff's review discovered several issues that MERC's needs to address, the issues are as follows:

1. Consolidated PGA district's demand costs;
2. Albert Lea PGA district's demand costs;
3. NNG's commodity transportation rate
4. Consolidated PGA district's commodity cost of gas
5. Consolidated PGA district's calculation of storage quantities

PUC staff's inability to reconcile the demand and commodity costs led staff to issue its Informational Data Request No. 300 on October 26, 2015. MERC responded on October 30, 2015.

Consolidated PGA district's demand costs

In its October 30, 2015 informational data response, MERC stated that it erroneously excluded certain demand entitlements from its as filed Exhibit 1 levels; this understated its Consolidated PGA district's demand cost and MERC corrected its Consolidated PGA district's demand costs to \$3,979,215.

In its November 6, 2015 *Response Comments*, the Department reviewed the updates MERC made to its Consolidated PGA demand cost calculation and compared demand entitlements and costs levels to MERC's most recent Consolidated PGA filing.¹⁶ The Department concluded that the new demand entitlements cost levels were correct and appropriate.

PUC staff has reviewed the information provided in MERC's response and believes that the revised Consolidated PGA district's demand costs are now correct and represent the interstate pipeline contract's demand costs reflected in MERC's demand entitlement petitions. PUC staff believes that MERC's adjusted \$3,979,215 demand cost level is supported by its response. PUC staff believes that this issue has been resolved.

¹⁵ Demand Costs of \$25,458,209 plus Commodity Costs of \$146,352,328.

¹⁶ Docket No. G011/AA-15-959.

Albert Lea PGA district's demand costs

In its October 30, 2015 informational data response, MERC stated that it erroneously included certain demand entitlements in its as filed Exhibit 1 levels, this overstated its NNG-Albert Lea PGA district's demand cost, and MERC believes the correct demand entitlement cost level is \$1,330,925.

In its November 6, 2015 *Response Comments*, the Department reviewed the MERC's updated Albert Lea PGA demand cost calculation and compared the demand entitlements and costs levels to MERC's most recent Albert Lea PGA filing.¹⁷ The Department concluded that the new demand entitlements cost levels were correct and appropriate.

PUC staff has reviewed the information provided by MERC's responses and believes that the revised NNG-Albert Lea PGA district's demand costs are now correct and represent the interstate pipeline contract's demand costs reflected in MERC's demand entitlement petitions. PUC staff believes that MERC's adjusted \$1,330,925 demand cost level is supported by its responses. PUC staff believes that this issue has been resolved.

NNG's commodity transportation rate

In its October 30, 2015 informational data response, MERC stated that it incorrectly used a NNG commodity transportation rate of \$0.369 per Dth as opposed to NNG's actual tariff commodity transportation rate of \$0.0369 per Dth, which resulted in MERC overstating its NNG commodity cost of gas by approximately \$9 million, see Table 5.

In its November 6, 2015 *Response Comments*, the Department believed that correct NNG commodity transportation rate of \$0.0369 was correct.

PUC staff has reviewed the information provided by MERC's responses and believes that the revised NNG commodity transportation rate of \$0.0369 is now correct and should be used by MERC in calculating its commodity cost of gas. PUC staff believes that this issue has been resolved.

Consolidated PGA district's commodity cost of gas

In its October 30, 2015 informational data response, MERC responded to PUC staff request for more information on how MERC calculates its Consolidated PGA district's commodity cost of gas. From PUC staff's initial review, staff could not determine if the calculation was correct.

In its November 6, 2015 *Response Comments*, the Department concluded that the explanation and updates provided by MERC in its response to IR 300 were reasonable.

¹⁷ Docket No. G-011/AA-15-957.

MERC's response enabled PUC staff to determine that the Consolidated PGA district's commodity cost of gas was calculated correctly. PUC staff believes that this issue has been resolved.

Consolidated PGA district's calculation of storage quantities

In its October 30, 2015 informational data response, MERC responded to PUC staff request for more information on how MERC calculates its Consolidated PGA district's storage quantities and associated commodity cost calculation. From PUC staff's initial review, staff could not determine if the calculation was correct.

In its November 6, 2015 *Response Comments*, the Department concluded that the explanation and updates provided by MERC in its response to IR 300 were reasonable.

MERC's response enabled PUC staff to determine that the Consolidated PGA district's storage quantities and associated commodity cost were calculated correctly. PUC staff believes that this issue has been resolved.

After receiving and reviewing MERC's data response and MERC's November 4, 2015 *Reply Comments*, PUC staff discovered another incorrect commodity rate; NNG's injection/withdrawal commodity rate was incorrectly stated at \$0.149 per Dth as opposed to NNG's actual tariff injection/withdrawal commodity rate of \$0.0149 per Dth. This resulted in MERC overstating its NNG commodity cost of gas.

In its November 6, 2015 *Response Comments*, the Department believed that the correct NNG commodity injection/withdraw rate of \$0.0149 was correct.

PUC staff has reviewed NNG's tariff and believes that the revised NNG injection/withdrawal commodity rate of \$0.0149 is correct and should be used by MERC in calculating its commodity cost of gas.

PUC staff used MERC's data response to staff's Informational Data Request 300 and in its November 4, 2015 *Reply Comments* to re-calculate the demand and commodity costs and factors in each of MERC's PGA district's, see Tables 4 through 6:

Table 4: PUC Staff's Revised Demand and Commodity Costs, and PGA Factors

By PGA District	Demand	Commodity	Total
	(1)	(2)	(3)
	\$	\$	\$
NNG			
PUC Staff Adjusted NNG revised costs	20,763,150	109,490,278	130,253,428
NNG Sales forecast (therms)	225,057,235	253,351,745	
Revised NNG PGA factors (per therm)	0.09226	0.43217	
Consolidated			
PUC Staff Adjusted Consolidated revised costs	3,979,215	21,903,050	25,882,265
Consolidated Sales forecast (therms)	49,765,067	56,859,413	
Revised Consolidated PGA factors (per therm)	0.07996	0.38521	
NNG- Albert Lea			
PUC Staff Adjusted NNG-Albert Lea revised costs	1,330,925	5,895,743	7,226,668
NNG-Albert Lea Sales forecast (therms)	12,822,861	16,301,176	
Revised NNG-Albert Lea PGA factors (per therm)	0.10379	0.36168	

Table 5: Reconciliation of PUC Staff's Adjusted Total Cost by Area to MERC-As Filed

By PGA District	Demand	Commodity	Total
	(1)	(2)	(3)
	\$	\$	\$
NNG			
MERC NNG as filed	20,763,147	118,005,600	138,768,747
Staff Adjusted NNG	20,763,150	109,490,278	130,253,428
Difference	3	(8,515,322)	(8,515,319)
Consolidated			
MERC Consolidated as filed	2,848,657	21,903,020	24,751,677
Staff Adjusted Consolidated	3,979,215	21,903,050	25,882,265
Difference	1,130,558	30	1,130,588
NNG-Albert Lea			
MERC NNG-Albert Lea as filed	1,846,405	6,443,708	8,290,113
Staff Adjusted NNG-Albert Lea	1,330,925	5,895,743	7,226,668
Difference	(515,480)	(547,965)	(1,063,445)

Table 6: Comparison of PUC Staff adjusted PGA factors and MERC PGA factors-As Filed

By PGA District	Demand	Commodity	Total
	(1)	(2)	(3)
	\$/therm	\$/therm	\$/therm
NNG			
MERC – as filed	0.09226	0.46578	0.55804
PUC Staff Adjusted NNG PGA factors	0.09226	0.43217	0.52443
Difference	0	(0.03361)	(0.03361)
Consolidated			
MERC – as filed	0.05724	0.38521	0.44245
PUC Staff Adjusted Consolidated PGA factors	0.07996	0.38521	0.46517
Difference	0.02272	0	0.02272
NNG-Albert Lea			
MERC – as filed	0.14399	0.39529	0.53928
PUC Staff Adjusted NNG- Albert Lea PGA factors	0.10379	0.36168	0.46547
Difference	(0.04020)	(0.03361)	(0.07381)

Based on its review of MERC's response to Staff IR 300 and its Reply Comments, the Department recommended that the Commission approve MERC's petition as amended in its *Reply Comments*, but with the following correction of changing the NNG Storage Injection/Withdraw rate to \$0.01490, as it was originally filed.

PUC staff included its calculations that support Tables 4 through 6 amounts in Attachment 1. PUC staff believes that MERC's *Reply Comments* calculations are relatively close to staff's calculation, but staff believes its calculations should be used by MERC to update its interim base cost of gas petition, if the Commission orders MERC to re-file its September 30, 2015 interim base cost of gas petition.

PUC staff's costs and PGA factors calculations are supported by MERC's November 4, 2015 email to PUC staff, where MERC agreed with staff's adjusted demand and commodity costs, and PGA factors for each of MERC's PGA districts, see Attachment 2.

PUC staff believes that the Commission may wish to direct MERC to resubmit (refile) its initial interim base cost of gas schedules (Docket No. 15-748) to reflect the Department and PUC staff adjustments in its interim period compliance filing. PUC staff believes that its corrected demand and commodity costs will produce the correct interim base cost of gas PGA factors for each of MERC PGA districts. If the Commission chooses to require MERC to adjust its interim base cost of gas petition to reflect the changes discussed above, the Commission may wish to adopt decision alternative 6[c] on p. 37 of the staff briefing papers on MERC's general rate case

(Docket No. G-011/GR-15-736), which is also on the agenda for the Commission's November 13th meeting).¹⁸

Further, the Commission may wish to direct MERC to re-file all general rate case schedules (Docket No. 15-736) affected by PUC staff's adjustments and revised calculations. PUC staff included a decision alternative for Commission consideration.

In the alternative, the Commission may wish to reject MERC's initial interim base cost of gas petition (Docket No. 15-748) and its general rate case (Docket No. 15-736) as not being sufficiently accurate or complete.

Proposed Sales Forecast

MERC's proposed demand and commodity PGA factors reflected in Table 1 and in Tables 4 through 6 are based on the sales forecast proposed in MERC's general rate case, Docket No. 15-736.

Table 7: MERC's Proposed Sales Forecast

Service	NNG	Consolidated	Albert Lee	Total
	(1)	(2)	(3)	(4)
	therms	therms	therms	therms
General Service	225,057,235	49,765,067	12,822,861	287,645,163
Interruptible	28,132,238	6,818,164	3,478,315	38,428,717
Joint	162,272	276,182	0	438,454
Commodity Forecast	253,351,745	56,859,413	16,301,176	326,512,334
Demand Forecast	225,057,235	49,765,067	12,822,861	287,645,163

[Staff Note: The above volumes do not include Company Use, and lost and unaccounted for (LUF) volumes, which are not recovered in the base cost of gas. Company Use gas costs are recovered through base distribution rates, while the System Losses (LUF) costs are recovered through the monthly PGA.]

PUC staff agrees that MERC's sales forecast used in its interim base cost of gas petition is consistent with the sales forecast used in MERC's general rate case. In the event the sales

¹⁸ This decision alternative corresponds to decision alternative 6[c] on p. 37 of the staff briefing papers on MERC's general rate case, in Docket No. G-011/GR-15-736:

If the Commission requires MERC to adjust its interim rate revenue deficiency and rates to something different than proposed, direct MERC to file revised financial schedules and calculations (interim rate base, income statement, cost of capital, and revenue summary) and class revenue schedules reflecting the Commission's modifications within 5 calendar days of this meeting.

forecast changes through the general rate case process, then the demand and commodity PGA factors will need to be updated. PUC staff recommends, if the sales forecast changes, the Commission should require MERC to make the necessary adjustments to the demand and commodity PGA factors. MERC agreed to this adjustment in its initial interim base cost of gas petition, Docket No. 15-748. PUC staff believes that this adjustment could be made by MERC in its final rates compliance filing, once the Commission has rendered its decision. PUC staff included a decision alternative for Commission consideration.

Decision Alternatives

1. Base Cost of Gas

- A. Approve MERC's petition as amended in its *Reply Comments*, but with the following correction of changing the NNG Storage Injection/Withdraw rate to \$0.01490. (Department)
- B. Approve PUC staff's adjusted interim base cost of gas PGA factors as reflected in Table 4.
 - i. Direct MERC to recalculate and restate its NNG, Consolidated, and Albert Lea's PGA District factors in accordance with PUC staff's adjusted calculations reflected in Tables 4 through 6 and Attachment 1, and resubmit its interim base cost of gas.¹⁹ and
 - ii. Direct MERC to revise and re-submit all affected general rate case schedules within five calendar days, at the same time as it files its revised interim financial schedules and calculations. (PUC staff and MERC) or
- C. Approve MERC's As Filed Interim Base Cost of Gas Petition. or
- D. Direct MERC to re-file its entire general rate case (Docket No. 15-736) and its interim base cost of gas (Docket No. 15-748) updated for PUC staff's proposed changes and illustrated in Tables 4 through 6, and in Attachment 1.
- E. Do not approve (reject) MERC's Interim Base Cost of Gas.

2. Updated Commodity Costs

- A. Order MERC to provide updated information about its commodity base cost of gas during the course of the general rate case proceeding. Direct MERC to work with the Department and Staff to determine the timing of these updates. The updates shall be filed in both this docket and the general rate case, in Docket No. G-011/GR-15-736. (Staff, Department and MERC)
- B. Do not require MERC to provide updated information about its commodity cost of gas.

¹⁹ This decision alternative corresponds to decision alternative 6[c] on p. 37 of the staff briefing papers on MERC's general rate case, in Docket No. G-011/GR-15-736:

If the Commission requires MERC to adjust its interim rate revenue deficiency and rates to something different than proposed, direct MERC to file revised financial schedules and calculations (interim rate base, income statement, cost of capital, and revenue summary) and class revenue schedules reflecting the Commission's modifications within 5 calendar days of this meeting.

MERC
Calculation of Staff's Adjusted NNG PGA District Factors

Attachment 1
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	NNG - Demand		NNG - Commodity				Commodity Costs	Total Factor
	GS Sales	Demand Costs	NNG Commodity Volumes			Total		
	(1) therms	(2) \$	(3) therms	(4) therms	(5) therms	(6) therms	(7) \$	(8) \$
January 16	42,423,451	3,344,672	42,423,451	2,710,035	24,053	45,157,539	18,470,914	
February 16	36,850,840	3,344,672	36,850,840	2,288,132	22,983	39,161,955	16,099,206	
March 16	29,940,455	3,344,672	29,940,455	2,292,842	20,639	32,253,936	13,375,083	
April 16	17,865,367	586,123	17,865,367	2,297,528	15,384	20,178,279	7,900,440	
May 16	9,111,931	574,757	9,111,931	2,302,273	10,732	11,424,936	5,067,240	
June 16	3,076,348	574,757	3,076,348	2,307,355	6,997	5,390,700	3,626,651	
July 16	1,403,130	574,757	1,403,130	2,312,494	5,342	3,720,966	3,209,195	
August 16	1,326,960	574,757	1,326,960	2,317,478	4,688	3,649,126	3,178,241	
September 16	5,133,658	574,757	5,133,658	2,321,060	5,995	7,460,713	4,332,841	
October 16	14,513,123	586,123	14,513,123	2,324,435	9,842	16,847,400	7,278,913	
November 16	25,568,832	3,344,672	25,568,832	2,327,765	14,886	27,911,483	11,106,246	
December 16	37,843,140	3,344,672	37,843,140	2,330,841	20,731	40,194,712	15,874,390	
Total	<u>225,057,235</u>	20,769,391	225,057,235	28,132,238	162,272	253,351,745	109,519,360	
Less: Gas Lost		<u>6,241</u>					<u>29,082</u>	
Net Demand Cost		20,763,150					109,490,278	
Divide by GS Sales Volumes - in therms		<u>225,057,235</u>					<u>253,351,745</u>	
Staff Demand PGA Factor - NNG (per therm)		0.09226					0.43217	0.52443
MERC calculated PGA Factors - As Filed		0.09226					0.46578	0.55804
Difference between staff and MERC		0.00000					(0.03361)	(0.03361)

MERC
Summary of Demand Costs - NNG

	111866	112486	112495	112486	NW Energy	Total
	(1)	(2)	(3)	(4)	(5)	(6)
	\$	\$	\$	\$	\$	\$
January 16	583,120	1,186,248	1,331,380	236,644	7,280	3,344,672
February 16	583,120	1,186,248	1,331,380	236,644	7,280	3,344,672
March 16	583,120	1,186,248	1,331,380	236,644	7,280	3,344,672
April 16	77,955	72,867	428,021		7,280	586,123
May 16	77,955	61,501	428,021		7,280	574,757
June 16	77,955	61,501	428,021		7,280	574,757
July 16	77,955	61,501	428,021		7,280	574,757
August 16	77,955	61,501	428,021		7,280	574,757
September 16	77,955	61,501	428,021		7,280	574,757
October 16	77,955	72,867	428,021		7,280	586,123
November 16	583,120	1,186,248	1,331,380	236,644	7,280	3,344,672
December 16	583,120	1,186,248	1,331,380	236,644	7,280	3,344,672
Total	3,461,285	6,384,479	9,653,047	1,183,220	87,360	20,769,391

MERC
Total Commodity Costs - NNG PGA District

Page 6																				
Flowing Gas	Bison		NNG		Demand						Transportation				Total Trans.		Total Commodity Costs			
	Commodity		Commodity		Storage	WACOG	Storage	Net Flowing	Costs	Total	Commodity	Commodity	Storage	Costs	Hedging Costs					
	Bison	NNG	Gas Rate	Gas Cost	Gas Rate	Gas Cost	Quantities	Storage	Gas Cost	Costs	thru Commodity	Gas Cost	Cost -Bison	Cost -NNG	Total	ACA		Inj/With	Comm. Costs	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	
Dth	Dth	\$	\$	\$	\$	Dth	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
			(1)*(3)		(2)*(5)			(7)*(8)	(4)+(6)+(9)		(10)+(11)						(15)+(16)+(17)		(12)+(18)+(19)	
January 16	750,000	2,486,455	3.6820	2,761,500	3.7195	9,248,369	1,339,984	3.3250	4,455,447	16,465,316	1,468,676	17,933,992	27,675	91,750	119,425	4,531	19,966	143,922	393,000	18,470,914
February 16	775,000	1,851,941	3.6775	2,850,063	3.7050	6,861,441	1,339,984	3.3250	4,455,447	14,166,951	1,388,176	15,555,127	28,598	68,337	96,935	3,678	19,966	120,579	423,500	16,099,206
March 16	750,000	1,990,787	3.5275	2,645,625	3.4975	6,962,778	533,259	3.3250	1,773,086	11,381,489	1,468,676	12,850,165	27,675	73,460	101,135	3,837	7,946	112,918	412,000	13,375,083
April 16	775,000	889,725	3.1615	2,450,163	3.0115	2,679,407	382,851	3.3250	1,272,980	6,402,550	1,428,426	7,830,976	28,598	32,831	61,429	2,331	5,704	69,464		7,900,440
May 16	775,000	379,670	3.1555	2,445,513	2.9205	1,108,826	0	0.0000	0	3,554,339	1,468,676	5,023,015	28,598	14,010	42,608	1,617	0	44,225		5,067,240
June 16	700,000	934,534	3.1860	2,230,200	2.9285	2,736,783	1,072,416	3.0388	(3,258,858)	1,708,125	1,839,945	3,548,070	25,830	34,484	60,314	2,288	15,979	78,581		3,626,651
July 16	775,000	727,043	3.3230	2,575,325	3.0405	2,210,574	1,108,163	3.1863	(3,530,940)	1,254,959	1,880,195	3,135,154	28,598	26,828	55,426	2,103	16,512	74,041		3,209,195
August 16	750,000	744,772	3.2890	2,466,750	3.0440	2,267,086	1,108,163	3.1670	(3,509,552)	1,224,284	1,880,195	3,104,479	27,675	27,482	55,157	2,093	16,512	73,762		3,178,241
September 16	775,000	1,068,608	3.2260	2,500,150	3.0435	3,252,308	1,072,416	3.1202	(3,346,152)	2,406,306	1,839,945	4,246,251	28,598	39,432	68,030	2,581	15,979	86,590		4,332,841
October 16	750,000	2,078,527	3.2870	2,465,250	3.0295	6,296,898	1,108,163	3.1478	(3,488,275)	5,273,873	1,880,195	7,154,068	27,675	76,698	104,373	3,960	16,512	124,845		7,278,913
November 16	775,000	1,523,600	3.4710	2,690,025	3.3310	5,075,112	533,259	3.1330	1,670,700	9,435,837	1,428,426	10,864,263	28,598	56,221	84,819	3,218	7,946	95,983	146,000	11,106,246
December 16	775,000	1,956,704	3.6825	2,853,938	3.5450	6,936,516	1,339,984	3.1330	4,198,170	13,988,624	1,468,676	15,457,300	28,598	72,202	100,800	3,824	19,966	124,590	292,500	15,874,390
Total	9,125,000	16,632,366		30,934,502		55,636,098	10,938,642		692,053	87,262,653	19,440,207	106,702,860	336,716	613,735	950,451	36,061	162,988	1,149,500	1,667,000	109,519,360

	NNG Storage Demand Costs					
			125915/ 125916	Bison	NBPL	Total
January 16	147,701	49,442	23,783	891,250	356,500	1,468,676
February 16	147,701	49,442	23,783	833,750	333,500	1,388,176
March 16	147,701	49,442	23,783	891,250	356,500	1,468,676
April 16	147,701	49,442	23,783	862,500	345,000	1,428,426
May 16	147,701	49,442	23,783	891,250	356,500	1,468,676
June 16	502,148	49,442	80,855	862,500	345,000	1,839,945
July 16	502,148	49,442	80,855	891,250	356,500	1,880,195
August 16	502,148	49,442	80,855	891,250	356,500	1,880,195
September 16	502,148	49,442	80,855	862,500	345,000	1,839,945
October 16	502,148	49,442	80,855	891,250	356,500	1,880,195
November 16	147,701	49,442	23,783	862,500	345,000	1,428,426
December 16	147,701	49,442	23,783	891,250	356,500	1,468,676
Total	3,544,647	593,304	570,756	10,522,500	4,209,000	19,440,207

MERC
NNG Base Gas of Gas Volumes

Attachment 1
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	NNG Base Gas Volumes															
	By Sales Component				By Pipeline				Total	Gas Loss and Company Use	NNG Inj/With	net sales requirements	Flowing Gas Requirements			
	GS Sales	Interruptible	Joint Sales	Total	NNG	Total	Total	Difference					Bison	Ventura	Total	Difference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)					(13)	(14)	(15)	(16)
	Therms	Therms	Therms	Therms	Dth	Dth	Therms	(4)-(9) Therms	Dth	Dth	Dth	Dth	Dth	Dth	Dth	(15) - (12) Dth
January 16	42,423,451	2,710,035	24,053	45,157,539	4,515,754	4,515,754	45,157,540	(1)	4,515,754	23,790	(1,339,984)	3,199,560	750,000	2,486,455	3,236,455	36,895
February 16	36,850,840	2,288,132	22,983	39,161,955	3,916,196	3,916,196	39,161,960	(5)	3,916,196	20,783	(1,339,984)	2,596,995	775,000	1,851,941	2,626,941	29,946
March 16	29,940,455	2,292,842	20,639	32,253,936	3,225,394	3,225,394	32,253,940	(4)	3,225,394	17,408	(533,259)	2,709,543	750,000	1,990,787	2,740,787	31,244
April 16	17,865,367	2,297,528	15,384	20,178,279	2,017,828	2,017,828	20,178,280	(1)	2,017,828	10,770	(382,851)	1,645,747	775,000	889,725	1,664,725	18,978
May 16	9,111,931	2,302,273	10,732	11,424,936	1,142,494	1,142,494	11,424,940	(4)	1,142,494	6,057	-	1,148,551	775,000	379,670	1,154,670	6,119
June 16	3,076,348	2,307,355	6,997	5,390,700	539,070	539,070	5,390,700	-	539,070	2,834	1,072,416	1,614,320	700,000	934,534	1,634,534	20,214
July 16	1,403,130	2,312,494	5,342	3,720,966	372,097	372,097	3,720,970	(4)	372,097	1,887	1,108,163	1,482,147	775,000	727,043	1,502,043	19,896
August 16	1,326,960	2,317,478	4,688	3,649,126	364,913	364,913	3,649,130	(4)	364,913	1,838	1,108,163	1,474,914	750,000	744,772	1,494,772	19,858
September 16	5,133,658	2,321,060	5,995	7,460,713	746,071	746,071	7,460,710	3	746,071	3,798	1,072,416	1,822,285	775,000	1,068,608	1,843,608	21,323
October 16	14,513,123	2,324,435	9,842	16,847,400	1,684,740	1,684,740	16,847,400	-	1,684,740	8,697	1,108,163	2,801,600	750,000	2,078,527	2,828,527	26,927
November 16	25,568,832	2,327,765	14,886	27,911,483	2,791,148	2,791,148	27,911,480	3	2,791,148	14,507	(533,259)	2,272,396	775,000	1,523,600	2,298,600	26,204
December 16	37,843,140	2,330,841	20,731	40,194,712	4,019,471	4,019,471	40,194,710	2	4,019,471	21,075	(1,339,984)	2,700,562	775,000	1,956,704	2,731,704	31,142
	225,057,235	28,132,238	162,272	253,351,745	25,335,176	25,335,176	253,351,760	(15)	25,335,176	133,444	-	25,468,620	9,125,000	16,632,366	25,757,366	288,746

MERC
Calculation of Staff's Adjusted Consolidated PGA District Factors

	GLGT, VGT, and Centra GS Sales	Costs	GLGT, VGT, and Centra - Commodity				Commodity Costs	Total Factor
			Commodity Volumes					
			GS Sales	Interruptible	Joint	Total		
			(1)	(4)	(5)	(6)		
	therms	\$	therms	therms	therms	therms	\$	\$
January 16	8,980,043	344,318	8,980,043	1,131,194	41,903	10,153,140	4,213,466	
February 16	7,802,195	344,318	7,802,195	1,126,411	41,251	8,969,857	3,733,357	
March 16	6,414,758	339,519	6,414,758	1,054,980	38,045	7,507,783	3,090,955	
April 16	4,059,916	325,170	4,059,916	627,597	29,189	4,716,702	1,624,517	
May 16	2,310,413	325,170	2,310,413	527,930	20,419	2,858,762	951,486	
June 16	967,905	325,170	967,905	394,660	12,070	1,374,635	494,648	
July 16	604,334	325,170	604,334	196,300	7,427	808,061	319,923	
August 16	661,068	325,170	661,068	171,648	5,369	838,085	329,682	
September 16	1,470,605	325,170	1,470,605	178,694	7,703	1,657,002	586,954	
October 16	3,270,007	325,170	3,270,007	135,973	14,590	3,420,570	1,154,655	
November 16	5,374,205	339,519	5,374,205	434,565	23,745	5,832,515	2,127,746	
December 16	7,849,618	344,318	7,849,618	838,212	34,471	8,722,301	3,318,644	
Total	49,765,067	3,988,182	49,765,067	6,818,164	276,182	56,859,413	21,946,033	
Less: Gas Lost		8,967					42,983	
Net Demand Cost		3,979,215					21,903,050	
Divide by GS Sales Volumes		49,765,067					56,859,413	
Demand PGA Factor - NNG (per therm)		0.07996					0.38521	0.46517
MERC calculated PGA Factors		0.05724					0.38521	0.44245
Difference between staff and MERC		0.02272					0.00000	0.02272

MERC
Summary of Demand Costs - Consolidated

	GLGT				Centra		VGT				Total
	FT0016	FT15782	FT17891	FT0155	CTH 1201	CTM 1201	AF0012	AF0209	AH0102	AF0183	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
January 16	38,990	34,641	13,856	14,349	143,939	30,021	54,602	4,799	9,121		344,318
February 16	38,990	34,641	13,856	14,349	143,939	30,021	54,602	4,799	9,121		344,318
March 16	38,990	34,641	13,856	14,349	143,939	30,021	54,602		9,121		339,519
April 16	38,990	34,641	13,856		143,939	30,021	54,602		9,121		325,170
May 16	38,990	34,641	13,856		143,939	30,021	54,602		9,121		325,170
June 16	38,990	34,641	13,856		143,939	30,021	54,602		9,121		325,170
July 16	38,990	34,641	13,856		143,939	30,021	54,602		9,121		325,170
August 16	38,990	34,641	13,856		143,939	30,021	54,602		9,121		325,170
September 16	38,990	34,641	13,856		143,939	30,021	54,602		9,121		325,170
October 16	38,990	34,641	13,856		143,939	30,021	54,602		9,121		325,170
November 16	38,990	34,641	13,856	14,349	143,939	30,021	54,602		9,121		339,519
December 16	38,990	34,641	13,856	14,349	143,939	30,021	54,602	4,799	9,121		344,318
Total	467,880	415,692	166,272	71,745	1,727,268	360,252	655,224	14,397	109,452	0	3,988,182

MERC
Total Commodity Costs - Consolidated PGA District

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	Page 6																				
	GLGT	VGT	Centra	Total	Total	Storage	AECO	Storage	AECO	Storage	Total	Demand	Total	Transportation				Storage	Total Trans.	Total	
	Volumes	Volumes	Volumes	Volumes	Gas Cost	Quantities	WACOG	Gas Cost	Fuel	Fuel	Storage	Recovered	Commodity	Commodity	Commodity	Commodity	Inj/With	and Storage	Hedging Costs	Commodity	
	(1)	(2)	(3)	(4)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
	Dth	Dth	Dth	Dth	\$	Dth	\$	\$	Dth	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
					(1)*(3)			(7)*(8)					(10)+(11)					(15)+(16)+(17)		(12)+(18)+(19)	
January 16	522,564	292,132	210,517	1,025,213	3,226,768	231,769	2.9143	675,444	1,738	5,065	677,182	209,927	4,113,877	2,059	3,389	5,448	1,141	0	6,589	93,000	4,213,466
February 16	456,768	273,813	175,038	905,619	2,824,151	209,339	2.9143	610,077	1,570	4,575	611,647	197,060	3,632,858	1,800	3,176	4,976	1,023	0	5,999	94,500	3,733,357
March 16	372,622	230,609	154,883	758,114	2,595,364	96,375	2.9143	280,866	723	2,107	281,589	117,014	2,993,967	1,468	2,675	4,143	845	0	4,988	92,000	3,090,955
April 16	236,750	142,751	96,888	476,389	1,233,685	93,265	2.9143	271,802	699	2,037	272,501	115,211	1,621,397	933	1,656	2,589	531	0	3,120		1,624,517
May 16	138,093	80,943	69,628	288,664	887,131	191,103	2.4605		1,433	3,526	1,433	61,132	949,696	544	939	1,483	307	0	1,790		951,486
June 16	63,561	35,418	40,112	139,091	431,329	184,939	2.4810		1,387	3,441	1,387	61,132	493,848	250	411	661	139	0	800		494,648
July 16	38,483	18,033	25,497	82,013	256,918	191,103	2.4780		1,433	3,551	1,433	61,132	319,483	152	209	361	79	0	440		319,923
August 16	43,301	17,805	23,949	85,055	266,653	191,103	2.4765		1,433	3,549	1,433	61,132	329,218	171	207	378	86	0	464		329,682
September 16	89,169	42,101	36,344	167,614	524,099	93,335	2.4784		700	1,735	700	61,132	585,931	351	488	839	184	0	1,023		586,954
October 16	179,183	99,678	66,496	345,357	1,090,548	96,335	2.5820		723	1,867	723	61,132	1,152,403	706	1,156	1,862	390	0	2,252		1,154,655
November 16	317,120	164,519	106,892	588,531	1,766,643	85,304	2.4856	212,032	640	1,591	212,672	110,600	2,089,915	1,249	1,908	3,157	674	0	3,831	34,000	2,127,746
December 16	473,800	236,655	169,900	880,355	2,476,122	231,768	2.4856	576,083	1,738	4,320	577,821	194,094	3,248,037	1,867	2,745	4,612	995	0	5,607	65,000	3,318,644
Total	2,931,414	1,634,457	1,176,144	5,742,015	17,579,411	1,895,738		2,626,304	14,217	37,364	2,640,521	1,310,698	21,530,630	11,550	18,959	30,509	6,394	0	36,903	378,500	21,946,033

	Consolidated Storage Demand Costs					Total Flowing Require. Less: Stor.	Storage Quantities	Emerson Rates	AECO Rates	Gas Cost Less: Storage	Storage Gas Cost	Total Gas Cost	Storage Quantities	AECO Rates	Less Storage Costs	total Flowing Costs	net Flowing Costs	Total Gas Costs
	Centra Union	VGT ML0021	AECO AECO	AECO Swap	Total													
January 16	4,500	7,465	65,000	132,962	209,927	1,025,470		3.7720	2.7670	3,868,073	0	3,868,073	(231,769)	2.7670	(641,305)	3,226,768	3,226,768	3,868,073
February 16	4,500	7,465	65,000	120,095	197,060	905,833		3.7550	2.7575	3,401,403	0	3,401,403	(209,339)	2.7575	(577,252)	2,824,151	2,824,151	3,401,403
March 16	4,500	7,465	49,167	55,882	117,014	759,462		3.7600	2.7000	2,855,577	0	2,855,577	(96,375)	2.7000	(260,213)	2,595,364	2,595,364	2,855,577
April 16	4,500	7,465	49,167	54,079	115,211	477,224		3.0740	2.5015	1,466,987	0	1,466,987	(93,265)	2.5015	(233,302)	1,233,685	1,233,685	1,466,987
May 16	4,500	7,465	49,167	0	61,132	289,156	191,103	3.0680	2.4605	887,131	470,209	1,357,340	191,103	2.4605		1,357,340	887,131	887,131
June 16	4,500	7,465	49,167	0	61,132	139,318	184,939	3.0960	2.4810	431,329	458,834	890,163	184,939	2.4810		890,163	431,329	431,329
July 16	4,500	7,465	49,167	0	61,132	82,135	191,103	3.1280	2.4780	256,918	473,553	730,471	191,103	2.4780		730,471	256,918	256,918
August 16	4,500	7,465	49,167	0	61,132	85,084	191,103	3.1340	2.4765	266,653	473,267	739,920	191,103	2.4765		739,920	266,653	266,653
September 16	4,500	7,465	49,167	0	61,132	167,658	93,335	3.1260	2.4810	524,099	231,564	755,663	93,335	2.4810		755,663	524,099	524,099
October 16	4,500	7,465	49,167	0	61,132	345,438	96,335	3.1570	2.5820	1,090,548	248,737	1,339,285	96,335	2.5820		1,339,285	1,090,548	1,090,548
November 16	4,500	7,465	49,167	49,468	110,600	588,662		3.3860	2.6560	1,993,210	0	1,993,210	(85,304)	2.6560	(226,567)	1,766,643	1,766,643	1,993,210
December 16	4,500	7,465	49,167	132,962	194,094	880,563		3.5450	2.7850	3,121,596	0	3,121,596	(231,768)	2.7850	(645,474)	2,476,122	2,476,122	3,121,596
Total	54,000	89,580	621,670	545,448	1,310,698	5,746,003										19,935,575	17,579,411	

MERC
Consolidated Base Gas Volumes

MERC Base Gas Volumes										
Consolidated Base Gas Volumes										
	By Sales Component				By Pipeline					
	GS Sales	Interruptible	Joint Sales	Total	GLGT	VG	Centra	Total	Total	Difference
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10) (4)-(9)
	Therms	Therms	Therms	Therms	Dth	Dth	Dth	Dth	Therms	Therms
January 16	8,980,043	1,131,194	41,903	10,153,140	515,805	290,041	209,470	1,015,316	10,153,160	(20)
February 16	7,802,195	1,126,411	41,251	8,969,857	450,928	271,892	174,167	896,987	8,969,870	(13)
March 16	6,414,758	1,054,980	38,045	7,507,783	367,731	228,936	154,112	750,779	7,507,790	(7)
April 16	4,059,916	627,597	29,189	4,716,702	233,584	141,681	96,406	471,671	4,716,710	(8)
May 16	2,310,413	527,930	20,419	2,858,762	136,251	80,344	69,282	285,877	2,858,770	(8)
June 16	967,905	394,660	12,070	1,374,635	62,486	35,065	39,912	137,463	1,374,630	5
July 16	604,334	196,300	7,427	808,061	37,670	17,767	25,370	80,807	808,070	(9)
August 16	661,068	171,648	5,369	838,085	42,425	17,554	23,830	83,809	838,090	(5)
September 16	1,470,605	178,694	7,703	1,657,002	87,826	41,712	36,163	165,701	1,657,010	(8)
October 16	3,270,007	135,973	14,590	3,420,570	176,913	98,979	66,165	342,057	3,420,570	-
November 16	5,374,205	434,565	23,745	5,832,515	313,387	163,506	106,360	583,253	5,832,530	(15)
December 16	7,849,618	838,212	34,471	8,722,301	468,050	235,126	169,055	872,231	8,722,310	(9)
	49,765,067	6,818,164	276,182	56,859,413	2,893,056	1,622,603	1,170,292	5,685,951	56,859,510	(97)

	GLGT					VGT					Centra			Total	Injection/	Net Requirements	
	Company	Company	Total	Total	Total	Company	Company	Total	Total	Volumes	Company	Total	Total	Consolidated	Withdraw		
	Gas Use	Loss				Loss	Loss				Loss						Loss
	Volumes			Grossed-up	Volumes	Gas Use	Loss		Grossed-up				Grossed-up	Volumes	Volumes		
	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
	Dth	Dth	Dth	Dth	Dth	Dth	Dth	Dth	Dth	Dth	Dth	Dth	Dth	Dth	Dth	Dth	Dth
January 16	515,805	1,254	2,579	519,638	522,564	290,041	641	1,450	292,132	292,132	209,470	1,047	210,517	210,774	1,025,470	(231,769)	793,701
February 16	450,928	1,027	2,255	454,210	456,768	271,892	561	1,360	273,813	273,813	174,167	871	175,038	175,252	905,833	(209,339)	696,494
March 16	367,731	965	1,839	370,535	372,622	228,936	528	1,145	230,609	231,768	154,112	771	154,883	155,072	759,462	(96,375)	663,087
April 16	233,584	672	1,168	235,424	236,750	141,681	362	708	142,751	143,468	96,406	482	96,888	97,006	477,224	(93,265)	383,959
May 16	136,251	388	681	137,320	138,093	80,344	197	402	80,943	81,350	69,282	346	69,628	69,713	480,259	191,103	671,362
June 16	62,486	407	312	63,205	63,561	35,065	178	175	35,418	35,596	39,912	200	40,112	40,161	324,257	184,939	509,196
July 16	37,670	409	188	38,267	38,483	17,767	177	89	18,033	18,124	25,370	127	25,497	25,528	273,238	191,103	464,341
August 16	42,425	422	212	43,059	43,301	17,554	163	88	17,805	17,805	23,830	119	23,949	23,978	276,187	191,103	467,290
September 16	87,826	405	439	88,670	89,169	41,712	180	209	42,101	42,101	36,163	181	36,344	36,388	260,993	93,335	354,328
October 16	176,913	382	885	178,180	179,183	98,979	204	495	99,678	99,678	66,165	331	66,496	66,577	441,773	96,335	538,108
November 16	313,387	390	1,567	315,344	317,120	163,506	195	818	164,519	164,519	106,360	532	106,892	107,023	588,662	(85,304)	503,358
December 16	468,050	757	2,340	471,147	473,800	235,126	353	1,176	236,655	236,655	169,055	845	169,900	170,108	880,563	(231,768)	648,795
	2,893,056	7,478	14,465	2,914,999	2,931,414	1,622,603	3,739	8,115	1,634,457	1,637,009	1,170,292	5,852	#####	1,177,580	6,693,921	98	6,694,019

MERC
Calculation of Staff's Adjusted NNG-Albert Lea PGA District Factors

	NNG-Albert Lea - Demand		NNG-Albert Lea - Commodity			Commodity	Total
	GS Sales	Demand	NNG-Albert Lea	Commodity Volumes		Costs	Factor
	(1)	(2)	(3)	(4)	(5)	(6)	(8)
	therms	\$	therms	therms	therms	\$	\$
January 16	2,483,483	191,453	2,483,483	479,799		2,963,282	1,083,386
February 16	2,105,004	191,453	2,105,004	477,236		2,582,240	941,557
March 16	1,686,730	191,453	1,686,730	425,388		2,112,118	757,344
April 16	959,684	53,380	959,684	329,431		1,289,115	417,076
May 16	450,417	53,380	450,417	233,614		684,031	220,671
June 16	117,843	53,380	117,843	175,320		293,163	136,280
July 16	43,336	53,380	43,336	143,226		186,562	104,715
August 16	54,631	53,380	54,631	139,728		194,359	107,329
September 16	293,419	53,380	293,419	155,108		448,527	185,459
October 16	866,317	53,380	866,317	213,476		1,079,793	379,223
November 16	1,524,199	191,453	1,524,199	292,315		1,816,514	630,254
December 16	2,237,798	191,453	2,237,798	413,674		2,651,472	932,449
Total	<u>12,822,861</u>	1,330,925	<u>12,822,861</u>	<u>3,478,315</u>	<u>0</u>	<u>16,301,176</u>	5,895,743
Less: Gas Lost							
Net Demand Cost		1,330,925				5,895,743	
Divide by GS Sales Volumes		<u>12,822,861</u>				<u>16,301,176</u>	
Staff Adjusted Demand PGA Factor - NNG (per therm)		0.10379				0.36168	0.46547
MERC calculated PGA Factors		<u>0.14399</u>				<u>0.39529</u>	<u>0.53928</u>
Difference between staff and MERC		(0.04020)				(0.03361)	(0.07381)

MERC
Summary of Demand Costs - Albert Lea

	Albert Lea - NNG		
	106082	129710	Total
January 16	12,122	179,331	191,453
February 16	12,122	179,331	191,453
March 16	12,122	179,331	191,453
April 16		53,380	53,380
May 16		53,380	53,380
June 16		53,380	53,380
July 16		53,380	53,380
August 16		53,380	53,380
September 16		53,380	53,380
October 16		53,380	53,380
November 16	12,122	179,331	191,453
December 16	12,122	179,331	191,453
Total	60,610	1,270,315	1,330,925
Demand Entitlement Tab	60,612	1,270,319	1,330,931

MERC
Total Commodity Costs - NNG Albert Lea PGA District

	DeMarc Flowing Gas	DeMarc Commodity Gas Rate	DeMarc Commodity Gas Cost	Storage Quantities	Fuel Gross-up	WACOG Storage	Storage Gas Cost	Demand Costs Recovered thru Commodity	Total Commodity Gas Cost	Transportation		Storage Inj/With	Total Trans. and Storage Comm. Costs	Hedging Costs	Total Commodity Costs
	(1)	(2)	(3)	(4)		(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Dth	\$	\$	Dth		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
			(1)*(2)				(4)*(5)		(3)+(6)+(7)				(9)+(10)+(11)		(8)+(12)+(13)
January 16	214,505	3.5945	771,038	85,750	86,669	3.0524	261,743	14,112	1,046,893	7,915	300	1,278	9,493	27,000	1,083,386
February 16	175,769	3.5825	629,692	85,750	86,669	3.0524	261,743	14,112	905,547	6,486	246	1,278	8,010	28,000	941,557
March 16	180,197	3.3500	603,660	34,125	34,491	3.0524	104,163	14,112	721,935	6,649	252	508	7,409	28,000	757,344
April 16	106,268	3.0465	323,745	24,500	24,762	3.0524	74,784	14,112	412,641	3,921	149	365	4,435		417,076
May 16	69,111	2.9505	203,912	0	0	0.0000	0	14,112	218,024	2,550	97	0	2,647		220,671
June 16	99,356	3.0060	298,664	(68,627)	(69,362)	3.0060	(206,293)	39,081	131,452	3,666	139	1,023	4,828		136,280
July 16	90,910	3.0555	277,776	(70,915)	(71,675)	3.0555	(216,681)	39,081	100,176	3,355	127	1,057	4,539		104,715
August 16	91,698	3.0640	280,963	(70,915)	(71,675)	3.0640	(217,284)	39,081	102,760	3,384	128	1,057	4,569		107,329
September 16	115,053	3.0360	349,301	(68,627)	(69,362)	3.0360	(208,352)	39,081	180,030	4,245	161	1,023	5,429		185,459
October 16	181,159	3.0445	551,539	(70,916)	(71,676)	3.0937	(219,393)	39,081	371,227	6,685	254	1,057	7,996		379,223
November 16	150,146	3.2885	493,755	34,125	34,491	3.0514	104,129	14,112	611,996	5,540	210	508	6,258	12,000	630,254
December 16	182,807	3.4375	628,399	85,750	86,669	3.0514	261,658	14,112	904,169	6,746	256	1,278	8,280	20,000	932,449
Total	1,656,979		5,412,444	0	1		217	294,189	5,706,850	61,142	2,319	10,432	73,893	115,000	5,895,743

Albert Lea Storage Demand Costs			
	22560	22335	Total
January 16	3,706	10,406	14,112
February 16	3,706	10,406	14,112
March 16	3,706	10,406	14,112
April 16	3,706	10,406	14,112
May 16	3,706	10,406	14,112
June 16	3,706	35,375	39,081
July 16	3,706	35,375	39,081
August 16	3,706	35,375	39,081
September 16	3,706	35,375	39,081
October 16	3,706	35,375	39,081
November 16	3,706	10,406	14,112
December 16	3,706	10,406	14,112
Total	44,472	249,717	294,189

MERC
Albert Lea Volumes

Albert Lea (NNG) Base Gas Volumes

	By Sales Component			By Pipeline			Difference (3)-(6) Therms	Total Dth	Gas Loss and Company Use Dth	NNG Inj/With Dth	net sales requirements Dth	Gross - up Flowing Requirements Dth	Fuel Requirements Dth	DeMarc Volumes Dth
	GS Sales	Interruptible	Total	NNG	Total	Total								
	(1)	(2)	(3)	(4)	(5)	(6)								
	Therms	Therms	Therms	Dth	Dth	Therms								
January 16	2,483,483	479,799	2,963,282	296,328	296,328	2,963,280	2	296,328	1,482	(85,750)	212,060	214,505	2,445	214,505
February 16	2,105,004	477,236	2,582,240	258,224	258,224	2,582,240	-	258,224	1,291	(85,750)	173,765	175,769	2,004	175,769
March 16	1,686,730	425,388	2,112,118	211,212	211,212	2,112,120	(2)	211,212	1,056	(34,125)	178,143	180,197	2,054	180,197
April 16	959,684	329,431	1,289,115	128,912	128,912	1,289,120	(5)	128,912	645	(24,500)	105,057	106,268	1,211	106,268
May 16	450,417	233,614	684,031	68,403	68,403	684,030	1	68,403	342		68,745	69,111	366	69,111
June 16	117,843	175,320	293,163	29,316	29,316	293,160	3	29,316	147	68,627	98,090	99,356	1,266	99,356
July 16	43,336	143,226	186,562	18,656	18,656	186,560	2	18,656	93	70,915	89,664	90,910	1,246	90,910
August 16	54,631	139,728	194,359	19,436	19,436	194,360	(1)	19,436	97	70,915	90,448	91,698	1,250	91,698
September 16	293,419	155,108	448,527	44,853	44,853	448,530	(3)	44,853	224	68,627	113,704	115,053	1,349	115,053
October 16	866,317	213,476	1,079,793	107,979	107,979	1,079,790	3	107,979	540	70,916	179,435	181,159	1,724	181,159
November 16	1,524,199	292,315	1,816,514	181,651	181,651	1,816,510	4	181,651	908	(34,125)	148,434	150,146	1,712	150,146
December 16	2,237,798	413,674	2,651,472	265,147	265,147	2,651,470	2	265,147	1,326	(85,750)	180,723	182,807	2,084	182,807
	<u>12,822,861</u>	<u>3,478,315</u>	<u>16,301,176</u>	<u>1,630,117</u>	<u>1,630,117</u>	<u>16,301,170</u>	<u>6</u>	<u>1,630,117</u>	<u>8,151</u>	<u>-</u>	<u>1,638,268</u>	<u>1,656,979</u>	<u>18,711</u>	<u>1,656,979</u>

MERC
Demand Entitlements by PGA District

14/15													
Contract	Demand	Interim				MERC			MERC		MERC		
Number	Entitlement	Base Cost		Pipeline	Contract	Base Cost			Base Cost		Base Cost		
	Petition	of Gas	Difference	Months	Costs	of Gas Filing	Difference		of Gas Filing	Difference	of Gas Filing	Diifference	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(11)	
	Dth/day	Dth/day	Dth/day		\$	\$	Page 22-23	(8) - (7)	Page 25-27	(10) - (8)	Page 2	(12) - (8)	
	1/			1/	1/								
Contract Number 112495													
Winter-M Summer-M Winter-Y Summer-Y Total-Y													
AF0012	12,493	12,493	0	12	4.3706	655,223	655,224	1	54,602	54,602	273,010	382,214	655,224
AF0209	1,098	1,098	0	3	4.3706	14,397	14,397	0	4,799		14,397	0	14,397
AF0102	2,000	2,000	0	12	4.5607	109,457	109,452	(5)	9,121	9,121	45,605	63,847	109,452
AFXXXX	0	0	0	5	4.7507	0	0	0	0	0	0	0	0
						779,077	779,073	(4)	68,522	63,723	333,012	446,061	779,073
FT0016	10,130	10,130	0	12	3.8490	467,884	467,880	(4)	38,990	38,990	194,950	272,930	467,880
FT15782	9,000	9,000	0	12	3.8490	415,692	415,692	0	34,641	34,641	173,205	242,487	415,692
FT17891	3,600	3,600	0	12	3.8490	166,277	166,272	(5)	13,856	13,856	69,280	96,992	166,272
FT17891	3,728	3,728	0	5	3.8490	71,745	71,745	0	14,349	0	71,745	0	71,745
FTXXXX			0	5	4.9270	0							
						1,121,598	1,121,589	(9)	101,836	87,487	509,180	612,409	1,121,589
	9,100	9,100	0	12	15.8175	1,727,271	1,727,268	(3)	143,939	143,939	719,695	1,007,573	1,727,268
	9,100	9,100	0	12	3.2990	360,251	360,252	1	30,021	30,021	150,105	210,147	360,252
						2,087,522	2,087,520	(2)	173,960	173,960	869,800	1,217,720	2,087,520
						3,988,197	3,988,182	(15)	344,318	325,170	1,711,992	2,276,190	3,988,182
						378,500	p. 6 and 22-23)		2,855,076				
olidated						4,366,697							

NNG - Before Merger								Monthly	Contract Number 112495					
								Costs	Winter-M	Summer-M	Winter-Y	Summer-Y	Total-Y	
TF12B	112495	49,819	49,819	0	5	10.2300	2,548,242	509,648	1,217,660	509,250	6,088,300	3,564,750	9,653,050	9,653,047
TF12V	112495	49,056	49,056	0	7	5.6830	1,951,497	278,785						
TF12V	112495	21,060	21,060	0	12	9.0926	2,297,882	191,490						
TF5	112495	31,515	31,515	0	5	15.1530	2,387,734	477,547						
TF12B (Discount)	112495	5,200	5,200	0	12	7.4951	467,694	38,975						
TFX5 (Discount)	112561	0	0	0	12		0	0						
TFX12	112486	10,822	10,822	0	12	9.6288	1,250,434	104,203	Contract Number 112486					
TFX (Apr.)	112486	2,000	2,000	0	1	5.6830	11,366	11,366	Winter-M	Summer-M	Winter-Y	Summer-Y	Total-Y	

1/ From MERC's 2014-2015 demand entitlement petitions, Docket Nos. 14-660, 14-661.

From: [Lee, Amber S](#)
To: [Brill, Bob \(PUC\)](#); [DeMerritt, Seth S](#); [Kristin Stastny \(KStastny@briggs.com\)](#)
Cc: [Harding, Bob \(PUC\)](#); [Otis, Laura \(COMM\)](#)
Subject: RE: Docket No. 15-748 - MERC's interim base cost of gas
Date: Wednesday, November 04, 2015 3:57:40 PM

Bob,

MERC is in agreement with staff's revised PGA factors.

Thank you.

Amber

Amber S. Lee
Regulatory and Legislative Affairs Manager
Minnesota Energy Resources Corporation
1995 Rahnclyff Court, Suite 200
Eagan, MN 55122
Office: 651-322-8965
Cell: 651-278-6165

From: Brill, Bob (PUC) [mailto:bob.brill@state.mn.us]
Sent: Wednesday, November 04, 2015 3:22 PM
To: Lee, Amber S; DeMerritt, Seth S; Kristin Stastny (KStastny@briggs.com)
Cc: Harding, Bob (PUC); Otis, Laura (COMM)
Subject: FW: Docket No. 15-748 - MERC's interim base cost of gas

Amber/Seth/Kristin,

On October 26, 2015, staff issued MERC its Informational Data Request No. 300. MERC provided its data responses on October 30, 2015. Based on MERC's responses, staff has re-calculated MERC's interim base cost of gas petition's PGA factors for all districts. Staff has compared its revised PGA factors to MERC's as filed interim base cost of gas PGA factors, the results are as follows:

By PGA District	Demand	Commodity
	(1)	(2)
	\$	\$
PUC Staff Revised NNG PGA factors	0.09226	0.43217
MERC – as filed	0.09226	0.46578

Difference	0	(0.03361)
PUC Staff Revised Consolidated PGA factors	0.07996	0.38521
MERC – as filed	0.05724	0.38521
Difference	0.02272	0
Revised NNG-Albert Lea PGA factors	0.10379	0.36168
MERC – as filed	0.14399	0.39529
Difference	(0.0402)	(0.03361)

Please verify whether MERC is in agreement with staff's revised PGA factors by responding to this email. If MERC is not in agreement with staff's revised PGA factors, respond to this email indicating where the differences are.

Thanks,

Bob

(651) 201-2242

bob.brill@state.mn.us

121 7th Place E., Suite 350

St. Paul, MN 55101-2147