



RICHARD P. MIDDLETON
Attorney
(313) 235-3647

July 6, 2006

Honorable James N. Rigas
Administrative Law Judge
Michigan Public Service Commission
6545 Mercantile Way, Suite 14
Lansing, Michigan 48911

Re: In the Matter of the Application of Michigan Consolidated Gas Company for approval of a Gas Cost Recovery Plan, 5-year Forecast and Monthly GCR Factor for the 12 months ending March 31, 2007; MPSC Case No. U-14717

Dear Judge Rigas:

Pursuant to Rule 333, R 460.17333, all parties to the above-referenced proceeding have agreed to a partial settlement in this case. Enclosed for your review and submission to the Commission is an Executed Partial Settlement Agreement and Attachments, which address all issues in this case, except those presented in the testimony and exhibits offered on behalf of the Michigan Community Action Agency Association which were bond into the record on July 6, 2006. Also included is a Proof of Service upon all parties.

Thank your for your assistance in this matter. If you have any questions, please do no hesitate to contact me.

Very truly yours,

Richard P. Middleton
Digitally signed by Richard P. Middleton
DN: cn=Richard P. Middleton, c=US, o=DTE Energy, ou=Legal - Attorney,
email=rmiddleton@dteenergy.com
Date: 2006.07.06 16:19:24 -04'00'

Richard P. Middleton

RPM/jh
Enclosures
cc: Service List

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the Application of)
Michigan Consolidated Gas Company)
for approval of a Gas Cost Recovery Plan,)
5-year Forecast and Monthly GCR Factor)
for the 12 months ending March 31, 2007)

Case No. U-14717

PARTIAL SETTLEMENT AGREEMENT

As provided in Section 78 of the Administrative Procedures Act of 1969 (“APA”), as amended, MCL 24.278, and Rule 333 of the Commission’s Rules of Practice and Procedure, 2000 AC, R 460.17333, and supported by the Commission’s own policy towards settlement of contested issues, Michigan Consolidated Gas Company (“MichCon”), Michigan Attorney General Michael A. Cox (“AG”), the Residential Ratepayer Consortium (“RRC”), the Michigan Public Service Commission Staff (“Staff”) and the Michigan Community Action Agency Association (“MCAAA”) (hereafter, collectively referred to as the “Parties”) have resolved through settlement discussions all but one issue that has been presented for Commission consideration in this case, and agree as follows:

1. As required by MCL 460.6h et. seq. (“Act 304”), on December 29, 2005, MichCon filed its Application, together with the supporting testimony and exhibits of George H. Chapel, Barbara J. Goodwin, W. Bernard Kramer and Jennifer C. Schmidt, seeking approval of a Gas Cost Recovery (“GCR”) plan and factors for the twelve months ending March 31, 2007.

2. On January 27, 2006, the Commission’s Executive Secretary issued a notice of hearing directing MichCon to mail a copy of the notice to all cities, incorporated villages, townships and counties in its gas service territory. Further, MichCon was directed to publish the

substance of the notice of hearing in daily newspapers of general circulation throughout MichCon's gas service territory. Complying with these directives, MichCon filed the required affidavits of mailing and proofs of publication with the Commission on February 20, 2006.

3. On February 21, 2006, a prehearing conference was held. Administrative Law Judge James N. Rigas presided over the proceeding. MichCon and Staff participated in the proceeding along with the AG, MCAAA and RRC whose petitions to intervene were granted. On May 2, 2006, the AG filed the testimony and supporting exhibits of Ralph E. Miller, the RRC filed the testimony and supporting exhibits of Frank J. Hollewa, the MCAAA filed testimony and supporting exhibits of Martin Kushler, Geoff Crandall, and Jerry Mendl and Staff filed testimony and supporting exhibits of Nora Quilico and Robert G. Ozar.

4. Subsequent to the prehearing conference and the filing of testimony by the intervenors, the parties engaged in settlement discussions and as a result the Parties have agreed as follows:

- a. MichCon should, contemporaneous with Commission approval of this settlement agreement, implement a maximum uniform GCR factor of \$8.95 per Mcf for the remainder of the 2006-2007 GCR plan period. The parties reserve their right to support or challenge the reasonableness and prudence of MichCon's actual gas supply costs in MichCon's U-14717-R gas cost reconciliation.
- b. For the 2006-2007 GCR Year, the parties agree that Michigan Consolidated Gas Company's base GCR factor should be set at \$8.95 per Mcf subject to a quarterly adjustment, with symmetry, and that the "NYMEX Increase" used to calculate the quarterly adjustment is capped at \$3.00/MMBtu as set forth in

Attachment 1 to this settlement agreement. However, in no event, will the ceiling price decrease below the base factor.

- c. It is reasonable and prudent for MichCon to implement the agreed upon gas purchasing strategy for the 2006-2007 GCR plan year as originally described in the pre-filed testimony and exhibits of MichCon witnesses Chapel and Goodwin in this case, Attachment 2, and subsequently amended in part by the terms described in Attachment 3.
- d. Concurrent with its next general rate case filing MichCon shall file a study that discusses the Company's plans for utilization of the Company's gas storage fields which shall include any other matters relevant to a discussion of gas storage utilization, the Company's recommendations with respect to the amount of storage that should be made available for use by GCR customers.
- e. Each party is reserving the right to support or challenge the reasonableness and prudence of MichCon's actual 2006-2007 gas supply costs in MichCon's U-14717-R gas cost reconciliation proceeding.
- f. MCAAA's demand side management/conservation testimony offered by Martin Kushler and Geoff Crandall will be bound into the record in Case No. U-14717 without objection. Further, the parties agree that the record created by the entry of this testimony will be briefed according to a schedule set by the Administrative Law Judge on July 6, 2006 for ultimate consideration and order by the Commission, including the issuance of a proposal for decision, exceptions and replies to exceptions.

g. It is appropriate for the Commission to issue, as expeditiously as possible its order approving the terms of this partial settlement agreement, notwithstanding that the sole issue of the matters presented by the demand side management/conservation testimony of MCAAA may require further orders from the Commission in this case.

5. The parties believe that this Partial Settlement Agreement will promote the public interest and will aid in the expeditious conclusion of this case.

6. This Partial Settlement Agreement is entered into for the sole and express purpose of reaching a compromise among the parties. All offers of settlement and discussions relating to this settlement are considered privileged under MRE 408. If the Commission approves this Partial Settlement Agreement without modification, neither the parties to the settlement nor the Commission shall make any reference to, or use this Partial Settlement Agreement or the order approving it, as a reason, authority, rationale or example for taking any action or position or making any subsequent decision in any other case or proceeding; provided however, such references may be made to enforce or implement the provisions of this Partial Settlement Agreement and the order approving it.

7. This Partial Settlement Agreement is based on the facts and circumstances of this case and is intended a partial settlement of Case No. U-14717. If the Commission approves this Partial Settlement Agreement without modification the undersigned parties agree not to appeal, challenge, or otherwise contest the Commission order approving this Partial Settlement Agreement. Except as otherwise stated in this Agreement, the parties agree and understand that this Partial Settlement Agreement does not limit any party's right to take new or different positions on similar issues in other administrative proceedings, or appeals.

8. This Partial Settlement Agreement is not severable. Each provision of this settlement Agreement is dependent upon all other provisions of this Partial Settlement Agreement. Failure to comply with any provision of this Partial Settlement Agreement constitutes failure to comply with the entire Partial Settlement Agreement. If the Commission rejects or modifies this Partial Settlement Agreement or any provision of this Partial Settlement Agreement, this Partial Settlement Agreement shall be deemed to be withdrawn, and shall not constitute any part of the record in this proceeding or be used for any other purpose, and shall not operate to prejudice the pre-negotiation positions of any party.

9. The Staff certifies this Partial Settlement Agreement is reasonable and in the public interest.

10. The parties agree to waive Section 81 of the Administrative procedures Act of 1969 (MCL 24.281), as it applies to the issues in this proceeding, if the Commission approves this Settlement without modification.

11. This partial settlement agreement may be executed in multiple counterparts.

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WHEREFORE, the undersigned parties respectfully request that the Commission approve this Settlement Agreement without modification, and make it effective, in accordance with its terms, by final order.

**MICHIGAN PUBLIC SERVICE
COMMISSION STAFF**

By: Kristin M. Smith
Kristin M. Smith (P46323)
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Dated: July 6, 2006

MICHIGAN CONSOLIDATED GAS CO.

By: Richard P. Middleton
Richard P. Middleton (P41278)
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Dated: July 6, 2006

**MICHIGAN ATTORNEY
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Dated: July 6, 2006

**RESIDENTIAL RATEPAYER
CONSORTIUM**

By: Nancy J. Zuker P28954 son
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2379 Woodlake Drive, Suite 480 B
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Dated: July 6, 2006

**MICHIGAN COMMUNITY
ACTION AGENCY ASSOCIATION**

By: Don L. Keskey
Don L. Keskey (P23003)
Clark Hill PLC
212 E. Grand River
Lansing, MI 48906

Dated: July 6, 2006.

Michigan Consolidated Gas Company

2006 - 2007 GCR Plan Case No. U-14717

Staff's Contingent Factor Matrix

Updated for June 15, 2006 NYMEX Prices and \$8.95 per Mcf GCR Factor per Settlement

Attachment 1

Page 1 of 2

		Oct-Mar 3rd Q			Jan-Mar 4rd Q	
		INDEX	LIFO	LIFO	INDEX	LIFO
		Oct-Mar	2006	2007	Jan-Mar	2007
Fractional Mult. F_m		0.324	0.021	0.255	0.281	0.387
Plan NYMEX ($X_{\text{settlement}}$)		\$10.128	\$8.117	\$9.484	\$11.027	\$9.484
Base GCR Factor		\$8.9500			\$8.9500	
NYMEX Increase Greater than But Less Or Equal to than		Incremental Contingent GCR Factor				
		\$/Mcf				
		#1	#2	#3	#1	#3
\$0.00	\$0.05	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
\$0.05	\$0.10	\$0.016	\$0.001	\$0.013	\$0.014	\$0.019
\$0.10	\$0.15	\$0.032	\$0.002	\$0.026	\$0.028	\$0.039
\$0.15	\$0.20	\$0.049	\$0.003	\$0.038	\$0.042	\$0.058
\$0.20	\$0.25	\$0.065	\$0.004	\$0.051	\$0.056	\$0.077
\$0.25	\$0.30	\$0.081	\$0.005	\$0.064	\$0.070	\$0.097
\$0.30	\$0.35	\$0.097	\$0.006	\$0.077	\$0.084	\$0.116
\$0.35	\$0.40	\$0.113	\$0.007	\$0.089	\$0.098	\$0.135
\$0.40	\$0.45	\$0.130	\$0.008	\$0.102	\$0.112	\$0.155
\$0.45	\$0.50	\$0.146	\$0.009	\$0.115	\$0.126	\$0.174
\$0.50	\$0.55	\$0.162	\$0.011	\$0.128	\$0.141	\$0.194
\$0.55	\$0.60	\$0.178	\$0.012	\$0.140	\$0.155	\$0.213
\$0.60	\$0.65	\$0.194	\$0.013	\$0.153	\$0.169	\$0.232
\$0.65	\$0.70	\$0.211	\$0.014	\$0.166	\$0.183	\$0.252
\$0.70	\$0.75	\$0.227	\$0.015	\$0.179	\$0.197	\$0.271
\$0.75	\$0.80	\$0.243	\$0.016	\$0.191	\$0.211	\$0.290
\$0.80	\$0.85	\$0.259	\$0.017	\$0.204	\$0.225	\$0.310
\$0.85	\$0.90	\$0.275	\$0.018	\$0.217	\$0.239	\$0.329
\$0.90	\$0.95	\$0.292	\$0.019	\$0.230	\$0.253	\$0.348
\$0.95	\$1.00	\$0.308	\$0.020	\$0.242	\$0.267	\$0.368
\$1.00	\$1.05	\$0.324	\$0.021	\$0.255	\$0.281	\$0.387
\$1.05	\$1.10	\$0.340	\$0.022	\$0.268	\$0.295	\$0.406
\$1.10	\$1.15	\$0.356	\$0.023	\$0.281	\$0.309	\$0.426
\$1.15	\$1.20	\$0.373	\$0.024	\$0.293	\$0.323	\$0.445
\$1.20	\$1.25	\$0.389	\$0.025	\$0.306	\$0.337	\$0.464
\$1.25	\$1.30	\$0.405	\$0.026	\$0.319	\$0.351	\$0.484
\$1.30	\$1.35	\$0.421	\$0.027	\$0.332	\$0.365	\$0.503
\$1.35	\$1.40	\$0.437	\$0.028	\$0.344	\$0.379	\$0.522
\$1.40	\$1.45	\$0.454	\$0.029	\$0.357	\$0.393	\$0.542
\$1.45	\$1.50	\$0.470	\$0.030	\$0.370	\$0.407	\$0.561
\$1.50	\$1.55	\$0.486	\$0.032	\$0.383	\$0.422	\$0.581
\$1.55	\$1.60	\$0.502	\$0.033	\$0.395	\$0.436	\$0.600
\$1.60	\$1.65	\$0.518	\$0.034	\$0.408	\$0.450	\$0.619
\$1.65	\$1.70	\$0.535	\$0.035	\$0.421	\$0.464	\$0.639
\$1.70	\$1.75	\$0.551	\$0.036	\$0.434	\$0.478	\$0.658
\$1.75	\$1.80	\$0.567	\$0.037	\$0.446	\$0.492	\$0.677
\$1.80	\$1.85	\$0.583	\$0.038	\$0.459	\$0.506	\$0.697
\$1.85	\$1.90	\$0.599	\$0.039	\$0.472	\$0.520	\$0.716
\$1.90	\$1.95	\$0.616	\$0.040	\$0.485	\$0.534	\$0.735
\$1.95	\$2.00	\$0.632	\$0.041	\$0.497	\$0.548	\$0.755
\$2.00	\$2.05	\$0.648	\$0.042	\$0.510	\$0.562	\$0.774
\$2.05	\$2.10	\$0.664	\$0.043	\$0.523	\$0.576	\$0.793
\$2.10	\$2.15	\$0.680	\$0.044	\$0.536	\$0.590	\$0.813
\$2.15	\$2.20	\$0.697	\$0.045	\$0.548	\$0.604	\$0.832
\$2.20	\$2.25	\$0.713	\$0.046	\$0.561	\$0.618	\$0.851
\$2.25	\$2.30	\$0.729	\$0.047	\$0.574	\$0.632	\$0.871
\$2.30	\$2.35	\$0.745	\$0.048	\$0.587	\$0.646	\$0.890
\$2.35	\$2.40	\$0.761	\$0.049	\$0.599	\$0.660	\$0.909
\$2.40	\$2.45	\$0.778	\$0.050	\$0.612	\$0.674	\$0.929
\$2.45	\$2.50	\$0.794	\$0.051	\$0.625	\$0.688	\$0.948
\$2.50	\$2.55	\$0.810	\$0.053	\$0.638	\$0.703	\$0.968
\$2.55	\$2.60	\$0.826	\$0.054	\$0.650	\$0.717	\$0.987
\$2.60	\$2.65	\$0.842	\$0.055	\$0.663	\$0.731	\$1.006
\$2.65	\$2.70	\$0.859	\$0.056	\$0.676	\$0.745	\$1.026
\$2.70	\$2.75	\$0.875	\$0.057	\$0.689	\$0.759	\$1.045
\$2.75	\$2.80	\$0.891	\$0.058	\$0.701	\$0.773	\$1.064
\$2.80	\$2.85	\$0.907	\$0.059	\$0.714	\$0.787	\$1.084
\$2.85	\$2.90	\$0.923	\$0.060	\$0.727	\$0.801	\$1.103
\$2.90	\$2.95	\$0.940	\$0.061	\$0.740	\$0.815	\$1.122
\$2.95	\$3.00	\$0.956	\$0.062	\$0.752	\$0.829	\$1.142

NYMEX Increase = ($X - X_{\text{settlement}}$)

Staff Contingent Factor Calculations
Averages of NYMEX Futures Contract Data for and June 2006

June 15, 2006 Data					
Month	NYMEX		Averages		
Jan-06	\$	11.4310	(Close)		
Feb-06	\$	8.4000	(Close)		
Mar-06	\$	7.1120	(Close)		
Apr-06	\$	7.2330	(Close)		
May-06	\$	7.1980	(Close)		
Jun-06	\$	5.9250	(Close)		
Jul-06	\$	7.2070			
Aug-06	\$	7.4750			
Sep-06	\$	7.7350			
Oct-06	\$	8.0750			
Nov-06	\$	9.1900			
Dec-06	\$	10.4250	\$	8.1172	Jan '06 - Dec '06 (Company LIFO 2006)
Jan-07	\$	11.0850			
Feb-07	\$	11.1050			
Mar-07	\$	10.8900	\$	8.6286	April '06 - March '07 (1st Qtr Flowing)
Apr-07	\$	8.5950	\$	9.2430	July '06 - March '07 (2nd Qtr Flowing)
May-07	\$	8.4050	\$	10.1283	Oct '06 - March '07 (3rd Qtr Flowing)
Jun-07	\$	8.5000	\$	11.0267	Jan '07- March '07 (4th Qtr Flowing)
Jul-07	\$	8.6150			
Aug-07	\$	8.7100			
Sep-07	\$	8.8200			
Oct-07	\$	8.9850			
Nov-07	\$	9.7000			
Dec-07	\$	10.4000	\$	9.4842	Jan '07 - Dec '07 (Company LIFO 2007)

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In The Matter Of The Application Of)
MICHIGAN CONSOLIDATED GAS COMPANY)
For Approval Of Gas Cost Recovery Plan)
5-Year Forecast And Monthly GCR Factor)
For The Period Of April 2006 – March 2007)

Case No. U-14717

QUALIFICATIONS
AND
DIRECT TESTIMONY
OF
GEORGE H. CHAPEL

MICHIGAN CONSOLIDATED GAS COMPANY
QUALIFICATIONS OF GEORGE H. CHAPEL

Line
No.

1 **Q. What is your name, address, and by whom are you employed?**

2 A. My name is George H. Chapel. My business address is 2000 Second Avenue,
3 Detroit, Michigan 48226. I am employed by Michigan Consolidated Gas
4 Company ("MichCon" or "Company") as Manager of Gas Market Forecasting.

5

6 **Q. What is your educational background and business experience?**

7 A. In December 1985, I earned a Bachelor of Science degree from Central
8 Michigan University with a major in mathematics. In April 1988, I was hired by
9 Michigan Gas Company ("MiGas") as a Rates and Gas Supply Analyst. There
10 I performed various duties of increasing responsibility arising out of the
11 regulation of MiGas as a public utility. In 1993, the assets of MiGas were
12 rolled in amongst those of affiliate Southeastern Michigan Gas Company and
13 Battle Creek Gas Company. These companies were combined to form what is
14 known today as SEMCO Energy Gas Company ("SEMCO"). My duties with
15 SEMCO included demand forecasting, supply planning, supply purchasing,
16 nominating, and pipeline capacity management. In May 1998, I was hired by
17 MichCon as a Gas Supply Analyst. My duties with MichCon in that capacity
18 included supply purchasing and market analysis. In October 2000, I was
19 promoted to my current position.

20

21 **Q. What are your primary responsibilities at MichCon?**

22 A. Among other things, I am responsible for MichCon's sales forecast and
23 analysis of MichCon's natural gas supply portfolio, including gas purchases
24 and purchase of interstate pipeline transportation services.

Line
No.

1 **Q. Have your previously provided testimony before the Michigan Public**
2 **Service Commission (“MPSC or “the Commission”)?**

3 A. Yes. I sponsored testimony on behalf of SEMCO and its subsidiaries in a
4 variety of cases before the Commission. These cases include two general rate
5 cases, two MRCS cases, and a number of Gas Cost Recovery (“GCR”) Plan
6 and Reconciliation proceedings. Most recently, I sponsored testimony on
7 behalf of MichCon in its Rate Case No. U-13898, its 2002 GCR Case No. U-
8 13060, its 2003 GCR Case No. U-13549 and its 2005 GCR Case No. U-14401.

Line
No.

2 A. The purpose of my testimony is to describe MichCon's GCR market forecast
3 for the five-year operational period 2006-2011. Further, my testimony will
4 address the implementation of MichCon's natural gas supply plan ("the Plan")
5 over the next five years, April 2006 through March 2011 ("the Plan Period"). I
6 will describe MichCon's gas supply strategy, the purchases that MichCon has
7 made and plans to make over the Plan Period, the source, contract, and
8 forecasted price for such supplies, existing and planned transportation
9 arrangements, and the actions that the Company plans to take to execute this
10 Plan.

11

13 A. Yes. I am sponsoring the following exhibits, prepared by me or under my
14 direction:

A-2 (GHC-2) Market Outlook - Projected Average Number of
Customers

20 A-4 (GHC-4) Market Forecast Analysis - Forecasted GCR Number of
21 Customers

23 A-6 (GHC-6) Mean Peak Day Temperatures by District Peak Day

24 Load by Area

25 A-7 (GHC-7) Projected NYMEX and Basis Prices

**Line
No.**

1	A-8 (GHC-8)	Fixed Price Purchase Guidelines
2	A-9 (GHC-9)	Intrastate Purchase Contract Summaries
3	A-10 (GHC-10)	Summary of Transport Contracts
4	A-11 (GHC-11)	Projected Gas Purchase Quantities and Costs
5	A-12 (GHC-12)	Projected Transport Capacities and Costs
6	A-13 (GHC-13)	Projected Total Supply Costs

7

8 **MARKET OUTLOOK**

9 **Q. What is MichCon's rate schedule and GCR sales forecast for the 2006**
10 **through 2011 planning period?**

11 A. For the April 2006-March 2007 operational plan year (OPY), I am forecasting
12 sales volumes of approximately 183 Bcf for MichCon's rate schedule sales
13 customers (Exhibit No. A-1 (GHC-1), line 17, column A). Note that rate
14 schedule sales customers include both GCR sales volumes and Gas Customer
15 Choice (GCC) volumes. I expect annual normalized rate schedule sales
16 volumes to increase very slightly over the five year plan, increasing to
17 approximately 184 Bcf in 2010-11, as shown on Exhibit No. A-1 (GHC-1), line
18 17, column E.

19

20 **Q. What is your projection for average number of rate schedule customers**
21 **from 2006 through 2011?**

22 A. As reflected on Exhibit No. A-2 (GHC-2), line 17, column A, I am projecting
23 approximately 1.26 million rate schedule customers (mean average) during the
24 2006-07 OPY. This number increases to approximately 1.28 million customers
25 through 2010-11 as shown in columns B through E, line 17. I will describe

**Line
No.**

1 throughout my testimony the factors contributing to my projected increases in
2 the average number of customers for the residential, commercial, and
3 industrial segments.

4

5 **RESIDENTIAL RATE SCHEDULE SALES MARKET**

6 **Q. How did you develop the forecast for the residential rate schedule sales**
7 **market, including both GCR and GCC customers?**

8 A. The residential rate schedule sales market is shown on Exhibit No. A-3 (GHC-
9 3). There are two key elements used in projecting volumes in the residential
10 rate schedule sales market. The first element is the forecast of the number of
11 customers, by month, in the various market areas that we serve. The second
12 element is a forecast of the average use per customer (both base load and
13 usage per HDD) in each of these areas. The combination of the two elements
14 for each respective market area yields the residential rate schedule sales
15 market forecast.

16

17 **Q. How did you develop the forecast of the number of residential**
18 **customers, including both GCR and GCC?**

19 A. Monthly customer additions and losses by each of MichCon's sixteen service
20 regions over a three-year period were analyzed to develop a trend factor for
21 the number of residential customers. The historical data used is the actual
22 monthly billing data for each of the approximately 1.25 million MichCon
23 customers across its service territory. Customer growth and loss, by month, is
24 then projected for each region and projected forward for five years to develop
25 the demand forecast.

**Line
No.**

1 **Q. What are MichCon's sixteen different service regions?**

2 A. MichCon's sixteen different service regions are as follows: Detroit, Ann Arbor,
3 Grand Rapids, Muskegon, Big Rapids, Traverse City, Alpena, Petoskey,
4 Grayling, Tawas, Ludington, Mount Pleasant, Cadillac, Sault Sainte Marie, Iron
5 Mountain, and Escanaba. Each of these different regions exhibit different
6 usage characteristics, growth/decline patterns, and weather patterns.

7

8 **Q. Is MichCon experiencing change in the number of customers in any of its**
9 **residential markets?**

10 A. Yes. A significant population shift continues to take place across MichCon's
11 service territory. The population of the city of Detroit, Wayne County's largest
12 population center, continues to decline, as it has since the 1980's. Given this
13 trend, I believe Detroit's population will continue to decline during the next 5-
14 years. Population increases have been observed in other MichCon service
15 areas, particularly in Kent (Grand Rapids), Washtenaw (Ann Arbor), and Grand
16 Traverse (Traverse City) Counties. Given this trend, I believe that the
17 population in these three key areas will continue to increase during the next
18 five years.

19

20 **Q. How is the forecasted average consumption per customer developed?**

21 A. The forecasted average residential usage per customer for the five-year plan
22 period was established based upon actual historical consumption data for the
23 12-month period ended August 2005. The data is normalized using the
24 average of thirty calendar years (1973-2002) of weather data.

Line
No.

1 **Q. What is the result of your forecast of residential rate schedule sales**
2 **markets, for both GCR and GCC customers?**

3 A. The forecast of an increase in number of residential customers, results in a
4 small increase to the total residential markets from 119.7 Bcf in OPY 2006-07
5 to approximately 120.4 Bcf during OPY 2010-11.

6

7 **COMMERCIAL MARKET**

8 **Q. How did you develop the forecast for commercial market, including both**
9 **GCR and GCC customers?**

10 A. The methodology used for forecasting volumes in the commercial GCR and
11 GCC market is essentially the same as that used for the residential market.
12 The process involves forecasting the number of customers for each year and
13 calculating the average base load and usage per HDD per customer. As
14 reflected on Exhibit No. A-1 (GHC-1), line 11, I am projecting a slight increase
15 in volumes, from 40.7 Bcf to 41.3 Bcf for commercial sales customers from
16 OPY 2006-07 to 2010-11.

17

18 **Q. What is the Exelon Easement Agreement?**

19 A. As a condition for receiving the Federal Trade Commission's approval of its
20 merger with DTE Energy, MichCon entered into a special contract with Exelon.
21 This contract grants Exelon rights to annual transportation and storage
22 capacity on MichCon's distribution system in specific parts of MichCon's
23 service territory where MichCon's and Detroit Edison's service territories
24 overlap.

Line
No.

1 Q. How have you factored the impact of the Exelon Agreement into the
2 forecast?

3 A. For this plan case, I have assumed that a total of 2.5 Bcf from MichCon's
4 existing commercial market and 2.5 Bcf from MichCon's end use transportation
5 ("EUT") market will continue to be served by Exelon beginning in 2006-07 and
6 beyond. The total of 5 Bcf is the initial capacity pursuant to the Exelon
7 Easement Agreement, MPSC Case No. U-12825.

8

9 **INDUSTRIAL SALES MARKET**

10 Q. How did you develop the forecast for the industrial GCR and GCC sales
11 market?

12 A. Industrial GCR and GCC sales were forecast in the same manner as the
13 residential and commercial GCR and GCC classes. The volume and number
14 of customers has remained relatively stable for the last five years and is
15 relatively small. As reflected on Exhibit No. A-1 (GHC-1), line 14, I am
16 projecting a slight decline in volumes, from 1.6 Bcf to 1.5 Bcf for industrial
17 sales customers from OPY 2006-07 to 2010-11.

18

19 **GAS CUSTOMER CHOICE PROGRAM**

20 Q What impact does the GCC program have on forecasted MichCon
21 markets?

22 A. The GCC program continues to have a significant impact on MichCon GCR
23 markets. As of November 2005, approximately 137,000 customers, or about
24 11% of MichCon's total rate schedule customers, have elected to choose an
25 alternate supplier through the GCC program. Through the end of 2006, I am

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1 forecasting a slight increase in migration resulting in a projection of
2 approximately 140,000 GCC customers . Going forward, I have assumed
3 participation levels in the Choice program to remain at roughly 11%
4 participation, growing to approximately 143,000 customers by OPY 2010-11.
5 The total number of customers choosing an alternative supplier will be the
6 result of a number of factors, including MichCon's GCR factor, the then-current
7 market environment and price, an increase or decrease in the number of
8 alternative suppliers, etc. MichCon will continue to monitor customer
9 participation in the GCC program and adjust its market forecast and gas
10 supply accordingly.

11

12 **FORECASTED GCR SALES VOLUMES**

13 **Q. What are the forecasted GCR sales volumes and customers?**

14 A. Please refer to Exhibit No. A-3 (GHC-3), pages 1 through 5, for MichCon's
15 GCR sales volumes by month, and Exhibit No. A-4 (GHC-4), pages 1 through
16 5, for MichCon's forecasted number of GCR customers by month. The annual
17 GCR sales volumes are: 162.1 Bcf for OPY 2006-07, 162.0 Bcf for OPY 2007-
18 08, 162.4 Bcf for OPY 2008-09, 162.8 Bcf for OPY 2009-10, and finally, 163.1
19 Bcf for OPY 2010-11.

20

21 **Q. What is the basis for MichCon's total annual GCR requirements?**

22 A. Exhibit No. A-5 (GHC-5), pages 1 through 3, identifies projected total
23 requirements for OPYs 2006 – 2011, which is made up of Company use, lost
24 gas, unbilled volume change and balance, and the forecasted GCR sales
25 market volumes previously described. The forecasted requirements are based

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1 on normal weather, which assumes a gradual and even change in daily
2 temperature and sendout during the year.

3

4 **PEAK DAY DEMAND**

5 **Q. What are the mean average temperatures around which MichCon plans its**
6 **peak day demand?**

7 A. Please refer to Exhibit No. A-6 (GHC-6), page 1 of 2. This exhibit identifies
8 sixteen key locations across MichCon's service territory. Along with these
9 locations, it also identifies the coldest mean average temperature (in degrees
10 Fahrenheit) that MichCon can expect at each location during three pivotal
11 times during the winter. These pivotal times occur at the end, of January,
12 February, and March.

13

14 **Q. What is the 2007 peak day load associated with each of these critical**
15 **period mean average temperatures?**

16 A. Please refer to Exhibit No. A-6 (GHC-6), page 2 of 2. This exhibit details the
17 peak demand in January, February, and March 2007 at five primary demand
18 locations. These five locations are Detroit/Ann Arbor, Alpena, Grand Rapids,
19 the Upper Peninsula, and Traverse City. These demand loads are discussed
20 further within the testimony of Witness Goodwin.

21

22 **Q. Have these peak day load volumes changed as compared to MichCon's**
23 **previous GCR filing?**

24 A. No, for the 2007 peak day projection, there has not been a change to the
25 forecast. However, the growth in specific areas, such as Kent County and

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1 Washtenaw County (specifically in the Grand Rapids area), and the decrease
2 in the Wayne County area (specifically in the city of Detroit) will change the
3 peak day load. The Grand Rapids area has increased by 15% in population
4 while Wayne County has decreased by 2% per the U.S. Census Bureau from
5 1990 to 2000. As I previously indicated, MichCon will continue to evaluate the
6 population change so that it is positioned for changes to regional peak day
7 load demand.

8
9 **GAS SUPPLY PLAN**

10 **Q. What is MichCon's 5-year gas supply plan?**

11 A. MichCon's 5-year supply plan is predicated on the volume requirements
12 described in the testimony of Witness Goodwin. The Plan features a
13 reasonably flexible portfolio of geographically diverse sources of supply under
14 short to long-term supply and transportation contracts with a diverse range of
15 reliable suppliers and interstate transport providers. The supply plan also
16 contains a comprehensive pricing strategy intended to achieve 3 goals: (a)
17 reduce price volatility through fixed price purchases based on predetermined
18 price levels, (b) capture low prices as far as 5 years forward by locking in fixed
19 prices when the market falls below historical median prices, and (c) limit the
20 risk of high fixed price purchases by setting fixed price volume limits and
21 securing all remaining requirements at spot related pricing. The details of
22 MichCon's supply plan and resulting portfolio are more fully described
23 throughout my testimony.

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1 **PRICE FORECAST**

2 **Q. What methodology did MichCon use to forecast gas prices for this GCR**
3 **Plan Case?**

4 A. The 5-year price forecast is found in Exhibit No. A-7 (GHC-7) and is a long-
5 term price projection for the market. Column B contains the average of
6 settlement prices for the natural gas contracts traded on the New York
7 Mercantile Exchange ("NYMEX") at the close of trading for the first five trading
8 days of December 2005. The remaining columns show the forecasted basis
9 price differentials and resulting prices for the indicated purchase locations. All
10 prices are stated in dollars per Dth. Throughout this testimony, I assume a
11 heating value of 1.020 Dth per Mcf. This conversion factor represents the
12 approximate heating value of gas delivered to the MichCon system.

13

14 **Q. What is NYMEX and why did MichCon use the average of the settlement**
15 **prices on the first five trading days of December 2005, as the foundation**
16 **for its forecast of market prices?**

17 A. NYMEX is the world's largest physical commodity futures exchange and is an
18 industry-wide recognized price reference point for commodities including
19 natural gas. NYMEX provides the market's collective assessment of the
20 expected future value for natural gas. NYMEX trades reveal the value, in
21 dollars per Dth, which the market places on gas delivered to the Henry Hub
22 trading point located in Louisiana for each future delivery month. The average
23 of the settlement prices on the first five trading of December 2005, were the
24 most recent natural gas traded prices at the time the Plan was finalized.

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1 **Q. How does MichCon forecast the price of gas at geographic locations**
2 **other than at Henry Hub?**

3 A. The price of gas at different geographic locations is measured through basis
4 price differentials. Basis price differentials represent the difference in price for
5 gas delivered at the indicated geographic location and the price for gas
6 delivered at Henry Hub as traded on the NYMEX.

7

8 **Q. How does MichCon forecast the basis price differentials and the**
9 **resulting price it will pay for gas at various supply points?**

10 A. MichCon periodically collects information on the basis price differentials being
11 offered by its suppliers. The basis price differentials shown on Exhibit No. A-7
12 (GHC-7) reflect these differentials. The forecasted basis price differentials are
13 then added to the forecasted NYMEX price by month to arrive at projected gas
14 prices at the indicated supply points.

15

16 **Q. How are projected gas prices at different geographic supply points used**
17 **in your gas supply forecast?**

18 A. Supply point prices at different geographic locations are used to calculate the
19 cost for gas purchased by MichCon on the spot market, for gas purchased
20 under contracts that are tied to the NYMEX plus a basis, or for gas purchased
21 under contracts that are tied to monthly indices. The prices are also used to
22 calculate the cost of forecasted supplies that have not yet been placed under
23 contract.

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1 **FIXED PRICE PURCHASE GUIDELINES – LONG TERM**

2 **Q. Mr. Chapel, how does MichCon plan to price its long term gas supply for**
3 **2006 and beyond?**

4 A. The attached Exhibit No. A-8 (GHC-8) outlines the guidelines that MichCon
5 intends to follow for pricing gas supply for 2006 and beyond. Generally,
6 MichCon plans to lock-in long term fixed prices using price signals based on
7 the Quartile Indices method for long term supply pricing (also known as the
8 Long Term method covering 1 to 5 years forward).

9

10 **Q. Is this method for locking-in long term fixed prices different than**
11 **methods previously used by MichCon, and if so why is MichCon**
12 **modifying its method for locking-in long term fixed prices?**

13 A. Yes, it is different. MichCon is modifying its method to improve the timing,
14 price level and quantity of gas to be locked-in at fixed prices. The old Quartile
15 Indices method for long term fixed prices was improved upon by extending its
16 application from 2 years forward to 5 years forward. To accommodate this
17 change, the price signals (or quartile ranges) were modified. Instead of using
18 a 3-year history of NYMEX prices to determine appropriate fixed price levels,
19 the data history was expanded to incorporate 1, 2, 3, 4, and 5 year historical
20 quartiles. With these changes, the quantity to lock-in at each price signal was
21 adjusted appropriately. These changes are more fully described in the
22 attached Exhibit No. A-8 (GHC-8).

23

24 **Q. What time frame is covered by the Long Term method under the fixed**
25 **price purchase guidelines?**

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1 A. The Long Term method covers five 12-month periods starting with the next full
 2 12-month GCR period beginning April 1st. If there is a price signal on May 15,
 3 2006, indicating that fixed prices should be locked-in under the Long Term
 4 method, then such pricing would apply for the indicated 1, 2, 3, 4, or 5-year
 5 periods beginning April 1, 2007.

6

7 **Q. How are the quantities and price signals determined under the Long**
 8 **Term method of locking in fixed prices?**

9 A. MichCon maintains a history of NYMEX prices for the past 5 years. This
 10 history of prices is then used to determine the 50th percentile, 25th percentile,
 11 and 0th percentile prices for each of the past 12-month, 24-month, 36-month,
 12 48-month, and 60-month periods. Each of these 3 percentile prices for each of
 13 the 5 indicated periods establishes a total of 15 price signals. Each of the
 14 price signals determined from the past 12-month period would indicate that
 15 fixed prices, at or below that price level, may be locked-in for up to 5% of the
 16 average daily purchase quantity covering the 1-year period beginning the
 17 following April 1st.

18

19 Likewise, each of the price signals determined from the past 24-month period
 20 would indicate that fixed prices, at or below that price level, may be locked-in
 21 for up to 5% of the average daily purchase quantity covering the 2-year period
 22 beginning the following April 1st. This method continues for up to a 5-year
 23 period beginning the following April 1st. If market prices fall below all of the 15
 24 price signals, then a maximum of 75% of the prompt GCR period deliveries
 25 would be locked-in at fixed prices, 60% in the second forward GCR period,

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1 45% in the third, 30% in the fourth, and 15% in the fifth forward GCR period.
2 All of this is explained in more detail in Exhibit No. A-8 (GHC-8),
3

4 **Q. Has MichCon already secured fixed priced supplies for 2006 and beyond**
5 **under this new Long Term methodology or under the previous fixed price**
6 **methodology?**

7 A. No. Market prices have continued to generally increase since 2002.
8 Consequently, due to relatively high NYMEX futures prices compared to
9 historical Quartile Indices, no fixed prices were locked-in.
10

11 **FIXED PRICE PURCHASE GUIDELINES – SHORT TERM**

12 **Q. Mr. Chapel, how does MichCon plan to price its short term required gas**
13 **supply for 2006-07?**

14 A. The attached Exhibit No. A-8 (GHC-8) outlines the guidelines that MichCon
15 intends to follow for pricing gas supply for 2006-07. Generally, MichCon plans
16 to lock-in fixed prices using price signals based on the 21-Day Moving Average
17 method for short term supply pricing (also known as the Short Term method
18 covering the balance of the then-current GCR period).
19

20 **Q. Is this method for locking-in short term fixed prices different than**
21 **methods previously used by MichCon, and if so, why is MichCon**
22 **modifying its method for locking-in short term fixed prices?**

23 A. Yes, it is different. As with the long term method under the fixed price
24 program, MichCon is modifying its methods to improve the timing, price level
25 and quantity of gas to be locked-in at short term fixed prices. The new 21-Day

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1 Moving Average method utilizes dynamic price signals to determine
 2 appropriate timing and price levels for short term purchases. This is an
 3 improvement to the old Dollar Cost Averaging method that mandated the
 4 locking-in of fixed prices based solely on a calendar schedule regardless of
 5 real-time market prices or price trends. These changes are more fully
 6 described in the attached Exhibit No. A-8 (GHC-8).

7

8 **Q. What time frame is covered by the Short Term method under the fixed**
 9 **price purchase guidelines?**

10 A. The Short Term method covers gas deliveries in the prompt month through the
 11 end of the current GCR period. For example, if there is a price signal on May
 12 15, 2006, indicating that fixed prices should be locked-in under the Short Term
 13 method, then such pricing would apply for the period June 2006 through March
 14 2007.

15

16 **Q. How are the quantities and price signals determined under the Short**
 17 **Term method of locking-in fixed prices?**

18 A. MichCon charts the history of the average daily settlement prices for all of the
 19 NYMEX contracts from the prompt month through the end of the current GCR
 20 period in March ("Balance of Period"). This charted history is then used to
 21 determine the most recent 21-Day Moving Average price. A fixed price signal
 22 occurs when the NYMEX market price for the Balance of Period moves from
 23 below to above the 21-Day Moving Average. As each fixed price signal
 24 occurs, MichCon may lock-in fixed prices for up to 20% of the targeted fixed
 25 price quantity to be delivered over the Balance of Period. This targeted fixed

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price quantity is 50% of planned purchases for the Balance of Period. If sufficient Short Term price signals do not achieve a minimum of 50% of the Balance of Period locked-in at fixed prices by the last trading day for the November NYMEX contract, then MichCon may lock-in fixed prices during November to achieve a minimum of 50% for the December through March deep winter period. This is explained in more detail in Exhibit No. A-8 (GHC-8),

Q. Has MichCon already secured fixed priced supplies for 2006 and beyond under this new Short Term methodology?

A. No. MichCon expects that this Short Term program will commence on March 30, 2006, the day following the expiration of the April 2006 NYMEX contract on March 29, 2006.

Q. How does MichCon plan to price its remaining supply requirements for 2006 and beyond where the price is not fixed?

A. Generally, all gas that is not locked-in at fixed prices will be priced either on the spot market (i.e. a price that is negotiated during the month of delivery or the month prior to delivery), a monthly Spot Index related price, or at the NYMEX settlement price plus a fixed basis differential.

INTRASTATE SUPPLY

Q. What is your definition of intrastate supply as used in this Plan Case?

A. From the early days of Michigan gas production until the mid-1980s, MichCon actively pursued the long-term purchase of wellhead dedicated gas produced

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1 in Michigan. This gas is classified as intrastate supply. All of these long-term
2 contracts have expired except one that will expire at the end of June 2006.
3 Supply from these intrastate contracts has declined over the years to where
4 they now provide less than 1% of MichCon's overall supply requirements.
5 Exhibit No. A-9 (GHC-9), contains a detailed summary of the remaining
6 contract.

7
8 **Q. Does MichCon intend to replace the expiring intrastate supply with**
9 **additional Michigan produced gas?**

10 A. No. Replacement supplies will be purchased at MichCon City Gate or at
11 interstate receipt points.

12
13 **INTERSTATE TRANSPORTATION AND SUPPLY**

14 **Q. Please give a brief overview of the interstate transportation market in**
15 **North America?**

16 A. Interstate pipelines connecting natural gas reserves in nearly all regions of
17 North America, except the Gulf Coast area, are running at or near capacity and
18 are fully subscribed with firm transportation shippers. There have been three
19 noticeable consequences of this limited transportation capacity.

20
21 First, suppliers within each region have been competing to fill the limited
22 pipeline space resulting in weaker regional basis prices. For example, Mid-
23 Continent supplies into Panhandle Eastern Pipe Line ("PEPL") have historically
24 been selling at an average basis of \$0.27 below NYMEX. They have, over the
25 past 12 months, been selling at an average of \$1.34 below NYMEX. Alberta

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1 gas supplies at the AECO C Hub that have historically been selling at an
2 average basis of \$0.60 below NYMEX have, over the past 12 months, been
3 selling at an average of \$1.56 below NYMEX. Chicago area gas supplies into
4 Vector that have historically been selling at an average basis of \$0.07 above
5 NYMEX have, over the past 12 months, been selling at an average of \$0.09
6 below NYMEX.

7

8 The second noticeable consequence of this limited interstate pipeline capacity
9 is the near elimination of pipeline discounts. Most renewals or replacement of
10 firm transportation contracts through either open season bidding or direct
11 negotiations with the pipelines is resulting in longer term contracts at maximum
12 pipeline tariff rates.

13

14 The third noticeable consequence is the increase in open season postings for
15 either new pipelines or pipeline expansions from these capacity constrained
16 regions. For example, El Paso Pipeline, PEPL, and Kinder Morgan have each
17 proposed major pipeline projects accessing the Rocky Mountain and Mid-
18 Continent production areas. As these changes have been taking place across
19 North America, the basis price in the Gulf Coast region has remained relatively
20 strong and the related pipeline takeaway capacity on Trunkline and ANR have
21 remained under-utilized due to these relatively high prices for gas from that
22 area.

23

24 **Q. What pipeline capacity have you assumed in the GCR Plan Case for the**
25 **period April 2006 through March 2007?**

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1 A. Exhibit No. A-10 (GHC-10) shows all interstate transport currently under
 2 contract and their related receipt points, capacity, and term. Exhibit No. A-12
 3 (GHC-12), page 1 of 5, also summarizes the pipeline capacity by maximum
 4 daily quantity ("MDQ") and includes the associated projected costs of that
 5 capacity by month. The projected costs include both reservation and
 6 commodity charges assessed by the pipelines.

7

8 **Q. What changes in interstate pipeline capacity have been made since**
 9 **MichCon's 2005 GCR Plan Case?**

10 A. Following is a summary of changes in interstate pipeline capacity since
 11 MichCon's 2005 GCR Plan Case:

12 1) The combined PEPL and Trunkline Gas Transmission capacity of 10,000
 13 Dth/day that was scheduled to expire October 31, 2007, was extended for
 14 two more years at the same combined discounted 100% LF rate of
 15 \$0.22/Dth.

16 2) The PEPL transport capacity of 40,000 Dth/day that was scheduled to
 17 expire at the end of March 2007 was renewed under a new contract for
 18 two more years at a discounted 100% LF rate of \$0.42/Dth effective April
 19 2007, or approximately \$0.16/Dth greater than the original rate. Despite
 20 this price increase, the PEPL supply remains one of MichCon's least cost
 21 sources of supply due to the significant reduction in the basis price of gas
 22 received into this pipeline as discussed above and shown on column N of
 23 Exhibit No. A-7 (GHC-7).

24 3) The PEPL transport capacity of 25,000 Dth/day that was scheduled to
 25 expire at the end of October 2006 was renewed under a new contract for

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- 1 two more years at a discounted 100% LF rate of \$0.42/Dth effective
 2 November 2006, or approximately \$0.12/Dth greater than the original rate.
 3 Despite this price increase, the PEPL supply remains one of MichCon's
 4 least cost sources of supply due to the significant reduction in the basis
 5 price of gas received into this pipeline as discussed above and shown on
 6 Column N of Exhibit No. A-7 (GHC-7).
- 7 4) The ANR Pipeline transportation service from Woolfolk to the Grand
 8 Rapids area (Trufant Agreement) was terminated and replaced with two
 9 new service agreements. These changes are more fully described below.
- 10 5) The Great Lakes Gas Transmission (GLGT) capacity of 30,390 Dth/day
 11 with a primary term of October 2011, and a MichCon early termination
 12 option of November 2006, was terminated and replaced with two contracts
 13 for the same capacity, with the same primary term and at the same rate
 14 but without the early termination option. This modification was executed to
 15 comport with GLGT standardized contracting practices and to secure the
 16 new Sagola Gate station and the discounted backhaul transportation
 17 service described below.
- 18 6) Effective December 2005, GLGT completed construction of a new gate
 19 station in Sagola Township, Dickinson County, Michigan, and began
 20 providing 50,000 Dth/day of backhaul transportation service for six years
 21 at a rate of \$0.07/Dth through October 2006 and \$0.183/Dth for the
 22 balance of the term expiring October 2011. This new service replaces the
 23 GLGT backhaul contract that was scheduled to expire October 2006 and
 24 conforms with plans filed by MichCon in its previous GCR cases.
- 25 7) MichCon entered into a new transportation service with TransCanada

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1 Pipeline Company (TCPL) for 50,000 Dth/day of capacity from Empress,
2 Alberta to Dawn, Ontario at a 100% load factor rate of approximately
3 \$0.78/Dth commencing November 2005 and expiring November 2010.
4 The new service adds more supply options, provides greater diversity and
5 security of supply, and conforms with plans to secure additional interstate
6 pipeline capacity as filed by MichCon in its previous GCR cases. Given
7 the limited to non-existent availability of pipeline capacity out of western
8 Canada, the Mid-Continent, and Chicago areas, coupled with the high cost
9 of Gulf Coast supplies, this new TCPL capacity was the best available and
10 least cost alternative to meet the plan for securing additional pipeline
11 capacity at this time.

12 8) The Vector Pipeline ("Vector") transport capacity of 50,000 Dth/day that
13 was scheduled to expire at the end of March 2007 was extended for five
14 more years at a discounted 100% LF rate of \$0.19/Dth, or approximately
15 \$0.02/Dth greater than the original rate. This higher transportation rate is
16 offset by the significant reduction in the basis price of gas received into
17 this pipeline as discussed above and shown on Column K of Exhibit No. A-
18 7 (GHC-7).

19

20 **Q. Does MichCon plan to enter into new interstate transport contracts?**

21 A. Yes. MichCon plans to renew existing capacity of interstate transportation
22 service as early as three years prior to expiration. Additionally, MichCon plans
23 to enter into new contracts upstream of its existing interstate capacity if the
24 costs are reasonable and the location adds benefit to the supply portfolio.
25 However, there are no plans at this time to increase the total delivered

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1 capacity of interstate transport above the current level of 450,000 Dth/day.

2

3 **Q. What changes did MichCon make to its ANR Trufant Agreement for**
4 **service to the Grand Rapids area?**

5 A. The ANR Trufant Agreement was terminated and replaced with two new
6 service agreements. The first agreement has a capacity of 400,000 Dth/day
7 starting July 2005 and continuing through June 2051. The second agreement
8 has a capacity of 100,000 Dth/day starting November 2007 and continuing
9 through November 2017, at which time the capacity increases to 200,000
10 Dth/day for the remaining term, June 2051. The second agreement is
11 currently being prepared by ANR and has not yet been executed.

12

13 **Q. Why did MichCon make these changes?**

14 A. There are several reasons why MichCon agreed to these contract changes
15 with ANR for serve to the Grand Rapids area. First, these changes were made
16 to comply with Federal Energy Regulatory Commission requirements for
17 interstate transportation contracting, specifically relating to such issues as fuel
18 and contract options for capacity, rate, and term. Second, MichCon was able
19 to secure an additional 100,000 to 200,000 Dth/day of transportation service
20 that was previously unavailable. Third, MichCon was able to secure a
21 minimum delivery pressure guarantee. Fourth, MichCon is no longer restricted
22 from building pipelines to serve this territory. And fifth, MichCon was able to
23 secure favorable contract changes (favorable to all MichCon rate schedule
24 customers) for transportation services it provides to ANR.

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1 **Q. Why did MichCon need to increase ANR transportation service to the**
2 **Grand Rapids area by 100,000 Dth/day starting November 2007 and then**
3 **by 200,000 Dth/day starting November 2017?**

4 A. MichCon currently has 500,000 Dth/day of ANR transportation service that
5 may be delivered to the Grand Rapids area on a peak day, consisting of
6 400,000 Dth/day under the "Trufant" service agreement plus 100,000 Dth/day
7 of long-haul ANR pipeline supply. As discussed earlier in my testimony, there
8 has been significant growth in the Grand Rapids area and this growth is
9 expected to continue into the future. Consequently, the peak day load in the
10 Grand Rapids area will continue to increase. The new transportation service
11 to the Grand Rapids area was shaped to meet this growing peak day demand.
12 Additionally, the ratcheting of the capacity in both 2007 and 2017 provides a
13 lower cost than securing the entire 200,000 Dth/day immediately.

14

15 **Q. How does MichCon plan to recover the cost of these new ANR**
16 **agreements serving the Grand Rapids market area?**

17 A. MichCon currently recovers \$3.5 million in its base rates for transportation
18 costs relating to the 400,000 Dth/day of ANR transport service. Accordingly,
19 the fuel, Reservation, and Commodity costs of the 400,000 Dth/day service are
20 not included in this GCR Plan. However, the fuel, Reservation, and
21 Commodity costs of the incremental 100,000 Dth/day and 200,000 Dth/day
22 transportation agreements to serve the Grand Rapids market are included in
23 this GCR Plan. This cost recovery structure is consistent with the
24 Commissions order in MichCon's latest Rate Case No. U-13898, U-13899 (see
25 page 67 of that Order) and supported by Witness Schmidt.

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1 **Q. Is there regional diversity in the Company's current transportation**
2 **portfolio?**

3 A. Yes. The following table shows the variety of supply basins and percentage of
4 annual normal weather supply requirements from each supply sources. Any
5 colder-than-normal requirements above and beyond that amount available
6 from storage will be covered by additional purchases at city-gate or under
7 interstate capacity release sources.

8

Location	Annual Percent
Mid-Continent	31%
Gulf Coast	27%
Canadian	39%
City Gate	3%
Total	100%

9

10 **Q. Why is regional diversity of supply important to MichCon?**

11 A. MichCon's customers benefit from regional diversity of supply from increased
12 reliability and lower price volatility. The basis price from the natural gas supply
13 basins is historically far less volatile than the prices at the MichCon city-gate
14 and further acts as a dampening effect of potentially volatile NYMEX prices.
15 Security of supply, greater price certainty, and increased diversity and options
16 of supply sources are the primary reasons MichCon holds regional diversity of
17 interstate transportation capacity.

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1 **PROJECTED TOTAL SUPPLY AND COSTS**

2 **Q. What are MichCon's projected total gas purchase quantities and costs**
3 **for the April 2006 through March 2007 period?**

4 A. MichCon's projected total gas purchase quantities and costs are summarized
5 in Exhibit No. A-11 (GHC-11). This exhibit reflects projected total purchases
6 and subtotals for the categories: contracted fixed price, contracted not fixed
7 price, and supply not yet under contract. The totals of these subdivisions are
8 added to arrive at the total expected gas purchase quantity of approximately
9 175 MMDth (page 1, line 6, column N) and a total expected gas purchase cost
10 of approximately \$1,878 million (page 1, line 14, column N) for the April 2006
11 through March 2007 period. These costs are inclusive of all pipeline fuel
12 retention and conversion from Dth (energy quantity) to Mcf (volumetric
13 quantity) at a factor of 1.02 Dth/Mcf (heating value), but do not include pipeline
14 transportation costs.

15

16 **Q. What are MichCon's projected total transportation costs for the April**
17 **2006 through March 2007 GCR Plan Period?**

18 A. MichCon's projected total transportation costs are summarized in Exhibit No.
19 A-12 (GHC-12). This exhibit reflects projected transportation capacity and cost
20 by month. The total expected transportation cost is approximately \$54 million
21 (page 1, line 21, column N) for the period April 2006 through March 2007.
22 These costs are inclusive of pipeline reservation and commodity charges and
23 conversion from Dth (energy quantity) to Mcf (volumetric quantity) at a factor of
24 1.02 Dth/Mcf (heating value).

Line
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1 **Q. What are MichCon's projected total supply costs and total delivered**
2 **supply volumes for the period April 2006 through March 2007?**

3 A. Projected total supply costs are presented on Exhibit No. A-13 (GHC-13) and
4 reflect the sum of the projected gas purchase and transport costs. MichCon's
5 projected total supply cost for period April 2006 through March 2007 is
6 approximately \$1,932 million, Exhibit No. A-13 (GHC-13), line 4, column N.
7 The total delivered supply volumes are presented on Exhibit No. A-11 (GHC-
8 11). MichCon's total delivered supply volume for the period April 2006 through
9 March 2007 is approximately 165 Bcf, Exhibit No. A-11 (GHC-11), line 10,
10 column N. This total delivered supply volume is the quantity delivered into
11 MichCon's system after interstate pipeline fuel is removed and after conversion
12 from Dth (energy quantity) to Mcf (volumetric quantity) at a factor of 1.02
13 Dth/Mcf (heating value),
14

15 **PROJECTED SUPPLY COSTS FOR LIFO VALUATION OF GAS IN STORAGE**

16 **Q. What projections have you provided to Witness Schmidt regarding**
17 **MichCon's gas supply volumes and costs for the period January 2006**
18 **through March 2006?**

19 A. I have projected that MichCon will purchase a total delivered volume of 38.335
20 Bcf of gas during the period January 2006 through March 2006: 13.203,
21 11.929 and 13.203 for January, February and March, respectively. The total
22 cost for the same period is \$489.771 million: \$168.104, \$153.237 and
23 \$168.430 for January, February and March, respectively. Furthermore, and
24 consistent with the methods used throughout the Plan, appropriate basis, fuel,
25 transportation charges, and heating value adjustments were applied to result in

Line
No.

1 a projected average delivered cost of \$12.776/Mcf, or \$12.732/Mcf,
2 \$12.846/Mcf, and \$12.757/Mcf for January, February, and March 2006,
3 respectively. The total cost was developed using a NYMEX value of
4 \$13.561/Dth, \$13.641/Dth and \$13.504/Dth for January, February, and March
5 2006 respectively. These were the average settlement prices of the NYMEX
6 contract at the close of trading on first five trading days of December 2005.
7 These NYMEX prices were used to calculate the purchase price for all
8 volumes not already contracted at fixed prices pursuant to the fixed price
9 purchase guidelines.

10
11 **GAS ACQUISITION FOR APRIL 2007 AND BEYOND**

12 **Q. How does MichCon plan to purchase its required gas supply for April**
13 **2007 and beyond?**

14 A. MichCon's proposed natural gas supply acquisition strategy for 2007 and
15 beyond is essentially the same as that used for 2006-07. It will include the
16 indicated quantities of fixed price gas that is locked-in using the guidelines
17 presented in this testimony.

18
19 For forecasting purposes, we have assumed that all interstate pipeline
20 capacity is renewed at current levels with the same provider. For any expiring
21 pipeline capacity not specifically addressed elsewhere in this testimony, it is
22 MichCon's intent to consider all replacement alternatives before selecting the
23 transportation provider of choice. MichCon will continue to stay abreast of
24 North American supply sources and available transportation routes.

**Line
No.**

1 Long-term sources from locations such as the Rockies Basin, Liquefied
2 Natural Gas ("LNG"), Alaska, and Mackenzie Delta Basins are being
3 considered in addition to long-term transportation alternatives such as Alliance,
4 Northern Border, Foothills, TransCanada Gas Pipeline, Nova, and various
5 proposed pipelines.

6

7 **Q. Have you made a projection of gas purchase and transportation costs for**
8 **the period April 2007 through March 2011?**

9 A. Yes. Projected gas purchase costs for the period April 2007 through March
10 2011 are calculated on pages 2 and 3 of Exhibit No. A-11 (GHC-11).
11 Projected transportation costs for that same period are calculated on pages 2
12 through 5 of Exhibit No. A-12 (GHC-12) and the projected total supply costs
13 (the sum of purchase and transport costs) are calculated on Exhibit No. A-13
14 (GHC-13).

15

16 **Q. Does this conclude your pre-filed testimony?**

17 A. Yes.

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In The Matter Of The Application Of)
MICHIGAN CONSOLIDATED GAS COMPANY)
For Approval Of Gas Cost Recovery Plan)
5-Year Forecast And Monthly GCR Factor)
For The Period Of April 2006 – March 2007)

Case No. U-14717

EXHIBITS
OF
GEORGE H. CHAPEL

**Michigan Consolidated Gas Company
Market Outlook
April 2006 through March 2011
Weather Normalized Sales by Rate Class**

Volumes in MMcf

<u>Line</u>	<u>Rate Schedule</u>	<u>Apr-Mar 2006-2007</u> Col (A)	<u>Apr-Mar 2007-2008</u> Col (B)	<u>Apr-Mar 2008-2009</u> Col (C)	<u>Apr-Mar 2009-2010</u> Col (D)	<u>Apr-Mar 2010-2011</u> Col (E)
1	Residential - Rate A	1,080	1,059	1,039	1,018	1,006
2	Residential - Rate A Heat	108,039	108,525	109,422	110,317	110,799
3	Residential - Rate AS	4,437	3,898	3,360	2,822	2,539
4	Residential - Rate 2A (Meter I)	225	223	222	220	219
5	Residential - Rate 2A (Meter II)	5,922	5,865	5,809	5,752	5,722
6	Residential - Total	119,702	119,571	119,851	120,129	120,286
7	Commercial - Rate GS-1	2,276	2,261	2,247	2,233	2,225
8	Commercial - Rate GS-1 Heat	37,412	37,534	37,654	37,775	37,843
9	Commercial - Rate GS-2 Heat	162	123	114	121	124
10	Commercial - Rate S	890	912	954	1,031	1,085
11	Commercial - Total	40,740	40,831	40,969	41,160	41,278
12	Industrial - Rate GS-1	1,420	1,390	1,359	1,328	1,310
13	Industrial - Rate GS-2	200	200	200	200	200
14	Industrial - Total	1,621	1,590	1,559	1,528	1,510
15	GCR TOTAL	162,062	161,991	162,379	162,816	163,073
16	Gas Customer Choice	20,469	20,475	20,533	20,592	20,624
17	Rate Schedule Sales	182,531	182,466	182,912	183,409	183,697
18	Aggregates	1,158	1,158	1,158	1,158	1,158
19	TOTAL MARKET	183,690	183,624	184,070	184,567	184,856

**Michigan Consolidated Gas Company
Market Outlook
April 2006 through March 2011
Projected Average Number of Customers**

Line	Rate Schedule	Apr-Mar 2006-2007 Col (A)	Apr-Mar 2007-2008 Col (B)	Apr-Mar 2008-2009 Col (C)	Apr-Mar 2009-2010 Col (D)	Apr-Mar 2010-2011 Col (E)
1	Residential - Rate A	19,860	19,421	18,982	18,543	18,104
2	Residential - Rate A Heat	974,131	983,088	991,929	1,000,770	1,009,611
3	Residential - Rate AS	34,567	31,440	25,901	21,835	17,769
4	Residential - Rate 2A (Meter I)	869	864	859	854	849
5	Residential - Rate 2A (Meter II)	6,319	6,271	6,223	6,175	6,127
6	Residential - Total	1,035,746	1,041,084	1,043,893	1,048,176	1,052,459
7	Commercial - Rate GS-1	4,133	4,113	4,093	4,073	4,053
8	Commercial - Rate GS-1 Heat	77,307	77,508	77,700	77,892	78,084
9	Commercial - Rate GS-2 Heat	11	11	12	13	14
10	Commercial - Rate S	104	105	110	122	131
11	Commercial - Total	81,555	81,737	81,914	82,098	82,281
12	Industrial - Rate GS-1	1,057	1,035	1,013	991	969
13	Industrial - Rate GS-2	2	2	2	2	2
14	Industrial - Total	1,059	1,037	1,015	993	971
15	GCR TOTAL	1,118,359	1,123,858	1,126,822	1,131,268	1,135,711
16	Gas Customer Choice	140,365	140,933	141,501	142,069	142,637
17	Rate Schedule Customers	1,258,724	1,264,791	1,268,323	1,273,336	1,278,348
18	Aggregates	394	394	394	394	394
19	TOTAL CUSTOMERS	1,259,118	1,265,184	1,268,717	1,273,730	1,278,742

Michigan Consolidated Gas Company
Market Forecast Analysis
Forecasted GCR Volumes

Volumes in MMcf

Line 2006-07 GCR Demand														
No.	FORECAST	April Col (A)	May Col (B)	June Col (C)	July Col (D)	August Col (E)	September Col (F)	October Col (G)	November Col (H)	December Col (J)	January Col (K)	February Col (L)	March Col (M)	TOTAL Col (N)
1	Residential - Rate A	121	83	52	35	32	37	53	86	119	154	164	144	1,080
2	Residential - Rate A Heat	11,117	6,498	4,262	2,500	2,242	1,757	4,254	8,434	14,193	18,177	18,605	16,000	108,039
3	Residential - Rate AS	526	315	158	80	68	100	202	373	552	722	726	615	4,437
4	Residential - Rate 2A (Meter I)	25	20	15	12	11	11	12	16	20	26	30	27	225
5	Residential - Rate 2A (Meter II)	653	386	187	91	77	121	271	511	771	994	1,006	853	5,922
6	Residential - Total	12,443	7,301	4,675	2,718	2,431	2,026	4,791	9,420	15,656	20,074	20,530	17,638	119,702
7	Commercial - Rate GS-1	254	184	126	92	86	91	115	174	232	302	327	291	2,276
8	Commercial - Rate GS-1 Heat	4,136	2,626	1,449	841	752	1,002	1,763	3,111	4,529	5,863	6,083	5,256	37,412
9	Commercial - Rate GS-2 Heat	20	12	8	5	4	6	12	16	15	22	23	20	162
10	Commercial - Rate S	99	60	28	12	10	20	41	76	113	151	153	129	890
11	Commercial - Total	4,508	2,882	1,610	949	852	1,120	1,931	3,377	4,889	6,338	6,586	5,696	40,740
12	Industrial - Rate GS-1	159	114	77	56	52	56	73	110	146	189	206	182	1,420
13	Industrial - Rate GS-2	23	14	6	2	1	4	9	17	25	33	35	30	200
14	Industrial - Total	183	128	83	58	54	60	82	127	172	222	240	212	1,621
15	TOTAL	17,134	10,311	6,367	3,726	3,337	3,206	6,804	12,924	20,717	26,634	27,357	23,546	162,062

Michigan Consolidated Gas Company
Market Forecast Analysis
Forecasted GCR Volumes

Volumes in MMcf

Line No.	2007-08 GCR Demand FORECAST	April Col (A)	May Col (B)	June Col (C)	July Col (D)	August Col (E)	September Col (F)	October Col (G)	November Col (H)	December Col (J)	January Col (K)	February Col (L)	March Col (M)	TOTAL Col (N)
1	Residential - Rate A	119	81	51	34	32	36	52	84	117	152	161	141	1,059
2	Residential - Rate A Heat	11,122	6,467	4,293	2,519	2,261	1,698	4,220	8,433	14,316	18,321	18,749	16,125	108,525
3	Residential - Rate AS	467	279	140	71	60	88	177	327	484	634	635	537	3,898
4	Residential - Rate 2A (Meter I)	25	19	15	12	11	11	12	16	20	26	29	26	223
5	Residential - Rate 2A (Meter II)	647	382	185	90	75	120	268	506	764	985	996	845	5,865
6	Residential - Total	12,380	7,229	4,684	2,727	2,440	1,953	4,728	9,366	15,701	20,118	20,571	17,675	119,571
7	Commercial - Rate GS-1	252	183	125	92	85	91	115	173	231	300	325	290	2,261
8	Commercial - Rate GS-1 Heat	4,150	2,636	1,454	844	755	1,006	1,769	3,121	4,543	5,882	6,101	5,271	37,534
9	Commercial - Rate GS-2 Heat	16	10	7	4	4	5	10	12	10	15	16	14	123
10	Commercial - Rate S	102	62	29	12	11	21	42	78	114	153	156	132	912
11	Commercial - Total	4,520	2,890	1,615	952	855	1,123	1,936	3,384	4,899	6,350	6,598	5,707	40,831
12	Industrial - Rate GS-1	156	112	75	55	51	55	71	108	143	185	201	178	1,390
13	Industrial - Rate GS-2	23	14	6	2	1	4	9	17	25	33	35	30	200
14	Industrial - Total	179	126	81	56	52	59	80	125	168	218	236	208	1,590
15	TOTAL	17,079	10,245	6,380	3,735	3,347	3,135	6,745	12,875	20,768	26,687	27,405	23,590	161,991

Michigan Consolidated Gas Company
Market Forecast Analysis
Forecasted GCR Volumes

Volumes in MMcf

Line	2008-09 GCR Demand													
No.	<u>FORECAST</u>	<u>April</u> Col (A)	<u>May</u> Col (B)	<u>June</u> Col (C)	<u>July</u> Col (D)	<u>August</u> Col (E)	<u>September</u> Col (F)	<u>October</u> Col (G)	<u>November</u> Col (H)	<u>December</u> Col (J)	<u>January</u> Col (K)	<u>February</u> Col (L)	<u>March</u> Col (M)	<u>TOTAL</u> Col (N)
1	Residential - Rate A	117	80	50	34	31	36	51	82	114	149	158	138	1,039
2	Residential - Rate A Heat	11,214	6,523	4,325	2,539	2,279	1,722	4,267	8,513	14,433	18,466	18,892	16,249	109,422
3	Residential - Rate AS	407	243	122	62	52	76	152	281	415	545	545	460	3,360
4	Residential - Rate 2A (Meter I)	25	19	15	12	11	11	12	16	20	26	29	26	222
5	Residential - Rate 2A (Meter II)	641	378	183	89	74	118	266	502	757	977	987	837	5,809
6	Residential - Total	12,403	7,244	4,694	2,735	2,448	1,963	4,747	9,393	15,740	20,162	20,611	17,711	119,851
7	Commercial - Rate GS-1	250	182	124	91	85	90	114	172	229	299	323	288	2,247
8	Commercial - Rate GS-1 Heat	4,162	2,643	1,458	847	757	1,011	1,777	3,133	4,560	5,901	6,118	5,287	37,654
9	Commercial - Rate GS-2 Heat	12	8	6	4	3	5	8	8	12	16	17	15	114
10	Commercial - Rate S	106	65	31	14	12	23	44	81	119	157	162	138	954
11	Commercial - Total	4,530	2,897	1,619	955	858	1,128	1,944	3,395	4,920	6,373	6,621	5,728	40,969
12	Industrial - Rate GS-1	153	109	73	53	50	54	70	105	140	181	197	174	1,359
13	Industrial - Rate GS-2	23	14	6	2	1	4	9	17	25	33	35	30	200
14	Industrial - Total	176	123	79	55	51	58	79	123	165	214	231	204	1,559
15	TOTAL	17,108	10,264	6,392	3,745	3,357	3,149	6,770	12,911	20,826	26,749	27,464	23,643	162,379

Michigan Consolidated Gas Company
Market Forecast Analysis
Forecasted GCR Volumes

Volumes in MMcf

Line No.	2009-10 GCR Demand FORECAST	April Col (A)	May Col (B)	June Col (C)	July Col (D)	August Col (E)	September Col (F)	October Col (G)	November Col (H)	December Col (J)	January Col (K)	February Col (L)	March Col (M)	TOTAL Col (N)
1	Residential - Rate A	114	78	49	33	30	35	50	81	112	146	155	135	1,018
2	Residential - Rate A Heat	11,303	6,578	4,356	2,558	2,298	1,747	4,314	8,592	14,551	18,611	19,035	16,373	110,317
3	Residential - Rate AS	348	207	103	52	44	64	127	235	347	457	455	383	2,822
4	Residential - Rate 2A (Meter I)	24	19	15	12	11	11	12	16	20	26	29	26	220
5	Residential - Rate 2A (Meter II)	634	374	181	87	73	117	263	497	751	968	977	829	5,752
6	Residential - Total	12,424	7,256	4,704	2,743	2,457	1,973	4,766	9,421	15,781	20,207	20,650	17,746	120,129
7	Commercial - Rate GS-1	249	180	123	91	84	90	113	171	228	297	321	286	2,233
8	Commercial - Rate GS-1 Heat	4,173	2,649	1,462	849	760	1,015	1,785	3,146	4,576	5,921	6,136	5,302	37,775
9	Commercial - Rate GS-2 Heat	12	8	6	4	4	5	9	9	13	17	18	16	121
10	Commercial - Rate S	113	70	34	15	14	25	48	87	127	168	178	153	1,031
11	Commercial - Total	4,546	2,908	1,625	959	862	1,135	1,956	3,413	4,945	6,402	6,653	5,757	41,160
12	Industrial - Rate GS-1	149	107	71	52	48	52	68	103	137	177	192	170	1,328
13	Industrial - Rate GS-2	23	14	6	2	1	4	9	17	25	33	35	30	200
14	Industrial - Total	172	121	77	54	50	56	78	120	162	210	227	200	1,528
15	TOTAL	17,143	10,285	6,406	3,755	3,368	3,165	6,799	12,954	20,888	26,820	27,531	23,704	162,816

Michigan Consolidated Gas Company
Market Forecast Analysis
Forecasted GCR Volumes

Volumes in MMcf

Line	2010-11 GCR Demand													
No.	<u>FORECAST</u>	<u>April</u> Col (A)	<u>May</u> Col (B)	<u>June</u> Col (C)	<u>July</u> Col (D)	<u>August</u> Col (E)	<u>September</u> Col (F)	<u>October</u> Col (G)	<u>November</u> Col (H)	<u>December</u> Col (J)	<u>January</u> Col (K)	<u>February</u> Col (L)	<u>March</u> Col (M)	<u>TOTAL</u> Col (N)
1	Residential - Rate A	112	76	48	32	30	34	49	79	110	146	155	135	1,006
2	Residential - Rate A Heat	11,392	6,632	4,387	2,577	2,316	1,771	4,361	8,672	14,671	18,611	19,035	16,373	110,799
3	Residential - Rate AS	288	171	85	43	36	52	102	189	278	457	455	383	2,539
4	Residential - Rate 2A (Meter I)	24	19	15	12	11	11	12	16	20	26	29	26	219
5	Residential - Rate 2A (Meter II)	628	370	179	86	72	116	261	493	744	968	977	829	5,722
6	Residential - Total	12,444	7,268	4,714	2,750	2,465	1,983	4,785	9,449	15,823	20,207	20,650	17,746	120,286
7	Commercial - Rate GS-1	247	179	122	90	84	89	113	170	227	297	321	286	2,225
8	Commercial - Rate GS-1 Heat	4,183	2,656	1,465	852	763	1,020	1,794	3,158	4,593	5,921	6,136	5,302	37,843
9	Commercial - Rate GS-2 Heat	13	9	6	4	4	5	9	10	14	17	18	16	124
10	Commercial - Rate S	124	77	37	17	15	28	53	96	140	168	178	153	1,085
11	Commercial - Total	4,567	2,920	1,631	963	865	1,142	1,969	3,434	4,974	6,402	6,653	5,757	41,278
12	Industrial - Rate GS-1	146	104	70	51	47	51	67	101	134	177	192	170	1,310
13	Industrial - Rate GS-2	23	14	6	2	1	4	9	17	25	33	35	30	200
14	Industrial - Total	169	118	76	52	49	55	76	118	159	210	227	200	1,510
15	TOTAL	17,180	10,306	6,420	3,765	3,379	3,180	6,830	13,002	20,956	26,820	27,531	23,704	163,073

Michigan Consolidated Gas Company
Market Forecast Analysis
Forecasted GCR Number of Customers

Line 2006-07 GCR Customers														
No.	FORECAST	April Col (A)	May Col (B)	June Col (C)	July Col (D)	August Col (E)	September Col (F)	October Col (G)	November Col (H)	December Col (J)	January Col (K)	February Col (L)	March Col (M)	TOTAL Col (N)
1	Residential - Rate A	20,110	20,036	19,976	19,917	19,866	19,828	19,746	19,775	19,783	19,778	19,769	19,731	19,860
2	Residential - Rate A Heat	972,412	970,763	969,014	968,071	967,644	968,028	971,635	975,705	979,463	981,633	982,713	982,495	974,131
3	Residential - Rate AS	36,140	35,732	35,298	34,909	34,477	34,051	33,595	33,286	33,024	35,009	34,779	34,499	34,567
4	Residential - Rate 2A (Meter I)	871	871	870	870	870	869	869	869	868	868	867	867	869
5	Residential - Rate 2A (Meter II)	6,350	6,346	6,315	6,323	6,320	6,312	6,312	6,316	6,316	6,312	6,303	6,303	6,319
6	Residential - Total	1,035,883	1,033,748	1,031,473	1,030,090	1,029,177	1,029,088	1,032,157	1,035,951	1,039,454	1,043,600	1,044,431	1,043,895	1,035,746
7	Commercial - Rate GS-1	4,154	4,169	4,147	4,149	4,137	4,111	4,123	4,114	4,117	4,123	4,118	4,128	4,133
8	Commercial - Rate GS-1 Heat	77,549	77,223	76,701	76,676	76,452	76,381	77,070	77,509	77,905	78,077	78,134	78,001	77,307
9	Commercial - Rate GS-2 Heat	11	11	12	12	12	11	12	11	10	10	11	11	11
10	Commercial - Rate S	105	105	100	101	104	103	103	106	105	109	108	104	104
11	Commercial - Total	81,819	81,508	80,960	80,938	80,705	80,607	81,308	81,740	82,137	82,319	82,371	82,244	81,555
12	Industrial - Rate GS-1	1,069	1,065	1,058	1,055	1,058	1,054	1,066	1,062	1,053	1,047	1,052	1,047	1,057
13	Industrial - Rate GS-2	2	2	2	2	2	2	2	2	2	2	2	2	2
14	Industrial - Total	1,071	1,067	1,060	1,057	1,060	1,056	1,068	1,064	1,055	1,049	1,054	1,049	1,059
15	TOTAL	1,118,773	1,116,323	1,113,493	1,112,085	1,110,942	1,110,751	1,114,533	1,118,755	1,122,646	1,126,968	1,127,856	1,127,188	1,118,359

Michigan Consolidated Gas Company
Market Forecast Analysis
Forecasted GCR Number of Customers

Line 2007-08 GCR Customers														
No.	<u>FORECAST</u>	<u>April</u> Col (A)	<u>May</u> Col (B)	<u>June</u> Col (C)	<u>July</u> Col (D)	<u>August</u> Col (E)	<u>September</u> Col (F)	<u>October</u> Col (G)	<u>November</u> Col (H)	<u>December</u> Col (J)	<u>January</u> Col (K)	<u>February</u> Col (L)	<u>March</u> Col (M)	<u>TOTAL</u> Col (N)
1	Residential - Rate A	19,671	19,597	19,537	19,478	19,427	19,389	19,307	19,336	19,344	19,339	19,330	19,292	19,421
2	Residential - Rate A Heat	981,407	979,758	978,009	977,066	976,639	977,023	980,630	984,700	988,458	990,474	991,554	991,336	983,088
3	Residential - Rate AS	34,164	33,727	33,261	32,840	32,377	31,916	31,428	31,087	30,800	28,794	28,574	28,316	31,440
4	Residential - Rate 2A (Meter I)	866	866	865	865	865	864	864	864	863	863	862	862	864
5	Residential - Rate 2A (Meter II)	6,302	6,298	6,267	6,275	6,272	6,264	6,264	6,268	6,268	6,264	6,255	6,255	6,271
6	Residential - Total	1,042,410	1,040,246	1,037,939	1,036,524	1,035,580	1,035,456	1,038,493	1,042,255	1,045,733	1,045,734	1,046,575	1,046,061	1,041,084
7	Commercial - Rate GS-1	4,134	4,149	4,127	4,129	4,117	4,091	4,103	4,094	4,097	4,103	4,098	4,108	4,113
8	Commercial - Rate GS-1 Heat	77,753	77,427	76,905	76,880	76,656	76,585	77,274	77,713	78,109	78,269	78,326	78,193	77,508
9	Commercial - Rate GS-2 Heat	11	11	12	12	12	12	12	11	11	10	11	11	11
10	Commercial - Rate S	106	106	101	102	105	104	104	107	106	110	109	105	105
11	Commercial - Total	82,004	81,693	81,145	81,123	80,890	80,792	81,493	81,925	82,322	82,492	82,544	82,417	81,737
12	Industrial - Rate GS-1	1,047	1,043	1,036	1,033	1,036	1,032	1,044	1,040	1,031	1,025	1,030	1,025	1,035
13	Industrial - Rate GS-2	2	2	2	2	2	2	2	2	2	2	2	2	2
14	Industrial - Total	1,049	1,045	1,038	1,035	1,038	1,034	1,046	1,042	1,033	1,027	1,032	1,027	1,037
15	TOTAL	1,125,463	1,122,984	1,120,122	1,118,682	1,117,508	1,117,282	1,121,032	1,125,222	1,129,088	1,129,253	1,130,151	1,129,505	1,123,858

Michigan Consolidated Gas Company
Market Forecast Analysis
Forecasted GCR Number of Customers

Line 2008-09 GCR Customers														
No.	FORECAST	April Col (A)	May Col (B)	June Col (C)	July Col (D)	August Col (E)	September Col (F)	October Col (G)	November Col (H)	December Col (J)	January Col (K)	February Col (L)	March Col (M)	TOTAL Col (N)
1	Residential - Rate A	19,232	19,158	19,098	19,039	18,988	18,950	18,868	18,897	18,905	18,900	18,891	18,853	18,982
2	Residential - Rate A Heat	990,248	988,599	986,850	985,907	985,480	985,864	989,471	993,541	997,299	999,315	1,000,395	1,000,177	991,929
3	Residential - Rate AS	28,008	27,600	27,166	26,777	26,345	25,919	25,463	25,154	24,892	24,728	24,508	24,250	25,901
4	Residential - Rate 2A (Meter I)	861	861	860	860	860	859	859	859	858	858	857	857	859
5	Residential - Rate 2A (Meter II)	6,254	6,250	6,219	6,227	6,224	6,216	6,216	6,220	6,220	6,216	6,207	6,207	6,223
6	Residential - Total	1,044,603	1,042,468	1,040,193	1,038,810	1,037,897	1,037,808	1,040,877	1,044,671	1,048,174	1,050,017	1,050,858	1,050,344	1,043,893
7	Commercial - Rate GS-1	4,114	4,129	4,107	4,109	4,097	4,071	4,083	4,074	4,077	4,083	4,078	4,088	4,093
8	Commercial - Rate GS-1 Heat	77,945	77,619	77,097	77,072	76,848	76,777	77,466	77,905	78,301	78,461	78,518	78,385	77,700
9	Commercial - Rate GS-2 Heat	11	11	12	12	12	12	12	11	12	11	12	12	12
10	Commercial - Rate S	110	111	106	107	109	108	108	111	111	115	115	113	110
11	Commercial - Total	82,180	81,870	81,322	81,300	81,066	80,968	81,669	82,101	82,500	82,670	82,723	82,598	81,914
12	Industrial - Rate GS-1	1,025	1,021	1,014	1,011	1,014	1,010	1,022	1,018	1,009	1,003	1,008	1,003	1,013
13	Industrial - Rate GS-2	2	2	2	2	2	2	2	2	2	2	2	2	2
14	Industrial - Total	1,027	1,023	1,016	1,013	1,016	1,012	1,024	1,020	1,011	1,005	1,010	1,005	1,015
15	TOTAL	1,127,810	1,125,361	1,122,531	1,121,123	1,119,979	1,119,788	1,123,570	1,127,792	1,131,685	1,133,692	1,134,591	1,133,947	1,126,822

Michigan Consolidated Gas Company
Market Forecast Analysis
Forecasted GCR Number of Customers

Line 2009-10 GCR Customers														
No.	FORECAST	April Col (A)	May Col (B)	June Col (C)	July Col (D)	August Col (E)	September Col (F)	October Col (G)	November Col (H)	December Col (J)	January Col (K)	February Col (L)	March Col (M)	TOTAL Col (N)
1	Residential - Rate A	18,793	18,719	18,659	18,600	18,549	18,511	18,429	18,458	18,466	18,461	18,452	18,414	18,543
2	Residential - Rate A Heat	999,089	997,440	995,691	994,748	994,321	994,705	998,312	1,002,382	1,006,140	1,008,156	1,009,236	1,009,018	1,000,770
3	Residential - Rate AS	23,942	23,534	23,100	22,711	22,279	21,853	21,397	21,088	20,826	20,662	20,442	20,184	21,835
4	Residential - Rate 2A (Meter I)	856	856	855	855	855	854	854	854	853	853	852	852	854
5	Residential - Rate 2A (Meter II)	6,206	6,202	6,171	6,179	6,176	6,168	6,168	6,172	6,172	6,168	6,159	6,159	6,175
6	Residential - Total	1,048,886	1,046,751	1,044,476	1,043,093	1,042,180	1,042,091	1,045,160	1,048,954	1,052,457	1,054,300	1,055,141	1,054,627	1,048,176
7	Commercial - Rate GS-1	4,094	4,109	4,087	4,089	4,077	4,051	4,063	4,054	4,057	4,063	4,058	4,068	4,073
8	Commercial - Rate GS-1 Heat	78,137	77,811	77,289	77,264	77,040	76,969	77,658	78,097	78,493	78,653	78,710	78,577	77,892
9	Commercial - Rate GS-2 Heat	12	12	13	13	13	13	13	12	12	12	13	13	13
10	Commercial - Rate S	119	120	120	120	121	120	121	123	123	122	126	123	122
11	Commercial - Total	82,362	82,052	81,509	81,486	81,251	81,153	81,855	82,286	82,685	82,850	82,907	82,781	82,098
12	Industrial - Rate GS-1	1,003	999	992	989	992	988	1,000	996	987	981	986	981	991
13	Industrial - Rate GS-2	2	2	2	2	2	2	2	2	2	2	2	2	2
14	Industrial - Total	1,005	1,001	994	991	994	990	1,002	998	989	983	988	983	993
15	TOTAL	1,132,253	1,129,804	1,126,979	1,125,570	1,124,425	1,124,234	1,128,017	1,132,238	1,136,131	1,138,133	1,139,036	1,138,391	1,131,268

Michigan Consolidated Gas Company
Market Forecast Analysis
Forecasted GCR Number of Customers

2010-11 GCR Customers														
No.	FORECAST	April Col (A)	May Col (B)	June Col (C)	July Col (D)	August Col (E)	September Col (F)	October Col (G)	November Col (H)	December Col (J)	January Col (K)	February Col (L)	March Col (M)	TOTAL Col (N)
1	Residential - Rate A	18,354	18,280	18,220	18,161	18,110	18,072	17,990	18,019	18,027	18,022	18,013	17,975	18,104
2	Residential - Rate A Heat	1,007,930	1,006,281	1,004,532	1,003,589	1,003,162	1,003,546	1,007,153	1,011,223	1,014,981	1,016,997	1,018,077	1,017,859	1,009,611
3	Residential - Rate AS	19,876	19,468	19,034	18,645	18,213	17,787	17,331	17,022	16,760	16,596	16,376	16,118	17,769
4	Residential - Rate 2A (Meter I)	851	851	850	850	850	849	849	849	848	848	847	847	849
5	Residential - Rate 2A (Meter II)	6,158	6,154	6,123	6,131	6,128	6,120	6,120	6,124	6,124	6,120	6,111	6,111	6,127
6	Residential - Total	1,053,169	1,051,034	1,048,759	1,047,376	1,046,463	1,046,374	1,049,443	1,053,237	1,056,740	1,058,583	1,059,424	1,058,910	1,052,459
7	Commercial - Rate GS-1	4,074	4,089	4,067	4,069	4,057	4,031	4,043	4,034	4,037	4,043	4,038	4,048	4,053
8	Commercial - Rate GS-1 Heat	78,329	78,003	77,481	77,456	77,232	77,161	77,850	78,289	78,685	78,845	78,902	78,769	78,084
9	Commercial - Rate GS-2 Heat	13	13	14	14	14	14	14	13	13	13	14	14	14
10	Commercial - Rate S	130	131	130	129	130	129	129	132	132	129	137	133	131
11	Commercial - Total	82,546	82,236	81,692	81,668	81,433	81,335	82,036	82,468	82,867	83,030	83,091	82,964	82,281
12	Industrial - Rate GS-1	981	977	970	967	970	966	978	974	965	959	964	959	969
13	Industrial - Rate GS-2	2	2	2	2	2	2	2	2	2	2	2	2	2
14	Industrial - Total	983	979	972	969	972	968	980	976	967	961	966	961	971
15	TOTAL	1,136,698	1,134,249	1,131,423	1,130,013	1,128,868	1,128,677	1,132,459	1,136,681	1,140,574	1,142,574	1,143,481	1,142,835	1,135,711

Michigan Consolidated Gas Company
April 2006 - March 2011
Total Market Requirements

Volumes in MMcf

MPSC Case No. U-14717
 Witness: G.H. Chapel
 Exhibit No. A-5 (GHC-5)
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				GCR				Other			Total GCR	Gas Customer Choice			Total GCR
Line	Year	Month	Days	Billed Sales	Unbilled Change	Unbilled Balance	Total	Company Use	Losses	Total		Billed Sales	Unbilled Change	Total	
	(Col. 1)	(Col. 2)	(Col. 3)	(Col. 4)	(Col. 5)	(Col. 6)	(Col. 7)	(Col. 8)	(Col. 9)	(Col. 10)	(Col. 11)	(Col. 12)	(Col. 13)	(Col. 14)	(Col. 15)
1		Beginning Balance					12,846								
2	2006	April	30	17,134	(4,567)	8,279	12,566	82	385	467	13,033	2,093	(507)	1,586	14,620
3		May	31	10,311	(3,699)	4,580	6,613	86	5	91	6,704	1,246	(410)	835	7,539
4		June	30	6,367	(2,191)	2,389	4,176	140	(102)	38	4,214	770	(243)	527	4,741
5		July	31	3,726	(484)	1,905	3,241	229	(79)	150	3,391	463	(54)	409	3,801
6		August	31	3,337	75	1,979	3,411	262	(132)	130	3,541	422	8	431	3,972
7		September	30	3,206	1,348	3,327	4,553	197	334	531	5,084	426	149	576	5,660
8		October	31	6,804	3,845	7,172	10,650	140	550	690	11,340	919	427	1,345	12,685
9		November	30	12,924	3,821	10,993	16,745	130	1,781	1,911	18,656	1,692	424	2,116	20,772
10		December	31	20,717	4,734	15,727	25,451	236	1,403	1,639	27,090	2,690	525	3,215	30,305
11	2007	January	31	26,634	1,844	17,572	28,478	311	1,904	2,215	30,693	3,393	205	3,597	34,291
12		February	28	27,357	(2,448)	15,124	24,909	267	445	712	25,621	3,417	(271)	3,146	28,767
13		March	31	23,546	(2,278)	12,846	21,268	147	(648)	(501)	20,767	2,939	(253)	2,686	23,453
14		Total Period	365	162,062	(0)		162,062	2,227	5,846	8,073	170,135	20,469	0	20,469	190,604
				GCR				Other			Total GCR	Gas Customer Choice			Total GCR
Line	Year	Month	Days	Billed Sales	Unbilled Change	Unbilled Balance	Total	Company Use	Losses	Total		Billed Sales	Unbilled Change	Total	
	(Col. 1)	(Col. 2)	(Col. 3)	(Col. 4)	(Col. 5)	(Col. 6)	(Col. 7)	(Col. 8)	(Col. 9)	(Col. 10)	(Col. 11)	(Col. 12)	(Col. 13)	(Col. 14)	(Col. 15)
15	2007	April	30	17,079	(4,567)	8,279	12,512	70	353	423	12,935	2,087	(507)	1,580	14,515
16		May	31	10,245	(3,699)	4,580	6,547	86	5	91	6,638	1,237	(410)	827	7,465
17		June	30	6,380	(2,191)	2,389	4,189	140	(94)	46	4,235	771	(243)	528	4,763
18		July	31	3,735	(484)	1,905	3,251	229	(72)	157	3,408	464	(54)	410	3,818
19		August	31	3,347	75	1,979	3,421	262	(121)	141	3,562	423	8	432	3,994
20		September	30	3,135	1,348	3,327	4,483	197	306	503	4,986	417	149	567	5,552
21		October	31	6,745	3,845	7,172	10,590	133	504	637	11,227	912	427	1,339	12,566
22		November	30	12,875	3,821	10,993	16,697	100	1,633	1,733	18,430	1,687	424	2,111	20,541
23		December	31	20,768	4,734	15,727	25,502	183	1,286	1,469	26,971	2,699	525	3,224	30,195
24	2008	January	31	26,687	1,844	17,572	28,531	249	1,731	1,980	30,511	3,403	205	3,607	34,118
25		February	29	27,405	(2,448)	15,124	24,957	214	405	619	25,576	3,426	(271)	3,155	28,731
26		March	31	23,590	(2,278)	12,846	21,312	109	(589)	(480)	20,832	2,947	(253)	2,694	23,526
27		Total Period	366	161,991	(0)		161,991	1,972	5,347	7,319	169,310	20,475	0	20,475	189,785

Michigan Consolidated Gas Company
April 2006 - March 2011
Total Market Requirements

Volumes in MMcf

MPSC Case No. U-14717
 Witness: G.H. Chapel
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Line	Year	Month	Days	GCR				Other			Total GCR	Gas Customer Choice			Total GCR
				Billed Sales	Unbilled Change	Balance	Total	Company Use	Losses	Total		Billed Sales	Unbilled Change	Total	
	(Col. 1)	(Col. 2)	(Col. 3)	(Col. 4)	(Col. 5)	(Col. 6)	(Col. 7)	(Col. 8)	(Col. 9)	(Col. 10)	(Col. 11)	(Col. 12)	(Col. 13)	(Col. 14)	(Col. 15)
1	2008	April	30	17,108	(4,567)	8,278	12,541	70	321	391	12,932	2,092	(507)	1,585	14,517
2		May	31	10,264	(3,699)	4,580	6,565	86	4	90	6,655	1,240	(410)	830	7,485
3		June	30	6,392	(2,191)	2,389	4,201	140	(85)	55	4,256	773	(243)	530	4,786
4		July	31	3,745	(484)	1,905	3,261	229	(66)	163	3,424	465	(54)	411	3,835
5		August	31	3,357	75	1,979	3,432	262	(110)	152	3,584	425	8	433	4,017
6		September	30	3,149	1,348	3,327	4,497	197	278	475	4,972	419	149	569	5,540
7		October	31	6,770	3,845	7,172	10,615	133	458	591	11,206	916	427	1,343	12,549
8		November	30	12,911	3,821	10,993	16,732	100	1,484	1,584	18,316	1,693	424	2,117	20,434
9		December	31	20,826	4,734	15,727	25,560	183	1,169	1,352	26,912	2,708	525	3,233	30,145
10	2009	January	31	26,749	1,844	17,572	28,594	249	1,731	1,980	30,574	3,413	205	3,617	34,191
11		February	28	27,464	(2,448)	15,124	25,016	214	405	619	25,635	3,435	(271)	3,164	28,799
12		March	31	23,643	(2,278)	12,846	21,365	109	(589)	(480)	20,885	2,954	(253)	2,702	23,586
13		Total Period	365	162,379	(0)		162,379	1,972	5,000	6,972	169,351	20,533	0	20,533	189,884
Line	Year	Month	Days	GCR				Other			Total GCR	Gas Customer Choice			Total GCR
				Billed Sales	Unbilled Change	Balance	Total	Company Use	Losses	Total		Billed Sales	Unbilled Change	Total	
	(Col. 1)	(Col. 2)	(Col. 3)	(Col. 4)	(Col. 5)	(Col. 6)	(Col. 7)	(Col. 8)	(Col. 9)	(Col. 10)	(Col. 11)	(Col. 12)	(Col. 13)	(Col. 14)	(Col. 15)
14	2009	April	30	17,143	(4,567)	8,278	12,575	70	321	391	12,966	2,096	(507)	1,589	14,556
15		May	31	10,285	(3,699)	4,580	6,586	86	4	90	6,676	1,242	(410)	832	7,508
16		June	30	6,406	(2,191)	2,389	4,215	140	(85)	55	4,270	774	(243)	531	4,802
17		July	31	3,755	(484)	1,904	3,271	229	(66)	163	3,434	466	(54)	412	3,846
18		August	31	3,368	75	1,979	3,443	262	(110)	152	3,595	426	8	434	4,029
19		September	30	3,165	1,348	3,327	4,512	197	278	475	4,987	421	149	570	5,557
20		October	31	6,799	3,845	7,172	10,644	133	458	591	11,235	920	427	1,347	12,582
21		November	30	12,954	3,821	10,993	16,776	100	1,484	1,584	18,360	1,700	424	2,124	20,483
22		December	31	20,888	4,734	15,727	25,622	183	1,169	1,352	26,974	2,717	525	3,243	30,216
23	2010	January	31	26,820	1,844	17,572	28,664	249	1,731	1,980	30,644	3,423	205	3,628	34,272
24		February	28	27,531	(2,448)	15,124	25,083	214	405	619	25,702	3,444	(271)	3,173	28,875
25		March	31	23,704	(2,278)	12,846	21,425	109	(589)	(480)	20,945	2,962	(253)	2,709	23,655
26		Total Period	365	162,816	(0)		162,816	1,972	5,000	6,972	169,788	20,592	0	20,592	190,381

Michigan Consolidated Gas Company
April 2006 - March 2011
Total Market Requirements

Volumes in MMcf

MPSC Case No. U-14717
Witness: G.H. Chapel
Exhibit No. A-5 (GHC-5)
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Line	Year (Col. 1)	Month (Col. 2)	Days (Col. 3)	GCR				Other			Total GCR	Gas Customer Choice			Total GCR
				Billed Sales (Col. 4)	Unbilled Change (Col. 5)	Balance (Col. 6)	Total (Col. 7)	Company Use (Col. 8)	Losses (Col. 9)	Total (Col. 10)	(Col. 11)	Billed Sales (Col. 12)	Unbilled Change (Col. 13)	Total (Col. 14)	(Col. 15)
1	2010	April	30	17,180	(4,567)	8,278	12,613	70	321	391	13,004	2,101	(507)	1,594	14,598
2		May	31	10,306	(3,699)	4,580	6,608	86	4	90	6,698	1,245	(410)	834	7,532
3		June	30	6,420	(2,191)	2,389	4,229	140	(85)	55	4,284	776	(243)	533	4,817
4		July	31	3,765	(484)	1,904	3,281	229	(66)	163	3,444	467	(54)	414	3,858
5		August	31	3,379	75	1,979	3,454	262	(110)	152	3,606	427	8	435	4,041
6		September	30	3,180	1,348	3,327	4,528	197	278	475	5,003	423	149	572	5,575
7		October	31	6,830	3,845	7,172	10,676	133	458	591	11,267	924	427	1,351	12,618
8		November	30	13,002	3,821	10,993	16,823	100	1,484	1,584	18,407	1,706	424	2,130	20,536
9		December	31	20,956	4,734	15,727	25,690	183	1,169	1,352	27,042	2,727	525	3,252	30,294
10	2011	January	31	26,820	1,844	17,571	28,664	249	1,731	1,980	30,644	3,423	205	3,628	34,272
11		February	28	27,531	(2,448)	15,124	25,083	214	405	619	25,702	3,444	(271)	3,173	28,875
12		March	31	23,704	(2,278)	12,846	21,425	109	(589)	(480)	20,945	2,962	(253)	2,709	23,655
13		Total Period	365	163,073	(0)		163,073	1,972	5,000	6,972	170,045	20,624	0	20,624	190,669

Michigan Consolidated Gas Company
Mean Peak Day Temperatures by District

(Temperatures in ° F)

<u>Line</u>	<u>District</u> (Col. 1)	<u>January</u> <u>End of Mo.</u> (Col. 2)	<u>February</u> <u>End of Mo.</u> (Col. 3)	<u>March</u> <u>End of Mo.</u> (Col. 4)
1	Alpena	-10	-7	5
2	Ann Arbor	-4	4	16
3	Big Rapids	-11	-2	6
4	Cadillac	-20	-5	-6
5	Detroit	-4	4	14
6	Escanaba	-16	-7	5
7	Grand Rapids	-7	2	7
8	Grayling	-21	-13	1
9	Iron Mountain	-22	-9	0
10	Ludington	-3	0	11
11	Mount Pleasant	-9	-3	6
12	Muskegon	-6	0	11
13	Petoskey	-12	-2	8
14	Sault Ste. Marie	-16	-9	2
15	Tawas	-8	-1	7
16	Traverse City	-11	-9	5

Michigan Consolidated Gas Company

2006 Peak Day Load by Area

(Volumes in MMcf/d)

		End-of-Month Peak Day Load		
<u>Line</u>		<u>January</u>	<u>February</u>	<u>March</u>
	(Col. 1)	(Col. 2)	(Col. 3)	(Col. 4)
1	Detroit / Ann Arbor	1,738	1,606	1,447
2	Alpena	156	144	127
3	Grand Rapids	622	582	549
4	Upper Peninsula	105	91	93
5	Traverse City	120	119	104
6	Total	2,741	2,542	2,320

Michigan Consolidated Gas Company
2006 - 2011 GCR Plan
Projected NYMEX and Basis Prices -\$/Dth

Line No.	Vector																	
	NYMEX ⁽¹⁾		ANR Louisiana		ANR Oklahoma		Emerson (Canada)		MichCon City Gate		Chicago City Gate		Panhandle OK/TX		Trunkline ELA		TCPL Empress	
	Month	Price	Basis	Rate	Basis	Rate	Basis	Rate	Basis	Rate	Basis	Rate	Basis	Rate	Basis	Rate	Basis	Rate
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)
1	Apr-06	\$10.934	(\$0.080)	\$10.85	(\$0.83)	\$10.10	(\$0.50)	\$10.43	\$0.15	\$11.08	(\$0.15)	\$10.78	(\$0.85)	\$10.08	(\$0.07)	\$10.86	(\$1.00)	\$9.93
2	May-06	\$10.692	(\$0.080)	\$10.61	(\$0.83)	\$9.86	(\$0.50)	\$10.19	\$0.15	\$10.84	(\$0.15)	\$10.54	(\$0.85)	\$9.84	(\$0.07)	\$10.62	(\$1.00)	\$9.69
3	Jun-06	\$10.724	(\$0.080)	\$10.64	(\$0.83)	\$9.89	(\$0.50)	\$10.22	\$0.15	\$10.87	(\$0.15)	\$10.57	(\$0.85)	\$9.87	(\$0.07)	\$10.65	(\$1.00)	\$9.72
4	Jul-06	\$10.764	(\$0.080)	\$10.68	(\$0.83)	\$9.93	(\$0.50)	\$10.26	\$0.15	\$10.91	(\$0.15)	\$10.61	(\$0.85)	\$9.91	(\$0.07)	\$10.69	(\$1.00)	\$9.76
5	Aug-06	\$10.807	(\$0.080)	\$10.73	(\$0.83)	\$9.98	(\$0.50)	\$10.31	\$0.15	\$10.96	(\$0.15)	\$10.66	(\$0.85)	\$9.96	(\$0.07)	\$10.74	(\$1.00)	\$9.81
6	Sep-06	\$10.789	(\$0.080)	\$10.71	(\$0.83)	\$9.96	(\$0.50)	\$10.29	\$0.15	\$10.94	(\$0.15)	\$10.64	(\$0.85)	\$9.94	(\$0.07)	\$10.72	(\$1.00)	\$9.79
7	Oct-06	\$10.843	(\$0.080)	\$10.76	(\$0.83)	\$10.01	(\$0.50)	\$10.34	\$0.15	\$10.99	(\$0.15)	\$10.69	(\$0.85)	\$9.99	(\$0.07)	\$10.77	(\$1.00)	\$9.84
8	Nov-06	\$11.300	(\$0.065)	\$11.24	(\$0.75)	\$10.55	(\$0.60)	\$10.70	\$0.05	\$11.35	(\$0.05)	\$11.25	(\$0.80)	\$10.50	(\$0.07)	\$11.23	(\$1.10)	\$10.20
9	Dec-06	\$11.761	(\$0.065)	\$11.70	(\$0.75)	\$11.01	(\$0.60)	\$11.16	\$0.05	\$11.81	(\$0.05)	\$11.71	(\$0.80)	\$10.96	(\$0.07)	\$11.69	(\$1.10)	\$10.66
10	Jan-07	\$12.144	(\$0.065)	\$12.08	(\$0.75)	\$11.39	(\$0.60)	\$11.54	\$0.05	\$12.19	(\$0.05)	\$12.09	(\$0.80)	\$11.34	(\$0.07)	\$12.07	(\$1.10)	\$11.04
11	Feb-07	\$12.072	(\$0.065)	\$12.01	(\$0.75)	\$11.32	(\$0.60)	\$11.47	\$0.05	\$12.12	(\$0.05)	\$12.02	(\$0.80)	\$11.27	(\$0.07)	\$12.00	(\$1.10)	\$10.97
12	Mar-07	\$11.769	(\$0.065)	\$11.70	(\$0.75)	\$11.02	(\$0.60)	\$11.17	\$0.05	\$11.82	(\$0.05)	\$11.72	(\$0.80)	\$10.97	(\$0.07)	\$11.70	(\$1.10)	\$10.67

(1) NYMEX - Dec 2005 1st 5 days ave close

Note: Total may not equal due to rounding

Michigan Consolidated Gas Company
2006 - 2011 GCR Plan
Projected NYMEX and Basis Prices -\$/Dth

Line No.	Month	Vector																	
		NYMEX ⁽¹⁾		ANR Louisiana		ANR Oklahoma		Emerson (Canada)		MichCon City Gate		Chicago City Gate		Panhandle OK/TX		Trunkline ELA		TCPL Empress	
		Price	Basis	Rate	Basis	Rate	Basis	Rate	Basis	Rate	Basis	Rate	Basis	Rate	Basis	Rate	Basis	Rate	
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(M)	(N)	(O)	(P)	(Q)	(R)	(S)	
13	Apr-07	\$9.486	(\$0.065)	\$9.42	(\$0.78)	\$8.71	(\$0.50)	\$8.99	\$0.15	\$9.64	(\$0.15)	\$9.34	(\$0.80)	\$8.69	(\$0.07)	\$9.42	(\$0.85)	\$8.64	
14	May-07	\$9.249	(\$0.065)	\$9.18	(\$0.78)	\$8.47	(\$0.50)	\$8.75	\$0.15	\$9.40	(\$0.15)	\$9.10	(\$0.80)	\$8.45	(\$0.07)	\$9.18	(\$0.85)	\$8.40	
15	Jun-07	\$9.291	(\$0.065)	\$9.23	(\$0.78)	\$8.51	(\$0.50)	\$8.79	\$0.15	\$9.44	(\$0.15)	\$9.14	(\$0.80)	\$8.49	(\$0.07)	\$9.22	(\$0.85)	\$8.44	
16	Jul-07	\$9.335	(\$0.065)	\$9.27	(\$0.78)	\$8.55	(\$0.50)	\$8.83	\$0.15	\$9.48	(\$0.15)	\$9.18	(\$0.80)	\$8.53	(\$0.07)	\$9.26	(\$0.85)	\$8.48	
17	Aug-07	\$9.380	(\$0.065)	\$9.31	(\$0.78)	\$8.60	(\$0.50)	\$8.88	\$0.15	\$9.53	(\$0.15)	\$9.23	(\$0.80)	\$8.58	(\$0.07)	\$9.31	(\$0.85)	\$8.53	
18	Sep-07	\$9.379	(\$0.065)	\$9.31	(\$0.78)	\$8.60	(\$0.50)	\$8.88	\$0.15	\$9.53	(\$0.15)	\$9.23	(\$0.80)	\$8.58	(\$0.07)	\$9.31	(\$0.85)	\$8.53	
19	Oct-07	\$9.430	(\$0.065)	\$9.36	(\$0.78)	\$8.65	(\$0.50)	\$8.93	\$0.15	\$9.58	(\$0.15)	\$9.28	(\$0.80)	\$8.63	(\$0.07)	\$9.36	(\$0.85)	\$8.58	
20	Nov-07	\$9.925	(\$0.045)	\$9.88	(\$0.78)	\$9.15	(\$0.50)	\$9.43	\$0.05	\$9.98	\$0.00	\$9.93	(\$0.80)	\$9.13	(\$0.07)	\$9.86	(\$0.85)	\$9.08	
21	Dec-07	\$10.407	(\$0.045)	\$10.36	(\$0.78)	\$9.63	(\$0.50)	\$9.91	\$0.05	\$10.46	\$0.00	\$10.41	(\$0.80)	\$9.61	(\$0.07)	\$10.34	(\$0.85)	\$9.56	
22	Jan-08	\$10.771	(\$0.045)	\$10.73	(\$0.78)	\$9.99	(\$0.50)	\$10.27	\$0.05	\$10.82	\$0.00	\$10.77	(\$0.80)	\$9.97	(\$0.07)	\$10.70	(\$0.85)	\$9.92	
23	Feb-08	\$10.701	(\$0.045)	\$10.66	(\$0.78)	\$9.92	(\$0.50)	\$10.20	\$0.05	\$10.75	\$0.00	\$10.70	(\$0.80)	\$9.90	(\$0.07)	\$10.63	(\$0.85)	\$9.85	
24	Mar-08	\$10.386	(\$0.045)	\$10.34	(\$0.78)	\$9.61	(\$0.50)	\$9.89	\$0.05	\$10.44	\$0.00	\$10.39	(\$0.80)	\$9.59	(\$0.07)	\$10.32	(\$0.85)	\$9.54	
25	Apr-08	\$8.30	(\$0.065)	\$8.24	(\$0.75)	\$7.55	(\$0.50)	\$7.80	\$0.15	\$8.45	(\$0.15)	\$8.15	(\$0.78)	\$7.52	(\$0.07)	\$8.23	(\$0.85)	\$7.45	
26	May-08	\$8.10	(\$0.065)	\$8.04	(\$0.75)	\$7.35	(\$0.50)	\$7.60	\$0.15	\$8.25	(\$0.15)	\$7.95	(\$0.78)	\$7.32	(\$0.07)	\$8.03	(\$0.85)	\$7.25	
27	Jun-08	\$8.15	(\$0.065)	\$8.08	(\$0.75)	\$7.40	(\$0.50)	\$7.65	\$0.15	\$8.30	(\$0.15)	\$8.00	(\$0.78)	\$7.37	(\$0.07)	\$8.08	(\$0.85)	\$7.30	
28	Jul-08	\$8.19	(\$0.065)	\$8.12	(\$0.75)	\$7.44	(\$0.50)	\$7.69	\$0.15	\$8.34	(\$0.15)	\$8.04	(\$0.78)	\$7.41	(\$0.07)	\$8.12	(\$0.85)	\$7.34	
29	Aug-08	\$8.22	(\$0.065)	\$8.16	(\$0.75)	\$7.47	(\$0.50)	\$7.72	\$0.15	\$8.37	(\$0.15)	\$8.07	(\$0.78)	\$7.44	(\$0.07)	\$8.15	(\$0.85)	\$7.37	
30	Sep-08	\$8.21	(\$0.065)	\$8.15	(\$0.75)	\$7.46	(\$0.50)	\$7.71	\$0.15	\$8.36	(\$0.15)	\$8.06	(\$0.78)	\$7.43	(\$0.07)	\$8.14	(\$0.85)	\$7.36	
31	Oct-08	\$8.26	(\$0.065)	\$8.20	(\$0.75)	\$7.51	(\$0.50)	\$7.76	\$0.15	\$8.41	(\$0.15)	\$8.11	(\$0.78)	\$7.48	(\$0.07)	\$8.19	(\$0.85)	\$7.41	
32	Nov-08	\$8.75	(\$0.045)	\$8.70	(\$0.75)	\$8.00	(\$0.50)	\$8.25	\$0.05	\$8.80	\$0.00	\$8.75	(\$0.78)	\$7.97	(\$0.07)	\$8.68	(\$0.85)	\$7.90	
33	Dec-08	\$9.23	(\$0.045)	\$9.18	(\$0.75)	\$8.48	(\$0.50)	\$8.73	\$0.05	\$9.28	\$0.00	\$9.23	(\$0.78)	\$8.45	(\$0.07)	\$9.16	(\$0.85)	\$8.38	
34	Jan-09	\$9.62	(\$0.045)	\$9.57	(\$0.75)	\$8.87	(\$0.50)	\$9.12	\$0.05	\$9.67	\$0.00	\$9.62	(\$0.78)	\$8.84	(\$0.07)	\$9.55	(\$0.85)	\$8.77	
35	Feb-09	\$9.55	(\$0.045)	\$9.51	(\$0.75)	\$8.80	(\$0.50)	\$9.05	\$0.05	\$9.60	\$0.00	\$9.55	(\$0.78)	\$8.77	(\$0.07)	\$9.48	(\$0.85)	\$8.70	
36	Mar-09	\$9.24	(\$0.045)	\$9.19	(\$0.75)	\$8.49	(\$0.50)	\$8.74	\$0.05	\$9.29	\$0.00	\$9.24	(\$0.78)	\$8.46	(\$0.07)	\$9.17	(\$0.85)	\$8.39	

(1) NYMEX - Dec 2005 1st 5 days ave close

Note: Total may not equal due to rounding

Michigan Consolidated Gas Company
2006 - 2011 GCR Plan
Projected NYMEX and Basis Prices -\$/Dth

Line No.	Month	NYMEX ⁽¹⁾		ANR Louisiana		ANR Oklahoma		Emerson (Canada)		MichCon City Gate		Vector Chicago City Gate		Panhandle OK/TX		Trunkline ELA		TCPL Empress	
		Price (B)		Basis (C)	Rate (D)	Basis (E)	Rate (F)	Basis (G)	Rate (H)	Basis (I)	Rate (J)	Basis (K)	Rate (M)	Basis (N)	Rate (O)	Basis (P)	Rate (Q)	Basis (R)	Rate (S)
37	Apr-09	\$7.38		(\$0.065)	\$7.32	(\$0.70)	\$6.68	(\$0.25)	\$7.13	\$0.15	\$7.53	(\$0.15)	\$7.23	(\$0.70)	\$6.68	(\$0.07)	\$7.31	(\$0.75)	\$6.63
38	May-09	\$7.18		(\$0.065)	\$7.12	(\$0.70)	\$6.48	(\$0.25)	\$6.93	\$0.15	\$7.33	(\$0.15)	\$7.03	(\$0.70)	\$6.48	(\$0.07)	\$7.11	(\$0.75)	\$6.43
39	Jun-09	\$7.23		(\$0.065)	\$7.17	(\$0.70)	\$6.53	(\$0.25)	\$6.98	\$0.15	\$7.38	(\$0.15)	\$7.08	(\$0.70)	\$6.53	(\$0.07)	\$7.16	(\$0.75)	\$6.48
40	Jul-09	\$7.28		(\$0.065)	\$7.21	(\$0.70)	\$6.58	(\$0.25)	\$7.03	\$0.15	\$7.43	(\$0.15)	\$7.13	(\$0.70)	\$6.58	(\$0.07)	\$7.21	(\$0.75)	\$6.53
41	Aug-09	\$7.33		(\$0.065)	\$7.26	(\$0.70)	\$6.63	(\$0.25)	\$7.08	\$0.15	\$7.48	(\$0.15)	\$7.18	(\$0.70)	\$6.63	(\$0.07)	\$7.26	(\$0.75)	\$6.58
42	Sep-09	\$7.32		(\$0.065)	\$7.26	(\$0.70)	\$6.62	(\$0.25)	\$7.07	\$0.15	\$7.47	(\$0.15)	\$7.17	(\$0.70)	\$6.62	(\$0.07)	\$7.25	(\$0.75)	\$6.57
43	Oct-09	\$7.35		(\$0.065)	\$7.29	(\$0.70)	\$6.65	(\$0.25)	\$7.10	\$0.15	\$7.50	(\$0.15)	\$7.20	(\$0.70)	\$6.65	(\$0.07)	\$7.28	(\$0.75)	\$6.60
44	Nov-09	\$7.85		(\$0.045)	\$7.80	(\$0.70)	\$7.15	(\$0.25)	\$7.60	\$0.05	\$7.90	\$0.00	\$7.85	(\$0.70)	\$7.15	(\$0.07)	\$7.78	(\$0.75)	\$7.10
45	Dec-09	\$8.34		(\$0.045)	\$8.30	(\$0.70)	\$7.64	(\$0.25)	\$8.09	\$0.05	\$8.39	\$0.00	\$8.34	(\$0.70)	\$7.64	(\$0.07)	\$8.27	(\$0.75)	\$7.59
46	Jan-10	\$8.74		(\$0.045)	\$8.70	(\$0.70)	\$8.04	(\$0.25)	\$8.49	\$0.05	\$8.79	\$0.00	\$8.74	(\$0.70)	\$8.04	(\$0.07)	\$8.67	(\$0.75)	\$7.99
47	Feb-10	\$8.68		(\$0.045)	\$8.63	(\$0.70)	\$7.98	(\$0.25)	\$8.43	\$0.05	\$8.73	\$0.00	\$8.68	(\$0.70)	\$7.98	(\$0.07)	\$8.61	(\$0.75)	\$7.93
48	Mar-10	\$8.37		(\$0.045)	\$8.32	(\$0.70)	\$7.67	(\$0.25)	\$8.12	\$0.05	\$8.42	\$0.00	\$8.37	(\$0.70)	\$7.67	(\$0.07)	\$8.30	(\$0.75)	\$7.62
49	Apr-10	\$6.72		(\$0.065)	\$6.66	(\$0.65)	\$6.07	(\$0.25)	\$6.47	\$0.15	\$6.87	(\$0.15)	\$6.57	(\$0.65)	\$6.07	(\$0.07)	\$6.65	(\$0.75)	\$5.97
50	May-10	\$6.53		(\$0.065)	\$6.46	(\$0.65)	\$5.88	(\$0.25)	\$6.28	\$0.15	\$6.68	(\$0.15)	\$6.38	(\$0.65)	\$5.88	(\$0.07)	\$6.46	(\$0.75)	\$5.78
51	Jun-10	\$6.55		(\$0.065)	\$6.49	(\$0.65)	\$5.90	(\$0.25)	\$6.30	\$0.15	\$6.70	(\$0.15)	\$6.40	(\$0.65)	\$5.90	(\$0.07)	\$6.48	(\$0.75)	\$5.80
52	Jul-10	\$6.58		(\$0.065)	\$6.52	(\$0.65)	\$5.93	(\$0.25)	\$6.33	\$0.15	\$6.73	(\$0.15)	\$6.43	(\$0.65)	\$5.93	(\$0.07)	\$6.51	(\$0.75)	\$5.83
53	Aug-10	\$6.61		(\$0.065)	\$6.55	(\$0.65)	\$5.96	(\$0.25)	\$6.36	\$0.15	\$6.76	(\$0.15)	\$6.46	(\$0.65)	\$5.96	(\$0.07)	\$6.54	(\$0.75)	\$5.86
54	Sep-10	\$6.61		(\$0.065)	\$6.54	(\$0.65)	\$5.96	(\$0.25)	\$6.36	\$0.15	\$6.76	(\$0.15)	\$6.46	(\$0.65)	\$5.96	(\$0.07)	\$6.54	(\$0.75)	\$5.86
55	Oct-10	\$6.66		(\$0.065)	\$6.60	(\$0.65)	\$6.01	(\$0.25)	\$6.41	\$0.15	\$6.81	(\$0.15)	\$6.51	(\$0.65)	\$6.01	(\$0.07)	\$6.59	(\$0.75)	\$5.91
56	Nov-10	\$7.15		(\$0.045)	\$7.11	(\$0.65)	\$6.50	(\$0.25)	\$6.90	\$0.05	\$7.20	\$0.00	\$7.15	(\$0.65)	\$6.50	(\$0.07)	\$7.08	(\$0.75)	\$6.40
57	Dec-10	\$7.66		(\$0.045)	\$7.61	(\$0.65)	\$7.01	(\$0.25)	\$7.41	\$0.05	\$7.71	\$0.00	\$7.66	(\$0.65)	\$7.01	(\$0.07)	\$7.59	(\$0.75)	\$6.91
58	Jan-11	\$8.04		(\$0.045)	\$8.00	(\$0.65)	\$7.39	(\$0.25)	\$7.79	\$0.05	\$8.09	\$0.00	\$8.04	(\$0.65)	\$7.39	(\$0.07)	\$7.97	(\$0.75)	\$7.29
59	Feb-11	\$7.98		(\$0.045)	\$7.94	(\$0.65)	\$7.33	(\$0.25)	\$7.73	\$0.05	\$8.03	\$0.00	\$7.98	(\$0.65)	\$7.33	(\$0.07)	\$7.91	(\$0.75)	\$7.23
60	Mar-11	\$7.69		(\$0.045)	\$7.65	(\$0.65)	\$7.04	(\$0.25)	\$7.44	\$0.05	\$7.74	\$0.00	\$7.69	(\$0.65)	\$7.04	(\$0.07)	\$7.62	(\$0.75)	\$6.94

(1) NYMEX - Dec 2005 1st 5 days ave close

Note: Total may not equal due to rounding

Fixed Price Purchase Guidelines

Percent of Purchase Volume	Fixed Price Portfolio Targets for Case No. U-14717 Maximum Fixed Price Quantity Priced Below Historical Median				
	12-Month NYMEX				
75%					
60%	24-Month NYMEX				
45%	36-Month NYMEX				
30%	48-Month NYMEX				
15%	60-Month NYMEX				
	2006-2007 Year 1	2007-2008 Year 2	2008-2009 Year 3	2009-2010 Year 4	2010-2011 Year 5

Objective:

To create a two tiered purchasing strategy that effectively manages the impact of natural gas market volatility while emphasizing the purchase of fixed-price forward contracts having prices in the range of historically low prices levels.

Fixed Price Programs:

1 – Quartile Indices Method (Long Term) – a procedure that incorporates into contract purchase decision making, the potential risk associated with entering into fixed-price contracts for future GCR periods. Price risk is reduced by creating a nexus between purchase quantities and a comparison of contract prices in relation to a ranking of historical NYMEX 12-month strips. A rolling: 12-month NYMEX data period will be used to determine the quartile ranges and percent of total purchases applied to Year 1 of the GCR Period.

- 24-month NYMEX data period will be used to determine the quartile ranges and percent of total purchases applied collectively for Year 1 through 2.

- 36-month NYMEX data period will be used to determine the quartile ranges and percent of total purchases applied collectively for Year 1 through 3.
- 48-month NYMEX data period will be used to determine the quartile ranges and percent of total purchases applied collectively for Year 1 through 4.
- 60-month NYMEX data period will be used to determine the quartile ranges and percent of total purchases applied collectively for Year 1 through 5.

These historical rankings incorporate an arithmetic average of the 12-month NYMEX future strip on the date of the monthly contract settlement. The 0th percentile, the 25th percentile (first quartile), and the 50th percentile (second quartile) are identified as key price indices. Only prices at or below the second quartile invoke a “buy” signal. The *Second Quartile Range* is defined to be the interval between the second quartile and the first quartile, inclusive of the median. The *First Quartile Range* is defined to be the interval between the first quartile and the 0th percentile, inclusive of the first quartile data-point.

- 2 – 21-Day Moving Average method (Short Term) – a procedure that identifies price signals that invoke a “buy” signal during the Current GCR Period. At the close of each NYMEX trading day, the average of all the NYMEX natural gas contract settlement prices from the prompt month through March (Balance of Period Strip) will be calculated. The average of this Balance of Period Strip over the most recent 21 trading days will be used to determine the 21-Day Moving Average. A “buy” signal occurs when prices change from being less than the 21-Day Moving Average to being greater than the 21-Day Moving Average.

Guideline specifics:

- 1 – When a “buy” signal occurs with the Quartile Indices method, fixed prices may lock-in at or below the given Quartile Range for up to 5% of the forecasted daily average purchases for the given period. Consequently, only 15% of the forecasted daily average purchases may be locked-in at fixed prices for 5 years forward using the 60-month NYMEX historical data: 5% at the 50th Percentile, 5% at the 25th Percentile and 5% at the 0th Percentile. Likewise, only 15% of volumes may be locked-in at fixed prices for 4 years

1 using the 48-month NYMEX Percentiles, 15% at 36-month Percentiles, 15%
2 at 24-month and 15% at 12-month. The above chart illustrates the maximum
3 quantity under fixed price contracts for each given year into the future, they
4 are 75% for Year 1, 60% for Year 2, 45% for Year 3, 30% for Year 4 and 15%
5 for Year 5.

6
7 2 – If a “buy” signal occurs with the Quartile Indices method, and the quantity to
8 be locked-in would cause the total quantity under fixed price contracts to
9 exceed the maximum for any given year per the above chart, then fixed prices
10 may be locked-in for a truncated term that excludes that year(s). For
11 example, if 75% of gas supply in Year 1 is under fixed price contracts, then
12 any “buy” signal would result in a truncated purchase period that excludes
13 Year 1, and may only cover Years 2 through 5.

14
15 3 – New (or increased) purchase volumes may, but are not required, to be
16 executed immediately upon a drop in futures prices into each Quartile Range.
17 In all cases, however, the Company shall schedule the acquisition of fixed-
18 price gas supply contracts in a prudent manner, taking into account the rate of
19 change in market prices, price trends, or any other factors that in its discretion
20 are deemed appropriate. It is anticipated that Quartile Indices targets may not
21 be fully achieved due to unanticipated gas market volatility.

22
23 4 – On the first day after the close of the April NYMEX contract each year, the
24 future GCR annual period that was designated the “Year 1” now becomes the
25 “*Current GCR Period*,” and what was formerly designated the “Year 2” now
26 becomes the “Year 1” and continuing in the same manner through Year 5.

27
28 5 – NYMEX futures prices below the 0th percentile allow, but do not require, the
29 Company to exceed the overall target-limit for each year.

30
31 6 – Quartile Index purchases for the current GCR period cease on the 1st day of
32 the Current GCR Period.

33
34 7 - To the extent that the sum of Quartile Index purchases for the current GCR
35 period fall short of 50% for the November through March period, then the 21-
36 Day Moving Average purchases for the Balance of Period Strip will be used to
37 make up the shortfall. If 50% of the November through March purchases are
38 not locked in by the last trading day for the November NYMEX contract, then
39 Company may, during the month of November, enter into fixed price contracts
40 for the December through March purchases at current market prices,

1 notwithstanding the 21-Day Moving Average method, with the intent to
2 achieve a minimum of 50% under fixed price contracts.

3
4 8 – 21-Day Moving Average purchases may begin on the day following the last
5 trading day for the April NYMEX Natural Gas Contract.

6
7 9 – The quantity of gas locked-in at fixed prices under each 21-Day Moving
8 Average “buy” signal are capped at 1/5 of the Balance of Period planned fixed
9 price volume calculated pursuant to paragraph 7 above. No more than 1/5 of
10 the Balance of Period planned fixed price volume may be locked-in at fixed
11 prices under the 21-Day Moving Average method during and any one trading
12 month (i.e. from the close of the last trading day of the spot NYMEX contract
13 until the close of the last trading day of the next spot NYMEX contract).

14
15 10 - Intra-year fixed-price contracts may be entered into during the current GCR
16 period up to a limit of 75% of the Balance of Period purchase volumes.

17
18 11 – Fixed prices under these guidelines may be achieved through fixed-price
19 physical contracts, NYMEX futures contracts, swaps, or call options at the
20 Company’s discretion.

21
22 12 – Percentage targets are based upon normalized purchase requirements
23 projected in the Five-Year Forecast of the latest GCR Plan, and may be
24 adjusted to comport with standardized contract increments.

25
26 13 – Purchase targets should be adjusted to take into account forecasted
27 changes in GCR load, including, but not limited to, changes in GCR load as a
28 result of customer migration to or from the Company’s Customer Choice
29 Program.

30
31 14 – Notwithstanding the foregoing, any purchases under these guidelines may
32 be suspended or modified at the Company’s discretion if at any time unusual,
33 unforeseen, or extreme market conditions occur. Such conditions shall
34 include, but not be limited to, events of force majeure, hurricanes, national or
35 natural disasters, extensive national pipeline disruptions, unprecedented or
36 extreme price levels or price movements, etc. Such suspensions or
37 modifications to these fixed price guidelines may include, but are not limited
38 to, the deferral of locking-in winter fixed prices until November of the current
39 GCR Period or the early start of the 21-Day Moving Average method into the
40 immediately preceding January, February, or March.

MICHIGAN CONSOLIDATED GAS COMPANY
INTRASTATE PURCHASE CONTRACT SUMMARY

SELLER: Scandia Energy

DATE: July 1, 1986

AREA: Northern Michigan Wet Header--Otsego Lake 6A and Hayes 13 Antrim

EXPIRATION: June 30, 2006

CONTRACT NUMBER: 173

PRICING: The minimum price is \$2.65/Mcf. The maximum price on 1/1/05 will be \$10.38654/Mcf escalating 1.5% quarterly thereafter.

The price payable, subject to the maximum and minimum prices, is equal to the average Commodity Gas Component paid by MichCon to its pipeline suppliers (i.e. ANR, Panhandle and Great Lakes) less 60¢. Provided, after 1/1/94 if the price payable is calculated to be the minimum price, then Buyer may pay an Alternate Price equal to said average Commodity Gas Component less 10¢. Provided, Buyer may only elect an Alternate Price once each year and that Alternate Price remains in effect for the remainder of that year.

Due to the absence of ANR sales after November 1, 1993, the average Commodity Gas Component paid by MichCon to its pipeline suppliers has been replaced with Gulf Cost Spot gas index.

TAXES: Buyer shall pay severance taxes and privilege fees in addition to the price, up to a maximum of 14.575¢/Mcf.

COMPRESSION: Seller shall provide all compression and fuel and buyer shall pay 18¢/Mcf for such compression.

QUANTITY: Seller delivers from each well producing under the contract all gas that is available for sale but not more than 9,000 Mcf/day.

CHANGES: There have been no changes in the last two years.

Michigan Consolidated Gas Company
Summary of Interstate Transportation Service

	(A) Contract Number	(B) Transporter	(C) Service	(D) Receipt Point	(E) Delivery Point	(F) MDQ Winter (Dth/Day)	(G) MDQ Summer (Dth/Day)	(H) Start Date	(I) Term Date
1									
2	108184	ANR Pipeline	ETS	Marshfield	Group 1	35,000	20,000	11/1/2003	10/31/2010
3	108185	ANR Pipeline	ETS	Marshfield	Group 5	15,051	30,051	11/1/2003	10/31/2010
4	108268	ANR Pipeline	ETS	SW Headstation	Group 1	10,000	10,000	11/1/2003	10/31/2010
5	108304	ANR Pipeline	ETS	SW Headstation	Group 2	15,000	15,000	11/1/2003	10/31/2010
6	108405	ANR Pipeline	FTS-1	SE Headstation	Willow Run	70,000	70,000	11/1/2002	10/31/2009
7	109511	ANR Pipeline	FTS-1	SW Headstation	Sparta-Muskegon	50,000	50,000	11/1/2004	10/31/2011
8	109608	ANR Pipeline	FTS-1	SE Headstation	Georgetown	25,000	25,000	11/1/2004	10/31/2010
9	111012	ANR Pipeline	FTS-1	SE Headstation	South Grand Rapids	25,000	25,000	11/1/2004	10/31/2010
10	111493	ANR Pipeline	ETS	Detroit Receipt	Group 3	400,000	400,000	7/01/2005	6/01/2051
11	FT3964	Great Lakes Gas Transmission	FT	Belle River	Various	50,000	50,000	11/1/2005	10/31/2011
12	FT4634	Great Lakes Gas Transmission	FT	Emerson/Belle River	Central Zone	10,130	10,130	4/1/2005	10/31/2011
13	FT4635	Great Lakes Gas Transmission	FT	Emerson/Belle River	Eastern Zone	20,260	20,260	4/1/2005	10/31/2011
14	017908	Panhandle Eastern Pipe Line	EFT	Field Zone	MCON/Southern	25,000	25,000	11/1/2003	10/31/2008
15	018251	Panhandle Eastern Pipe Line	FT	Bourbon	MCON	10,000	10,000	11/1/2003	10/31/2009
16	018474	Panhandle Eastern Pipe Line	FT	Field Zone	MCON/Southern	40,000	40,000	4/1/2002	3/31/2009
17	27905	TransCanada Pipelines Ltd	FT	Empress	Dawn	52,753 GJ	52,753 GJ	11/1/2005	11/30/2010
18	017760	Trunkline Gas	FT	East Louisiana	Bourbon	10,204	10,204	11/1/2003	10/31/2009
19	FT1-MCG-026	Vector Pipeline	FT	Alliance	Milford/Belle River/St. Clair	50,000	50,000	4/1/2005	3/31/2012
20	FT1-MCG-C026A	Vector Pipeline (Canada)	FT	St. Clair	Dawn	52,753 GJ	52,753 GJ	4/1/2005	3/31/2012
21	FT-A #AF0081	Viking Gas Transmission	FT	Emerson	Marshfield	50,865	50,865	12/1/2004	10/31/2010

Michigan Consolidated Gas Company
2006-2011 GCR Plan
Projected Gas Purchase Quantities and Costs

Line No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1		<u>Apr-06</u>	<u>May-06</u>	<u>Jun-06</u>	<u>Jul-06</u>	<u>Aug-06</u>	<u>Sep-06</u>	<u>Oct-06</u>	<u>Nov-06</u>	<u>Dec-06</u>	<u>Jan-07</u>	<u>Feb-07</u>	<u>Mar-07</u>	<u>Total</u>
2	<u>Company Total Purchase Quantity (Dth):</u>													
3	Contracted Fixed Price	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Not Under Contract	7,173,834	7,457,597	7,412,110	7,731,546	7,756,346	7,481,220	7,738,366	10,989,150	12,218,099	12,394,697	11,224,020	12,462,319	112,039,304
5	Contracted Not Fix Price	7,439,586	7,662,515	7,391,090	7,566,046	7,541,246	7,321,980	7,541,246	2,352,000	2,405,600	2,070,831	1,848,056	2,021,293	63,161,489
6	Total Receipt (Dth)	14,613,420	15,120,112	14,803,200	15,297,592	15,297,592	14,803,200	15,279,612	13,341,150	14,623,699	14,465,528	13,072,076	14,483,612	175,200,793
7	Less Fuel	554,760	591,232	572,160	591,232	591,232	572,160	573,252	526,890	576,259	573,128	517,916	573,872	6,814,093
8	Total Delivered (Dth)	14,058,660	14,528,880	14,231,040	14,706,360	14,706,360	14,231,040	14,706,360	12,814,260	14,047,440	13,892,400	12,554,160	13,909,740	168,386,700
9	Heating Value Adjustment	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	
10	Total Delivered (Mcf)	13,783,000	14,244,000	13,952,000	14,418,000	14,418,000	13,952,000	14,418,000	12,563,000	13,772,000	13,620,000	12,308,000	13,637,000	165,085,000
	<u>Company Total Purchase Cost:</u>													
11	Contracted Fixed Price	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	Not Under Contract	\$ 75,098,683	\$ 76,274,586	\$ 76,156,476	\$ 79,790,117	\$ 80,387,062	\$ 77,393,217	\$ 80,480,324	\$ 116,945,096	\$ 135,804,893	\$ 142,847,752	\$ 129,658,629	\$ 140,836,519	\$ 1,211,673,354
13	Contracted Not Fix Price	\$ 78,026,644	\$ 78,500,388	\$ 75,942,310	\$ 77,994,160	\$ 78,051,580	\$ 75,661,269	\$ 78,323,065	\$ 26,018,840	\$ 27,713,986	\$ 24,612,185	\$ 21,953,687	\$ 23,467,443	\$ 666,265,558
14	Total	\$ 153,125,327	\$ 154,774,974	\$ 152,098,785	\$ 157,784,277	\$ 158,438,642	\$ 153,054,486	\$ 158,803,389	\$ 142,963,936	\$ 163,518,880	\$ 167,459,937	\$ 151,612,317	\$ 164,303,962	\$ 1,877,938,912

Michigan Consolidated Gas Company
2006-2011 GCR Plan
Projected Gas Purchase Quantities and Costs

Line No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N
		<u>Apr-07</u>	<u>May-07</u>	<u>Jun-07</u>	<u>Jul-07</u>	<u>Aug-07</u>	<u>Sep-07</u>	<u>Oct-07</u>	<u>Nov-07</u>	<u>Dec-07</u>	<u>Jan-08</u>	<u>Feb-08</u>	<u>Mar-08</u>	<u>Total</u>
15														
16	Company Total Purchase Quantity (Dth):													
17	Contracted Fixed Price	-	-	-	-	-	-	-	-	-	-	-	-	-
18	Not Under Contract	13,243,680	13,727,712	13,485,540	14,245,092	14,269,892	13,857,540	14,277,732	12,411,450	13,460,979	13,993,899	13,148,881	14,014,619	164,137,016
19	Contracted Not Fix Price	1,332,000	1,351,600	1,284,000	1,016,800	992,000	912,000	967,200	936,000	942,400	272,800	232,000	248,000	10,486,800
20	Total Receipt (Dth)	14,575,680	15,079,312	14,769,540	15,261,892	15,261,892	14,769,540	15,244,932	13,347,450	14,403,379	14,266,699	13,380,881	14,262,619	174,623,816
21	Less Fuel	554,760	591,232	572,160	591,232	591,232	572,160	573,252	557,670	576,259	576,259	539,081	576,259	6,871,556
22	Total Delivered (Dth)	14,020,920	14,488,080	14,197,380	14,670,660	14,670,660	14,197,380	14,671,680	12,789,780	13,827,120	13,690,440	12,841,800	13,686,360	167,752,260
23	Heating Value Adjustment	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
24	Total Delivered (Mcf)	13,746,000	14,204,000	13,919,000	14,383,000	14,383,000	13,919,000	14,384,000	12,539,000	13,556,000	13,422,000	12,590,000	13,418,000	164,463,000
25	Company Total Purchase Cost:													
26	Contracted Fixed Price	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
27	Not Under Contract	\$ 119,006,196	\$ 120,098,355	\$ 118,676,740	\$ 126,087,749	\$ 126,959,780	\$ 123,302,776	\$ 127,763,732	\$ 115,137,078	\$ 131,830,261	\$ 142,454,512	\$ 134,435,931	\$ 139,737,714	\$ 1,525,490,823
28	Contracted Not Fix Price	\$ 6,896,922	\$ 6,719,497	\$ 6,311,334	\$ 6,552,528	\$ 6,353,332	\$ 5,700,918	\$ 6,155,190	\$ 6,129,090	\$ 6,397,707	\$ -	\$ -	\$ -	\$ 57,216,518
29	Total	\$ 125,903,118	\$ 126,817,852	\$ 124,988,074	\$ 132,640,277	\$ 133,313,112	\$ 129,003,694	\$ 133,918,922	\$ 121,266,168	\$ 138,227,968	\$ 142,454,512	\$ 134,435,931	\$ 139,737,714	\$ 1,582,707,341
30		<u>Apr-08</u>	<u>May-08</u>	<u>Jun-08</u>	<u>Jul-08</u>	<u>Aug-08</u>	<u>Sep-08</u>	<u>Oct-08</u>	<u>Nov-08</u>	<u>Dec-08</u>	<u>Jan-09</u>	<u>Feb-09</u>	<u>Mar-09</u>	<u>Total</u>
31	Company Total Purchase Quantity (Dth):													
32	Contracted Fixed Price	-	-	-	-	-	-	-	-	-	-	-	-	-
33	Not Under Contract	14,332,620	14,853,052	14,473,380	14,980,932	15,005,732	14,761,380	15,233,712	13,390,290	14,163,679	14,485,999	13,136,872	14,513,539	173,331,187
34	Contracted Not Fix Price	240,000	223,200	288,000	272,800	248,000	-	-	-	-	-	-	-	1,272,000
35	Total Receipt (Dth)	14,572,620	15,076,252	14,761,380	15,253,732	15,253,732	14,761,380	15,233,712	13,390,290	14,163,679	14,485,999	13,136,872	14,513,539	174,603,187
36	Less Fuel	554,760	591,232	572,160	591,232	591,232	572,160	573,252	557,670	576,259	576,259	520,492	576,259	6,852,967
37	Total Delivered (Dth)	14,017,860	14,485,020	14,189,220	14,662,500	14,662,500	14,189,220	14,660,460	12,832,620	13,587,420	13,909,740	12,616,380	13,937,280	167,750,220
38	Heating Value Adjustment	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
39	Total Delivered (Mcf)	13,743,000	14,201,000	13,911,000	14,375,000	14,375,000	13,911,000	14,373,000	12,581,000	13,321,000	13,637,000	12,369,000	13,664,000	164,461,000
40	Company Total Purchase Cost:													
40	Contracted Fixed Price	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
41	Not Under Contract	\$ 112,145,864	\$ 113,277,810	\$ 111,128,670	\$ 115,635,224	\$ 116,361,904	\$ 114,422,314	\$ 118,783,787	\$ 108,630,325	\$ 121,962,238	\$ 130,932,858	\$ 119,506,219	\$ 128,424,056	\$ 1,411,211,268
42	Contracted Not Fix Price	\$ 1,976,640	\$ 1,794,082	\$ 2,328,250	\$ 2,216,282	\$ 2,023,482	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,338,735
43	Total	\$ 114,122,504	\$ 115,071,891	\$ 113,456,919	\$ 117,851,505	\$ 118,385,386	\$ 114,422,314	\$ 118,783,787	\$ 108,630,325	\$ 121,962,238	\$ 130,932,858	\$ 119,506,219	\$ 128,424,056	\$ 1,421,550,003

Michigan Consolidated Gas Company
 2006-2011 GCR Plan
 Projected Gas Purchase Quantities and Costs

Line No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N
		<u>Apr-09</u>	<u>May-09</u>	<u>Jun-09</u>	<u>Jul-09</u>	<u>Aug-09</u>	<u>Sep-09</u>	<u>Oct-09</u>	<u>Nov-09</u>	<u>Dec-09</u>	<u>Jan-10</u>	<u>Feb-10</u>	<u>Mar-10</u>	<u>Total</u>
44														
45	Company Total Purchase Quantity (Dth):													
46	Contracted Fixed Price	-	-	-	-	-	-	-	-	-	-	-	-	-
47	Not Under Contract	14,350,980	14,872,432	14,492,760	15,001,332	15,026,132	14,780,760	15,256,152	13,394,370	14,281,999	14,565,559	13,254,172	14,530,879	173,807,527
48	Contracted Not Fix Price	240,000	223,200	288,000	272,800	248,000	-	-	-	-	-	-	-	1,272,000
49	Total Receipt (Dth)	14,590,980	15,095,632	14,780,760	15,274,132	15,274,132	14,780,760	15,256,152	13,394,370	14,281,999	14,565,559	13,254,172	14,530,879	175,079,527
50	Less Fuel	554,760	591,232	572,160	591,232	591,232	572,160	573,252	557,670	576,259	576,259	520,492	576,259	6,852,967
51	Total Delivered (Dth)	14,036,220	14,504,400	14,208,600	14,682,900	14,682,900	14,208,600	14,682,900	12,836,700	13,705,740	13,989,300	12,733,680	13,954,620	168,226,560
52	Heating Value Adjustment	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
53	Total Delivered (Mcf)	13,761,000	14,220,000	13,930,000	14,395,000	14,395,000	13,930,000	14,395,000	12,585,000	13,437,000	13,715,000	12,484,000	13,681,000	164,928,000
54	Company Total Purchase Cost:													
55	Contracted Fixed Price	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
56	Not Under Contract	\$ 100,006,220	\$ 100,695,238	\$ 98,909,343	\$ 103,115,127	\$ 104,021,314	\$ 102,333,039	\$ 106,073,117	\$ 97,523,157	\$ 111,300,411	\$ 119,873,673	\$ 109,909,322	\$ 116,881,115	\$ 1,270,641,075
57	Contracted Not Fix Price	\$ 1,755,600	\$ 1,588,514	\$ 2,063,866	\$ 1,968,143	\$ 1,801,224	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,177,347
58	Total	\$ 101,761,820	\$ 102,283,752	\$ 100,973,209	\$ 105,083,270	\$ 105,822,538	\$ 102,333,039	\$ 106,073,117	\$ 97,523,157	\$ 111,300,411	\$ 119,873,673	\$ 109,909,322	\$ 116,881,115	\$ 1,279,818,421
59		<u>Apr-10</u>	<u>May-10</u>	<u>Jun-10</u>	<u>Jul-10</u>	<u>Aug-10</u>	<u>Sep-10</u>	<u>Oct-10</u>	<u>Nov-10</u>	<u>Dec-10</u>	<u>Jan-11</u>	<u>Feb-11</u>	<u>Mar-11</u>	<u>Total</u>
60	Company Total Purchase Quantity (Dth):													
61	Contracted Fixed Price	-	-	-	-	-	-	-	-	-	-	-	-	-
62	Not Under Contract	14,609,340	15,116,032	14,800,140	15,294,532	15,294,532	14,800,140	15,277,572	13,319,910	14,484,979	14,546,179	13,226,632	14,569,639	175,339,627
63	Contracted Not Fix Price	-	-	-	-	-	-	-	-	-	-	-	-	-
64	Total Receipt (Dth)	14,609,340	15,116,032	14,800,140	15,294,532	15,294,532	14,800,140	15,277,572	13,319,910	14,484,979	14,546,179	13,226,632	14,569,639	175,339,627
65	Less Fuel	554,760	591,232	572,160	591,232	591,232	572,160	573,252	557,670	576,259	576,259	520,492	576,259	6,852,967
66	Total Delivered (Dth)	14,054,580	14,524,800	14,227,980	14,703,300	14,703,300	14,227,980	14,704,320	12,762,240	13,908,720	13,969,920	12,706,140	13,993,380	168,486,660
67	Heating Value Adjustment	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020	1.020
68	Total Delivered (Mcf)	13,779,000	14,240,000	13,949,000	14,415,000	14,415,000	13,949,000	14,416,000	12,512,000	13,636,000	13,696,000	12,457,000	13,719,000	165,183,000
69	Company Total Purchase Cost:													
70	Contracted Fixed Price	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
71	Not Under Contract	\$ 93,112,112	\$ 93,399,526	\$ 91,929,903	\$ 95,460,135	\$ 95,918,971	\$ 92,684,710	\$ 96,569,216	\$ 88,498,986	\$ 103,906,667	\$ 110,468,157	\$ 101,263,505	\$ 108,189,985	\$ 1,171,401,874
72	Contracted Not Fix Price	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
72	Total	\$ 93,112,112	\$ 93,399,526	\$ 91,929,903	\$ 95,460,135	\$ 95,918,971	\$ 92,684,710	\$ 96,569,216	\$ 88,498,986	\$ 103,906,667	\$ 110,468,157	\$ 101,263,505	\$ 108,189,985	\$ 1,171,401,874

Michigan Consolidated Gas Company
Projected Transport Capacities and Costs

MPSC Case No. U-14717
Exhibit No. A -12 (GHC-12)
Witness: George H. Chapel
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Line No.	A	B	C	D	E	F	G	H	I	J	K	J	M	N
		<u>Apr-06</u>	<u>May-06</u>	<u>Jun-06</u>	<u>Jul-06</u>	<u>Aug-06</u>	<u>Sep-06</u>	<u>Oct-06</u>	<u>Nov-06</u>	<u>Dec-06</u>	<u>Jan-07</u>	<u>Feb-07</u>	<u>Mar-07</u>	
1	<u>Company Total Transport Capacity (Dth/Day):</u>													
2	Great Lakes	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	
3	TCPL	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	
4	Viking/ANR	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	
5	Vector	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	
6	Panhandle	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	
7	Trunkline/PEPL	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	
8	ANR/SW	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	
9	ANR/SE	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	
10	Total	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	
11	<u>Company Total Transport Costs:</u>													<u>Total</u>
12	Great Lakes	\$ 272,086	\$ 281,156	\$ 272,086	\$ 281,156	\$ 281,156	\$ 272,086	\$ 281,156	\$ 308,444	\$ 318,725	\$ 318,735	\$ 287,898	\$ 318,753	\$ 3,493,436
13	TCPL	\$ 1,148,400	\$ 1,186,680	\$ 1,148,400	\$ 1,186,680	\$ 1,186,680	\$ 1,148,400	\$ 1,186,680	\$ 1,148,400	\$ 1,186,680	\$ 1,186,680	\$ 1,071,840	\$ 1,186,680	\$ 13,972,200
14	Viking/ANR	\$ 479,604	\$ 495,591	\$ 479,604	\$ 495,591	\$ 495,591	\$ 479,604	\$ 495,591	\$ 446,091	\$ 460,961	\$ 460,961	\$ 416,352	\$ 460,961	\$ 5,666,501
15	Vector	\$ 285,000	\$ 294,500	\$ 285,000	\$ 294,500	\$ 294,500	\$ 285,000	\$ 294,500	\$ 285,000	\$ 294,500	\$ 294,500	\$ 266,000	\$ 294,500	\$ 3,467,500
16	Panhandle	\$ 535,080	\$ 552,916	\$ 535,080	\$ 552,916	\$ 552,916	\$ 535,080	\$ 552,916	\$ 625,080	\$ 645,916	\$ 645,916	\$ 583,408	\$ 645,916	\$ 6,963,140
18	Trunkline/PEPL	\$ 65,933	\$ 68,131	\$ 65,933	\$ 68,131	\$ 68,131	\$ 65,933	\$ 68,131	\$ 65,933	\$ 68,131	\$ 68,131	\$ 61,537	\$ 68,131	\$ 802,185
19	ANR/SW	\$ 738,675	\$ 763,298	\$ 738,675	\$ 763,298	\$ 763,298	\$ 738,675	\$ 763,298	\$ 738,675	\$ 763,298	\$ 763,298	\$ 689,430	\$ 763,298	\$ 8,987,213
20	ANR/SE	\$ 1,026,600	\$ 1,060,820	\$ 1,026,600	\$ 1,060,820	\$ 1,060,820	\$ 1,026,600	\$ 1,060,820	\$ 643,350	\$ 664,795	\$ 664,795	\$ 600,460	\$ 664,795	\$ 10,561,275
21	Total	\$ 4,551,378	\$ 4,703,091	\$ 4,551,378	\$ 4,703,091	\$ 4,703,091	\$ 4,551,378	\$ 4,703,091	\$ 4,260,973	\$ 4,403,006	\$ 4,403,015	\$ 3,976,925	\$ 4,403,034	\$ 53,913,450

Michigan Consolidated Gas Company
Projected Transport Capacities and Costs

MPSC Case No. U-14717
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Line No.	A	B <u>Apr-07</u>	C <u>May-07</u>	D <u>Jun-07</u>	E <u>Jul-07</u>	F <u>Aug-07</u>	G <u>Sep-07</u>	H <u>Oct-07</u>	I <u>Nov-07</u>	J <u>Dec-07</u>	K <u>Jan-08</u>	J <u>Feb-08</u>	M <u>Mar-08</u>	N
1	<u>Company Total Transport Capacity (Dth/Day):</u>													
2	Great Lakes	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	
3	TCPL	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	
4	Viking/ANR	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	
5	Vector	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	
6	Panhandle	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	
7	Trunkline/PEPL	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	
8	ANR/SW	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	
9	ANR/SE	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	
10	Total	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	
11	<u>Company Total Transport Costs:</u>													
12	Great Lakes	\$ 272,086	\$ 281,156	\$ 272,086	\$ 281,156	\$ 281,156	\$ 272,086	\$ 281,156	\$ 308,444	\$ 318,725	\$ 524,033	\$ 682,286	\$ 934,647	\$ 4,709,016
13	TCPL	\$ 1,148,400	\$ 1,186,680	\$ 1,148,400	\$ 1,186,680	\$ 1,186,680	\$ 1,148,400	\$ 1,186,680	\$ 1,148,400	\$ 1,186,680	\$ 1,186,680	\$ 1,110,120	\$ 1,186,680	\$ 14,010,480
14	Viking/ANR	\$ 479,604	\$ 495,591	\$ 479,604	\$ 495,591	\$ 495,591	\$ 479,604	\$ 495,591	\$ 446,091	\$ 460,961	\$ 460,961	\$ 431,222	\$ 460,961	\$ 5,681,371
15	Vector	\$ 285,000	\$ 294,500	\$ 285,000	\$ 294,500	\$ 294,500	\$ 285,000	\$ 294,500	\$ 285,000	\$ 294,500	\$ 294,500	\$ 275,500	\$ 294,500	\$ 3,477,000
16	Panhandle	\$ 819,000	\$ 846,300	\$ 819,000	\$ 846,300	\$ 846,300	\$ 819,000	\$ 846,300	\$ 819,000	\$ 846,300	\$ 846,300	\$ 791,700	\$ 846,300	\$ 9,991,800
18	Trunkline/PEPL	\$ 65,933	\$ 68,131	\$ 65,933	\$ 68,131	\$ 68,131	\$ 65,933	\$ 68,131	\$ 65,934	\$ 68,132	\$ 68,132	\$ 63,736	\$ 68,132	\$ 804,388
19	ANR/SW	\$ 738,675	\$ 763,298	\$ 738,675	\$ 763,298	\$ 763,298	\$ 738,675	\$ 763,298	\$ 834,765	\$ 859,388	\$ 859,388	\$ 810,143	\$ 859,388	\$ 9,492,285
20	ANR/SE	\$ 1,026,600	\$ 1,060,820	\$ 1,026,600	\$ 1,060,820	\$ 1,060,820	\$ 1,026,600	\$ 1,060,820	\$ 643,350	\$ 664,795	\$ 664,795	\$ 621,905	\$ 664,795	\$ 10,582,720
21	Total	\$ 4,835,298	\$ 4,996,475	\$ 4,835,298	\$ 4,996,475	\$ 4,996,475	\$ 4,835,298	\$ 4,996,475	\$ 4,550,984	\$ 4,699,481	\$ 4,904,788	\$ 4,786,611	\$ 5,315,403	\$ 58,749,061

Michigan Consolidated Gas Company
Projected Transport Capacities and Costs

MPSC Case No. U-14717
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Line No.	A	B <u>Apr-08</u>	C <u>May-08</u>	D <u>Jun-08</u>	E <u>Jul-08</u>	F <u>Aug-08</u>	G <u>Sep-08</u>	H <u>Oct-08</u>	I <u>Nov-08</u>	J <u>Dec-08</u>	K <u>Jan-09</u>	J <u>Feb-09</u>	M <u>Mar-09</u>	N
1	<u>Company Total Transport Capacity (Dth/Day):</u>													
2	Great Lakes	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	
3	TCPL	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	
4	Viking/ANR	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	
5	Vector	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	
6	Panhandle	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	
7	Trunkline/PEPL	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	
8	ANR/SW	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	
9	ANR/SE	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	
10	Total	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	
11	<u>Company Total Transport Costs:</u>													
12	Great Lakes	\$ 272,086	\$ 281,156	\$ 272,086	\$ 281,156	\$ 281,156	\$ 272,086	\$ 281,156	\$ 308,444	\$ 318,725	\$ 524,033	\$ 658,759	\$ 934,647	\$ 4,685,489
13	TCPL	\$ 1,148,400	\$ 1,186,680	\$ 1,148,400	\$ 1,186,680	\$ 1,186,680	\$ 1,148,400	\$ 1,186,680	\$ 1,148,400	\$ 1,186,680	\$ 1,186,680	\$ 1,071,840	\$ 1,186,680	\$ 13,972,200
14	Viking/ANR	\$ 479,604	\$ 495,591	\$ 479,604	\$ 495,591	\$ 495,591	\$ 479,604	\$ 495,591	\$ 446,091	\$ 460,961	\$ 460,961	\$ 416,352	\$ 460,961	\$ 5,666,501
15	Vector	\$ 285,000	\$ 294,500	\$ 285,000	\$ 294,500	\$ 294,500	\$ 285,000	\$ 294,500	\$ 285,000	\$ 294,500	\$ 294,500	\$ 266,000	\$ 294,500	\$ 3,467,500
16	Panhandle	\$ 819,000	\$ 846,300	\$ 819,000	\$ 846,300	\$ 846,300	\$ 819,000	\$ 846,300	\$ 819,000	\$ 846,300	\$ 846,300	\$ 764,400	\$ 846,300	\$ 9,964,500
18	Trunkline/PEPL	\$ 65,873	\$ 68,069	\$ 65,873	\$ 68,069	\$ 68,069	\$ 65,873	\$ 68,069	\$ 65,934	\$ 68,132	\$ 68,132	\$ 61,538	\$ 68,132	\$ 801,762
19	ANR/SW	\$ 834,765	\$ 859,388	\$ 834,765	\$ 859,388	\$ 859,388	\$ 834,765	\$ 859,388	\$ 834,765	\$ 859,388	\$ 859,388	\$ 859,388	\$ 859,388	\$ 10,214,160
20	ANR/SE	\$ 1,026,600	\$ 1,060,820	\$ 1,026,600	\$ 1,060,820	\$ 1,060,820	\$ 1,026,600	\$ 1,060,820	\$ 643,350	\$ 664,795	\$ 664,795	\$ 600,460	\$ 664,795	\$ 10,561,275
21	Total	\$ 4,931,328	\$ 5,092,503	\$ 4,931,328	\$ 5,092,503	\$ 5,092,503	\$ 4,931,328	\$ 5,092,503	\$ 4,550,984	\$ 4,699,481	\$ 4,904,788	\$ 4,698,737	\$ 5,315,403	\$ 59,333,388

Michigan Consolidated Gas Company
Projected Transport Capacities and Costs

MPSC Case No. U-14717
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Line No.	A	B <u>Apr-09</u>	C <u>May-09</u>	D <u>Jun-09</u>	E <u>Jul-09</u>	F <u>Aug-09</u>	G <u>Sep-09</u>	H <u>Oct-09</u>	I <u>Nov-09</u>	J <u>Dec-09</u>	K <u>Jan-10</u>	J <u>Feb-10</u>	M <u>Mar-10</u>	N
1	<u>Company Total Transport Capacity (Dth/Day):</u>													
2	Great Lakes	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	
3	TCPL	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	
4	Viking/ANR	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	
5	Vector	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	
6	Panhandle	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	
7	Trunkline/PEPL	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	
8	ANR/SW	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	
9	ANR/SE	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	
10	Total	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	
11	<u>Company Total Transport Costs:</u>													
12	Great Lakes	\$ 272,086	\$ 281,156	\$ 272,086	\$ 281,156	\$ 281,156	\$ 272,086	\$ 281,156	\$ 308,444	\$ 318,725	\$ 524,033	\$ 658,759	\$ 934,647	\$ 4,685,489
13	TCPL	\$ 1,148,400	\$ 1,186,680	\$ 1,148,400	\$ 1,186,680	\$ 1,186,680	\$ 1,148,400	\$ 1,186,680	\$ 1,148,400	\$ 1,186,680	\$ 1,186,680	\$ 1,071,840	\$ 1,186,680	\$ 13,972,200
14	Viking/ANR	\$ 479,604	\$ 495,591	\$ 479,604	\$ 495,591	\$ 495,591	\$ 479,604	\$ 495,591	\$ 446,091	\$ 460,961	\$ 460,961	\$ 416,352	\$ 460,961	\$ 5,666,501
15	Vector	\$ 285,000	\$ 294,500	\$ 285,000	\$ 294,500	\$ 294,500	\$ 285,000	\$ 294,500	\$ 285,000	\$ 294,500	\$ 294,500	\$ 266,000	\$ 294,500	\$ 3,467,500
16	Panhandle	\$ 819,000	\$ 846,300	\$ 819,000	\$ 846,300	\$ 846,300	\$ 819,000	\$ 846,300	\$ 819,000	\$ 846,300	\$ 846,300	\$ 764,400	\$ 846,300	\$ 9,964,500
18	Trunkline/PEPL	\$ 65,873	\$ 68,069	\$ 65,873	\$ 68,069	\$ 68,069	\$ 65,873	\$ 68,069	\$ 65,934	\$ 68,132	\$ 68,132	\$ 61,538	\$ 68,132	\$ 801,762
19	ANR/SW	\$ 834,765	\$ 859,388	\$ 834,765	\$ 859,388	\$ 859,388	\$ 834,765	\$ 859,388	\$ 834,765	\$ 859,388	\$ 859,388	\$ 859,388	\$ 859,388	\$ 10,214,160
20	ANR/SE	\$ 1,026,600	\$ 1,060,820	\$ 1,026,600	\$ 1,060,820	\$ 1,060,820	\$ 1,026,600	\$ 1,060,820	\$ 643,350	\$ 664,795	\$ 664,795	\$ 600,460	\$ 664,795	\$ 10,561,275
21	Total	\$ 4,931,328	\$ 5,092,503	\$ 4,931,328	\$ 5,092,503	\$ 5,092,503	\$ 4,931,328	\$ 5,092,503	\$ 4,550,984	\$ 4,699,481	\$ 4,904,788	\$ 4,698,737	\$ 5,315,403	\$ 59,333,388

Michigan Consolidated Gas Company
Projected Transport Capacities and Costs

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Line No.	A	B <u>Apr-10</u>	C <u>May-10</u>	D <u>Jun-10</u>	E <u>Jul-10</u>	F <u>Aug-10</u>	G <u>Sep-10</u>	H <u>Oct-10</u>	I <u>Nov-10</u>	J <u>Dec-10</u>	K <u>Jan-11</u>	J <u>Feb-11</u>	M <u>Mar-11</u>	N
1	<u>Company Total Transport Capacity (Dth/Day):</u>													
2	Great Lakes	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	30,390	
3	TCPL	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	
4	Viking/ANR	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	50,051	
5	Vector	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	
6	Panhandle	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	65,000	
7	Trunkline/PEPL	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	
8	ANR/SW	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000	
9	ANR/SE	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	120,000	
10	Total	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	450,441	
11	<u>Company Total Transport Costs:</u>													
12	Great Lakes	\$ 272,086	\$ 281,156	\$ 272,086	\$ 281,156	\$ 281,156	\$ 272,086	\$ 281,156	\$ 308,444	\$ 318,725	\$ 524,033	\$ 658,759	\$ 934,647	\$ 4,685,489
13	TCPL	\$ 1,148,400	\$ 1,186,680	\$ 1,148,400	\$ 1,186,680	\$ 1,186,680	\$ 1,148,400	\$ 1,186,680	\$ 1,148,400	\$ 1,186,680	\$ 1,186,680	\$ 1,071,840	\$ 1,186,680	\$ 13,972,200
14	Viking/ANR	\$ 479,604	\$ 495,591	\$ 479,604	\$ 495,591	\$ 495,591	\$ 479,604	\$ 495,591	\$ 446,091	\$ 460,961	\$ 460,961	\$ 416,352	\$ 460,961	\$ 5,666,501
15	Vector	\$ 285,000	\$ 294,500	\$ 285,000	\$ 294,500	\$ 294,500	\$ 285,000	\$ 294,500	\$ 285,000	\$ 294,500	\$ 294,500	\$ 266,000	\$ 294,500	\$ 3,467,500
16	Panhandle	\$ 819,000	\$ 846,300	\$ 819,000	\$ 846,300	\$ 846,300	\$ 819,000	\$ 846,300	\$ 819,000	\$ 846,300	\$ 846,300	\$ 764,400	\$ 846,300	\$ 9,964,500
18	Trunkline/PEPL	\$ 65,873	\$ 68,069	\$ 65,873	\$ 68,069	\$ 68,069	\$ 65,873	\$ 68,069	\$ 65,934	\$ 68,132	\$ 68,132	\$ 61,538	\$ 68,132	\$ 801,762
19	ANR/SW	\$ 834,765	\$ 859,388	\$ 834,765	\$ 859,388	\$ 859,388	\$ 834,765	\$ 859,388	\$ 834,765	\$ 859,388	\$ 859,388	\$ 859,388	\$ 859,388	\$ 10,214,160
20	ANR/SE	\$ 1,026,600	\$ 1,060,820	\$ 1,026,600	\$ 1,060,820	\$ 1,060,820	\$ 1,026,600	\$ 1,060,820	\$ 643,350	\$ 664,795	\$ 664,795	\$ 600,460	\$ 664,795	\$ 10,561,275
21	Total	\$ 4,931,328	\$ 5,092,503	\$ 4,931,328	\$ 5,092,503	\$ 5,092,503	\$ 4,931,328	\$ 5,092,503	\$ 4,550,984	\$ 4,699,481	\$ 4,904,788	\$ 4,698,737	\$ 5,315,403	\$ 59,333,388

Michigan Consolidated Gas Company
2006 - 2011 GCR Plan
Projected Total Supply Costs

Line No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	<u>Items</u>	<u>Apr-06</u>	<u>May-06</u>	<u>Jun-06</u>	<u>Jul-06</u>	<u>Aug-06</u>	<u>Sep-06</u>	<u>Oct-06</u>	<u>Nov-06</u>	<u>Dec-06</u>	<u>Jan-07</u>	<u>Feb-07</u>	<u>Mar-07</u>	<u>Total</u>
2	Gas Purchase Cost	\$ 153,125,327	\$ 154,774,974	\$ 152,098,785	\$ 157,784,277	\$ 158,438,642	\$ 153,054,486	\$ 158,803,389	\$ 142,963,936	\$ 163,518,880	\$ 167,459,937	\$ 151,612,317	\$ 164,303,962	\$ 1,877,938,912
3	Transport Cost	\$ 4,551,378	\$ 4,703,091	\$ 4,551,378	\$ 4,703,091	\$ 4,703,091	\$ 4,551,378	\$ 4,703,091	\$ 4,260,973	\$ 4,403,006	\$ 4,403,015	\$ 3,976,925	\$ 4,403,034	\$ 53,913,450
4	Total Cost	\$ 157,676,705	\$ 159,478,065	\$ 156,650,164	\$ 162,487,368	\$ 163,141,733	\$ 157,605,864	\$ 163,506,480	\$ 147,224,910	\$ 167,921,885	\$ 171,862,952	\$ 155,589,242	\$ 168,706,996	\$ 1,931,852,363
5	<u>Items</u>	<u>Apr-07</u>	<u>May-07</u>	<u>Jun-07</u>	<u>Jul-07</u>	<u>Aug-07</u>	<u>Sep-07</u>	<u>Oct-07</u>	<u>Nov-07</u>	<u>Dec-07</u>	<u>Jan-08</u>	<u>Feb-08</u>	<u>Mar-08</u>	<u>Total</u>
6	Gas Purchase Cost	\$ 125,903,118	\$ 126,817,852	\$ 124,988,074	\$ 132,640,277	\$ 133,313,112	\$ 129,003,694	\$ 133,918,922	\$ 121,266,168	\$ 138,227,968	\$ 142,454,512	\$ 134,435,931	\$ 139,737,714	\$ 1,582,707,341
7	Transport Cost	\$ 4,835,298	\$ 4,996,475	\$ 4,835,298	\$ 4,996,475	\$ 4,996,475	\$ 4,835,298	\$ 4,996,475	\$ 4,550,984	\$ 4,699,481	\$ 4,904,788	\$ 4,786,611	\$ 5,315,403	\$ 58,749,061
8	Total Cost	\$ 130,738,416	\$ 131,814,327	\$ 129,823,373	\$ 137,636,752	\$ 138,309,587	\$ 133,838,992	\$ 138,915,397	\$ 125,817,152	\$ 142,927,449	\$ 147,359,300	\$ 139,222,542	\$ 145,053,117	\$ 1,641,456,402
9	<u>Items</u>	<u>Apr-08</u>	<u>May-08</u>	<u>Jun-08</u>	<u>Jul-08</u>	<u>Aug-08</u>	<u>Sep-08</u>	<u>Oct-08</u>	<u>Nov-08</u>	<u>Dec-08</u>	<u>Jan-09</u>	<u>Feb-09</u>	<u>Mar-09</u>	<u>Total</u>
10	Gas Purchase Cost	\$ 114,122,504	\$ 115,071,891	\$ 113,456,919	\$ 117,851,505	\$ 118,385,386	\$ 114,422,314	\$ 118,783,787	\$ 108,630,325	\$ 121,962,238	\$ 130,932,858	\$ 119,506,219	\$ 128,424,056	\$ 1,421,550,003
11	Transport Cost	\$ 4,931,328	\$ 5,092,503	\$ 4,931,328	\$ 5,092,503	\$ 5,092,503	\$ 4,931,328	\$ 5,092,503	\$ 4,550,984	\$ 4,699,481	\$ 4,904,788	\$ 4,698,737	\$ 5,315,403	\$ 59,333,388
12	Total Cost	\$ 119,053,832	\$ 120,164,394	\$ 118,388,248	\$ 122,944,008	\$ 123,477,889	\$ 119,353,642	\$ 123,876,290	\$ 113,181,309	\$ 126,661,718	\$ 135,837,646	\$ 124,204,956	\$ 133,739,459	\$ 1,480,883,391
13	<u>Items</u>	<u>Apr-09</u>	<u>May-09</u>	<u>Jun-09</u>	<u>Jul-09</u>	<u>Aug-09</u>	<u>Sep-09</u>	<u>Oct-09</u>	<u>Nov-09</u>	<u>Dec-09</u>	<u>Jan-10</u>	<u>Feb-10</u>	<u>Mar-10</u>	<u>Total</u>
14	Gas Purchase Cost	\$ 101,761,820	\$ 102,283,752	\$ 100,973,209	\$ 105,083,270	\$ 105,822,538	\$ 102,333,039	\$ 106,073,117	\$ 97,523,157	\$ 111,300,411	\$ 119,873,673	\$ 109,909,322	\$ 116,881,115	\$ 1,279,818,421
15	Transport Cost	\$ 4,931,328	\$ 5,092,503	\$ 4,931,328	\$ 5,092,503	\$ 5,092,503	\$ 4,931,328	\$ 5,092,503	\$ 4,550,984	\$ 4,699,481	\$ 4,904,788	\$ 4,698,737	\$ 5,315,403	\$ 59,333,388
16	Total Cost	\$ 106,693,148	\$ 107,376,255	\$ 105,904,537	\$ 110,175,772	\$ 110,915,040	\$ 107,264,367	\$ 111,165,620	\$ 102,074,141	\$ 115,999,891	\$ 124,778,461	\$ 114,608,058	\$ 122,196,517	\$ 1,339,151,810
17	<u>Items</u>	<u>Apr-10</u>	<u>May-10</u>	<u>Jun-10</u>	<u>Jul-10</u>	<u>Aug-10</u>	<u>Sep-10</u>	<u>Oct-10</u>	<u>Nov-10</u>	<u>Dec-10</u>	<u>Jan-11</u>	<u>Feb-11</u>	<u>Mar-11</u>	<u>Total</u>
18	Gas Purchase Cost	\$ 93,112,112	\$ 93,399,526	\$ 91,929,903	\$ 95,460,135	\$ 95,918,971	\$ 92,684,710	\$ 96,569,216	\$ 88,498,986	\$ 103,906,667	\$ 110,468,157	\$ 101,263,505	\$ 108,189,985	\$ 1,171,401,874
19	Transport Cost	\$ 4,931,328	\$ 5,092,503	\$ 4,931,328	\$ 5,092,503	\$ 5,092,503	\$ 4,931,328	\$ 5,092,503	\$ 4,550,984	\$ 4,699,481	\$ 4,904,788	\$ 4,698,737	\$ 5,315,403	\$ 59,333,388
20	Total Cost	\$ 98,043,440	\$ 98,492,029	\$ 96,861,232	\$ 100,552,638	\$ 101,011,474	\$ 97,616,039	\$ 101,661,719	\$ 93,049,970	\$ 108,606,148	\$ 115,372,945	\$ 105,962,241	\$ 113,505,387	\$ 1,230,735,262

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the Application of)
MICHIGAN CONSOLIDATED GAS COMPANY)
for approval of Gas Cost Recovery Plan,)
5-year Forecast and Monthly GCR Factor)
for the period of April 2006-March 2007)

Case No. U-14717

QUALIFICATIONS
AND
DIRECT TESTIMONY
OF
BARBARA J. GOODWIN

MICHIGAN CONSOLIDATED GAS COMPANY
QUALIFICATIONS OF BARBARA J. GOODWIN

Line
No.

1 **Q. What is your name, business address and by whom you are employed?**

2 A. My name is Barbara Goodwin. My business address is 2000 Second Avenue,
3 Detroit, Michigan 48226. I am employed by Michigan Consolidated Gas
4 Company (MichCon) as a Gas Planning Specialist.

5

6 **Q. What is your educational background and business experience?**

7 A. I received a Bachelor of Commerce degree with a major in Accounting from
8 the University of Windsor, in Windsor, Ontario, Canada in 1996 and a Master
9 of Business Administration degree in 1997 also from the University of Windsor.
10 I was hired by Union Gas in Chatham, Ontario in April 1998 as a Gas Supply
11 Planning Analyst. From 1998-2004, I held various positions at Union Gas in
12 the Gas Supply Planning, Gas Control Planning and Capacity Management
13 departments. My main responsibilities in these departments included gas
14 supply planning, gas cost deferral account forecasting, and pipeline capacity
15 management. I joined Michigan Consolidated Gas Company (MichCon) in
16 June 2004 as a Gas Planning Specialist.

17

18 **Q. What are your primary responsibilities at MichCon?**

19 A. I am responsible for planning of natural gas supplies necessary to reliably
20 meet the requirements of MichCon's customers. I have supported preparation
21 of testimony and exhibits in the 2005-06 Gas Cost Recovery (GCR) Plan case
22 U-14401 and the 2004-05 GCR Reconciliation U-13902-R.

MICHIGAN CONSOLIDATED GAS COMPANY
DIRECT TESTIMONY OF BARBARA J. GOODWIN

Line
No.

1 **Q. What is the purpose of your testimony in this case?**

2 A. The purpose of my testimony is to describe MichCon's operational plan for the
3 period April 1, 2006 through March 31, 2011 with emphasis on the operational
4 plan year (OPY) April 1, 2006 to March 31, 2007. I will explain how MichCon
5 will manage its transmission and storage operations, particularly focusing on
6 the 2006-07 winter heating season. My testimony will support MichCon's
7 operational planning decisions. I will outline how storage and system planning
8 parameters, including peak day supply and requirements, are used to develop
9 MichCon's operational plan.

10

11 **Q. Are you sponsoring exhibits in this proceeding?**

12 A. Yes. I am sponsoring Exhibits A-14 (BJG-1) through A-18 (BJG-5), which
13 have been prepared by me, or under my supervision and direction.

14 Exhibit A-14 (BJG-1) Peak Day Supply Mix

15 Exhibit A-15 (BJG-2) Colder Than Normal Storage Balances

16 Exhibit A-16 (BJG-3) Colder Than Normal Weather Source and Disposition

17 Exhibit A-17 (BJG-4) Normal Weather Source and Disposition

18 Exhibit A-18 (BJG-5) Warmer Than Normal Weather Source and Disposition

Line
No.

1 Q. Does your testimony regarding Gas Operations relate to testimony filled
2 by other MichCon witnesses in this case?

3 A. Yes. The operational plan that I have prepared is based on Mr. Chapel's
4 forecast of the monthly and peak day customer requirements. Also, Mr.
5 Chapel relies on the supply purchase pattern identified by the operational plan
6 to develop the supply portfolio including gas supply purchases and acquisition
7 of transportation capacity.

8

9 **OPERATIONAL PLANNING OBJECTIVES AND STRATEGY**

10 Q. What is MichCon's principal objective in formulating its operational plan?

11 A. MichCon's objective is to provide reliable supplies to its GCR sales customers
12 using storage and flowing supply. This market consists primarily of residential
13 and small commercial customers who have limited short-term supply
14 alternatives if their gas supply is interrupted.

15

16 Q. What data was used to develop the operating plan?

17 A. MichCon develops its operating plan from four primary sources. These
18 sources are: 1) market requirements as supported by Mr. Chapel, 2) peak
19 winter day and normal day flowing supply, 3) minimum winter storage balances
20 developed in conjunction with our peak day operations, and 4) colder-than-
21 normal exposure. I support the last three sources of data.

22

23 **MONTHLY FLOWING SUPPLY**

24 Q. What is MichCon's monthly flowing gas supply purchase pattern?

25 A. MichCon is planning to purchase flowing supplies for the plan period of April
26 2006 through March of 2007 and for the four subsequent operating years

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through March 2011 of 1/365th +/- 10% per day of the total annual GCR customer projected usage based on normal weather. MichCon's Gas Customer Choice (GCC) program suppliers' delivery requirements are calculated utilizing this same flowing supply parameter. Variations in customer demand will result in differences from the daily flowing supply and will be absorbed by the Company's storage field operations.

Q. Are there specific supply parameters for the GCC program?

A. Yes. Each month, based on a supplier's enrollment of customers, MichCon will provide the suppliers with a daily flow volume that identifies the daily delivery requirement using the 1/365th +/- 10% of total normal weather annual GCC customer usage. Deliveries to the customer continue to be MichCon's responsibility. Operationally, MichCon will operate and deliver gas to the GCC customers as if they were MichCon sales customers.

Q. Why is MichCon purchasing flowing supplies at 1/365th of normal weather total annual customer usage +/- 10% per day?

A. MichCon uses this purchase pattern to mitigate uncertainty resulting from the GCC program. With the GCC program, GCR customers may choose a supplier other than the utility to provide their gas. The timing and number of customers who change suppliers each month results in uncertainty regarding the amount of the remaining GCR customers' requirements. Because of this uncertainty, MichCon has planned its system operation on a total market basis, allocating supply each month based on the actual number of GCR and GCC customers.

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1 **Q. How does MichCon manage its supply strategy in conjunction with the**
2 **GCC program?**

3 A. MichCon's 1/365th planning strategy minimizes the risk of MichCon being short
4 supply or purchasing unnecessary gas supply. Each month MichCon plans to
5 purchase daily supply equaling approximately 1/365th of the company's total
6 annual sales market requirements. These daily volumes will be adjusted up or
7 down generally within the 10% parameters depending upon weather, GCC
8 volumes and other operational factors. MichCon continuously monitors the
9 number of customers moving to the GCC program and back to GCR sales and
10 the associated flow requirement to adjust its final monthly purchases to reflect
11 the remainder of 1/365th +/- 10 % of the total annual sales market. This allows
12 MichCon to maintain sufficient daily winter flowing supply to meet the needs of
13 its customers and a sufficient daily summer flowing supply to meet the volume
14 requirements to fill storage.

15

16 **Q. Does MichCon have planned storage balances for GCR and GCC**
17 **customers?**

18 A. Yes. MichCon plans for certain storage balances on October 31 and
19 December 31 of each year because these targeted storage levels in addition to
20 the 1/365th +/- 10% flowing supply allow MichCon to meet normal winter market
21 requirements and maintain planned minimum storage balances plus the 10 Bcf
22 of colder than normal protection (CTNP). Total gas in storage at October 31
23 and December 31 for both GCC and GCR customers is planned at
24 approximately 84 BCF and 63 BCF respectively, regardless of the mix between
25 GCR and GCC. These balances are lower than the planned balances
26 projected in last year's Plan Case. The reduction of total storage utilization by

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1 Rate Schedule customers is a result of the forecast of lower total market
2 requirements as presented in Mr. Chapel's testimony.

3

4 **PEAK DAY AND MINIMUM STORAGE BALANCES**

5 **Q. What flowing supplies will MichCon need to meet projected peak day**
6 **requirements?**

7 A. MichCon projects it will purchase approximately 440 MMcf/d for January 2006
8 through March 2007 to satisfy the projected winter requirements. Exhibit A-14
9 (BJG-1, line 1) shows that 60 MMcf/d flowing supply will be delivered for the
10 accounts of GCC customers by their suppliers (line 3). Total normal supplies
11 on line 4 are lower than the previous Plan case due to reduced normal weather
12 markets. I have also assumed that a minimum of approximately 330 MMcf/d
13 for January will be delivered for EUT customers (line 11). The peak day plan
14 also reflects a total of 72 MMcf/d to flow incrementally for colder-than-normal
15 (CTN) weather. This volume includes a minimum flow of approximately 66
16 MMcf/d of MichCon incremental purchases and 6 MMcf/d of incremental GCC
17 supplier volumes. Incremental purchases will be made if the 10 Bcf of stored
18 CTNP is close to being depleted. The delivery amount will be dependent upon
19 the actual timing and severity of the cold weather. CTNP is discussed later in
20 my testimony. The remainder of the gas supply to serve January through
21 March peak days will come from MichCon's storage (Refer to Exhibit A-14
22 (BJG-1, line 19).

23

24 **Q Will storage be utilized to satisfy peak day requirements?**

25 A. Yes. Approximately 67% of MichCon's supply on a January 2007 peak day will
26 be provided from storage. Deliveries out of storage include deliveries to GCR,

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1 GCC, EUT, and storage-service customers, including Exelon.

2

3 **COLDER-THAN-NORMAL PROTECTION**

4 **Q. What is a colder-than-normal protection (CTNP) volume?**

5 A. CTNP is a calculated volume of gas that allows MichCon to maintain the
6 minimum storage balances identified in Exhibit A-15 (BJG-2) line 7 should
7 colder-than-normal weather persist over a sustained period of time. The
8 CTNP volume consists of storage gas and if necessary, incremental
9 purchases.

10

11 **Q. How is the colder-than-normal exposure calculated?**

12 A. The total colder-than-normal exposure volume for all sales customers including
13 GCC and GCR customers is 18 Bcf. This volume was calculated using the
14 total Heating Degree Days (HDD) experienced for the coldest November
15 through March winter period since 1951. This extreme cold weather occurred
16 during the 1977-78 winter season. These accumulated HDD's were then
17 applied to heating factors to calculate a normalized winter distribution of
18 incremental sendout volumes if such weather were to occur now. The monthly
19 pattern of occurrence of the 18 Bcf of colder-than-normal exposure was
20 developed based on a combination of actual weather patterns experienced.
21 Using this colder-than-normal weather pattern to adjust the normalized winter
22 distribution of incremental sendout volumes assures that MichCon will maintain
23 the planned minimum storage balances identified in Exhibit A-15 (BJG-2) for
24 January, February and March under various weather scenarios. Please refer
25 to Exhibit A-16 (BJG-3) for the colder-than-normal plan for the OPY ending
26 March 2007.

Line
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1 **Q. How is the level of CTNP volume supplied?**

2 A. The CTNP volume consists of storage gas and increased flowing winter supply
3 to meet the maximum winter exposure of 18 Bcf. For the plan winter of 2006-
4 2007, and each winter for the remaining years in the Plan Case, MichCon will
5 enter into the winter season with 10 Bcf of storage gas for CTNP. As
6 previously discussed, if the 10 Bcf of storage CTNP is close to being depleted,
7 additional CTNP will be obtained with incremental winter purchases. Timing of
8 the incremental purchases will depend upon the severity of the winter season
9 and at what point in time the cold weather is actually experienced. The
10 colder-than-normal plan for the OPY ending March 2007 is shown on Exhibit
11 A-16 (BJG-3).

12

13 **Q. What are MichCon's planned colder- than- normal storage balances?**

14 A. Exhibit A-15 (BJG-2) reflects the amount, including storage service and other
15 third party storage volumes, of MichCon's planned total storage balances for
16 the colder than normal weather exposure identified in Exhibit A-16 (BJG-3).
17 The third party storage balances identified in Exhibit A-15 (BJG-2) at the end
18 of January, February and March are developed based on contractual
19 limitations and historical patterns. The mix of the volumes of MichCon and
20 third party customers' gas is constantly adjusted in response to weather and
21 third party activity. In any event, the designed minimum storage balances will
22 be maintained in order to provide the necessary peak day flowing storage
23 deliveries. The minimum total balance as shown in Exhibit A-15 (BJG-2), line
24 7, for January, February and March, is required to meet the peak day
25 deliveries.

Line
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1 Q. Is this CTNP plan methodology the same as presented in past year GCR
2 plans?

3 A. Yes. This is the same methodology that was presented in prior Plan Cases. A
4 specific CTNP balance in storage was maintained through incremental
5 purchases of supply in order to maintain the necessary minimum storage
6 balances and the associated storage deliverability.

7

8 **NORMAL WEATHER OPERATING PLAN**

9 Q. What is the monthly supply volume that MichCon plans to purchase
10 under normal weather conditions?

11 A. Please refer to the normal weather operating plan set forth on Exhibit A-17
12 (BJG-4). The planned volumes are generally consistent with 1/365th +/- 10 %
13 of the projected annual GCR requirements with the exception of the month of
14 November. This month is slightly modified to permit operational flexibility
15 necessary for compression maintenance and storage field maximum capacity
16 limitations.

17

18 **WARMER-THAN-NORMAL WEATHER OPERATING PLAN**

19 Q. What is MichCon's plan if warmer-than-normal weather occurs during the
20 winter of 2005-06?

21 A. As illustrated in Exhibit A-18 (BJG-5), during warmer-than-normal conditions,
22 MichCon would reduce summer supply (column H) in accordance with the
23 1/365th +/- 10 % GCC limits. If, as the winter progresses, warmer-than-normal
24 weather continues, MichCon will reduce flowing supply. The amount of
25 MichCon flowing supply reduction will be dependent on many factors such as
26 past weather patterns, MichCon storage balances, third party storage balances

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1 and third party flowing supply. Prior to any reduction in flowing supply,
2 MichCon will evaluate the above factors to determine if a reduction will result in
3 sufficient supply to meet peak day demand, in the event one occurs.
4 Depending on the timing of the warm weather and the associated reduction to
5 supply, a volume of gas associated with the weather variation could remain in
6 storage.

7
8 **Q. Have there been any changes to operations since MichCon's 2005/06**
9 **GCR Plan Case?**

10 A. Yes. First, Great Lakes Gas Transmission completed construction of the
11 Sagola gate station in November 2005. Construction of this station provides
12 MichCon with improved operational flexibility to serve western upper peninsula
13 markets and provides for added protection in the event of an outage. Second,
14 in response to the market growth in the Grand Rapids area and corresponding
15 increased peak day requirements, MichCon has negotiated an additional 100
16 MDth/day of ANR capacity starting November 1, 2007, increasing up to 200
17 MDth/day beginning November 1, 2017.

18
19 **Q. What are the operational benefits of the additional ANR transportation**
20 **capacity to the Grand Rapids area?**

21 Operationally, this increase in transportation capacity to the Grand Rapids
22 area of 100 MDth/day up to 200 MDth/day will allow MichCon to continue to
23 serve the growth in that area with integrated system supply. If future growth,
24 as forecast by Mr. Chapel, continues in the Grand Rapids area, MichCon will
25 be positioned to meet those increased peak day requirements with the
26 additional 100 MDth/day to 200 MDth/d of ANR capacity. In addition, the new

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1 contract guarantees MichCon a higher minimum delivery pressure level than
2 previously contracted. This pressure guarantee provides MichCon the ability
3 to serve specific growth, both current and future, on a peak day in the Grand
4 Rapids area. Without this higher minimum delivery pressure level guarantee,
5 MichCon might not be able to serve certain Grand Rapids markets on peak
6 day. These contract changes are identified in more detail in Mr. Chapel's
7 testimony.

8

9 **FUTURE OUTLOOK**

10 **Q. Will MichCon's Operational Plan change during the plan period?**

11 A. Yes. During the GCR year, factors influencing MichCon's operations are
12 continually changing. Such factors may include changes in weather, GCC
13 migration, customer usage, supply liquidity, natural gas pricing, and changes in
14 operations due to facility enhancements or constraints. Therefore, MichCon
15 will continue to refine its operational plan based on current and projected
16 market and operational conditions.

17

18 **Q. Does this conclude your testimony?**

19 A. Yes, it does.

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the Application of)
MICHIGAN CONSOLIDATED GAS COMPANY)
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5-year Forecast and Monthly GCR Factor)
for the period of April 2006-March 2007)

Case No. U-14717

EXHIBITS
OF
BARBARA J. GOODWIN

CASE NO.: U - 14717
WITNESS: B.J. GOODWIN
EXHIBIT NO.: A -14 (BJG - 1)
PAGE NO.: 1 OF 1

MICHIGAN CONSOLIDATED GAS COMPANY
2006/07 PEAK DAY SUPPLY MIX

Volumes in MMcfd

LINE NBR.	PEAK DAY SUPPLY (Col A)	END OF MONTH PEAK DAY REQUIREMENTS		
		JANUARY (Col B)	FEBRUARY (Col C)	MARCH (Col D)
1	TOTAL MICHCON PURCHASES	440	440	440
2	<u>CUSTOMER CHOICE</u>			
3	Various Receipt Points	60	60	60
4	TOTAL NORMAL SUPPLIES	500	500	500
5				
6	MichCon CTN	66	66	66
7	Customer Choice CTN	6	6	6
	TOTAL FLOWING SUPPLIES			
8	(1/365 th + 10%)	572	572	572
9				
10	<u>EUT RECEIPTS</u>			
11	Various Receipt Points	330	330	300
12				
13	TOTAL SUPPLY	902	902	872
14				
15				
16	<u>STORAGE WITHDRAWALS</u>			
17	Total Storage Withdrawal	2,145	1,814	1,598
18	Less Storage Service	300	170	150
19	MichCon Storage Withdrawal	1,845	1,644	1,448
20				
21	Total Peak Day Supply	2,747	2,546	2,320
22				
23	Total Peak Day Requirements	2,741	2,542	2,320
24				
25	Unallocated Supply	6	4	0
26				
27	Design Temperatures (Detroit)	-4 oF	4 oF	14 oF

CASE NO.:	<u>U - 14717</u>
WITNESS:	<u>B.J. GOODWIN</u>
EXHIBIT NO.:	<u>A-15 (BJG - 2)</u>
PAGE NO.:	<u>1 of 1</u>

MICHIGAN CONSOLIDATED GAS COMPANY
APRIL 2006 - MARCH 2007 GCR PLAN

COLDER THAN NORMAL STORAGE BALANCES

<u>Line Nbr.</u>	PLANNED ACTIVITY (Col A)	<u>JANUARY</u> (Col B)	<u>FEBRUARY</u> (Col C)	<u>MARCH</u> (Col D)
	<u>2007</u>			
1	MICHCON GCR PLANNED CTN BALANCE	33	18	12
2	GAS CUSTOMER CHOICE	<u>3</u>	<u>2</u>	<u>1</u>
3	MICHCON COLDER THAN NORMAL PLANNED MINIMUM BALANCE (Line 1 + line 2)	36	20	12
4	STORAGE SERVICE BALANCE	6	1	0
5	END USER TRANSPORTATION BALANCE	<u>7</u>	<u>4</u>	<u>1</u>
6	TOTAL PROJECTED STORAGE BALANCE (line 3+line 4+line 5)	49	25	13
7	MINIMUM TOTAL BALANCE	35	25	13

MICHIGAN CONSOLIDATED GAS COMPANY

APRIL 2006 - MARCH 2007 GCR PLAN

COLDER THAN NORMAL WEATHER SOURCE AND DISPOSITION

All volumes in Mmcf except where indicated otherwise.

Line Nbr.	YEAR/ MONTH	GAS			TOTAL GCC &	MICHCON SUPPLY	GCC SUPPLY	Total System Supply	CTN Volumes Purchased	GAS IN KIND	TOTAL SUPPLY	MICHCON STORAGE		GAS CUSTOMER CHOICE		GCR AND GCC TOTAL	
		MICHCON SENDOUT	CUSTOMER CHOICE SENDOUT	CTN VOLUMES	GCR SENDOUT (no weather adjustments)							To/(From)	Balance	To/(From)	Balance	To/(From)	Balance
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)
1													11,585		715		12,300
2	2006 APRIL	13,033	1,586		14,619	13,783	1,851	15,633	1,500	336	17,469	2,585	14,170	264	979	2,849	15,149
3	MAY	6,704	835		7,539	14,244	1,912	16,156	1,500	378	18,034	9,418	23,588	1,077	2,056	10,495	25,644
4	JUNE	4,214	527		4,741	13,952	1,682	15,634	1,500	413	17,547	11,651	35,239	1,155	3,212	12,806	38,450
5	JULY	3,392	409		3,801	14,418	1,738	16,156	1,500	417	18,073	12,943	48,182	1,329	4,541	14,272	52,723
6	AUGUST	3,541	431		3,971	14,418	1,738	16,156	1,500	412	18,068	12,789	60,971	1,308	5,849	14,097	66,819
7	SEPTEMBER	5,084	576		5,659	13,952	1,682	15,634	1,500	373	17,507	10,741	71,712	1,107	6,956	11,848	78,667
8	OCTOBER	11,339	1,345		12,685	14,418	1,738	16,156	1,500	362	18,018	4,940	76,652	393	7,349	5,333	84,000
9	NOVEMBER	18,656	2,116	1,000	20,771	12,563	1,514	14,077	0	324	14,401	(6,769)	69,883	(601)	6,747	(7,370)	76,630
10	DECEMBER	27,090	3,215	2,500	30,305	13,772	1,565	15,337	0	338	15,675	(15,480)	54,403	(1,650)	5,097	(17,130)	59,499
11	2007 JANUARY	30,694	3,597	7,500	34,291	13,620	1,738	15,358	2,500	651	18,510	(21,423)	32,980	(1,859)	3,238	(23,282)	36,218
12	FEBRUARY	25,622	3,146	4,500	28,768	12,308	1,570	13,878	2,500	558	16,937	(14,755)	18,225	(1,576)	1,663	(16,331)	19,887
13	MARCH	20,766	2,686	2,500	23,452	13,637	1,738	15,375	2,500	491	18,366	(6,639)	11,586	(948)	715	(7,587)	12,300
	2006-07 OPY																
14	Total	170,134	20,469	18,000	190,603	165,082	20,469	185,551	18,000	5,054	208,605	1		0		1	

MICHIGAN CONSOLIDATED GAS COMPANY

April 2006 - March 2011 GCR Plan

NORMAL WEATHER SOURCE AND DISPOSITION

All volumes in Mmcf except where indicated otherwise.

<u>Line Nbr.</u>	<u>Year MONTH</u>	<u>MichCon Markets</u>	<u>Company Use Lost (Found) Gas</u>	<u>MichCon Sendout</u>	<u>Gas Customer Choice Markets</u>	<u>Total GCR & GCC Markets</u>	<u>MichCon Supply</u>	<u>GCC Supply</u>	<u>Total System Supply</u>	<u>Gas In Kind</u>	<u>Total Supply</u>
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1	<u>2006</u> APRIL	12,566	467	13,033	1,586	14,619	13,783	1,851	15,633	336	15,969
2	MAY	6,613	91	6,704	835	7,539	14,244	1,912	16,156	378	16,534
3	JUNE	4,176	38	4,214	527	4,741	13,952	1,682	15,634	413	16,047
4	JULY	3,241	150	3,392	409	3,801	14,418	1,738	16,156	417	16,573
5	AUGUST	3,411	130	3,541	431	3,971	14,418	1,738	16,156	412	16,568
6	SEPTEMBER	4,553	531	5,084	576	5,659	13,952	1,682	15,634	373	16,007
7	OCTOBER	10,650	689	11,339	1,345	12,685	14,418	1,738	16,156	362	16,518
8	NOVEMBER	16,745	1,911	18,656	2,116	20,771	12,563	1,514	14,077	324	14,401
9	DECEMBER	25,451	1,639	27,090	3,215	30,305	13,772	1,565	15,337	338	15,675
10	<u>2007</u> JANUARY	28,478	2,216	30,694	3,597	34,291	13,620	1,738	15,358	651	16,010
11	FEBRUARY	24,909	712	25,622	3,146	28,768	12,308	1,570	13,878	558	14,437
12	MARCH	21,268	(501)	20,766	2,686	23,452	13,637	1,738	15,375	491	15,866
13	<u>2006-07</u> OPY Total	162,062	8,072	170,134	20,469	190,603	165,082	20,469	185,551	5,054	190,605

MICHIGAN CONSOLIDATED GAS COMPANY
April 2006 - March 2011 GCR Plan
NORMAL WEATHER SOURCE AND DISPOSITION

All volumes in Mmcf except where indicated otherwise.

<u>Line Nbr.</u>	Year MONTH	MichCon Markets	Company Use Lost (Found) Gas	MichCon Sendout	Gas Customer Choice Markets	Total GCR & GCC Markets	MichCon Supply	GCC Supply	Total System Supply	Gas In Kind	Total Supply
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1	<u>2007</u> APRIL	12,512	423	12,934	1,580	14,514	13,746	1,851	15,597	329	15,926
2	MAY	6,547	90	6,637	827	7,464	14,204	1,913	16,116	362	16,478
3	JUNE	4,189	46	4,235	529	4,764	13,919	1,678	15,597	402	15,999
4	JULY	3,251	157	3,408	410	3,818	14,383	1,734	16,117	412	16,529
5	AUGUST	3,422	141	3,562	432	3,994	14,383	1,734	16,117	400	16,517
6	SEPTEMBER	4,483	503	4,986	567	5,553	13,919	1,678	15,597	365	15,962
7	OCTOBER	10,591	636	11,227	1,339	12,566	14,384	1,734	16,118	347	16,465
8	NOVEMBER	16,697	1,733	18,429	2,111	20,540	12,539	1,510	14,049	277	14,326
9	DECEMBER	25,502	1,469	26,971	3,224	30,195	13,556	1,562	15,118	291	15,409
10	<u>2008</u> JANUARY	28,531	1,980	30,511	3,608	34,119	13,422	1,734	15,156	639	15,795
11	FEBRUARY	24,957	619	25,576	3,155	28,731	12,590	1,622	14,212	545	14,757
12	MARCH	21,312	(480)	20,832	2,694	23,526	13,418	1,735	15,153	471	15,624
13	<u>2007-08</u> OPY Total	161,992	7,317	169,309	20,476	189,785	164,460	20,488	184,948	4,839	189,787

MICHIGAN CONSOLIDATED GAS COMPANY
April 2006 - March 2011 GCR Plan
NORMAL WEATHER SOURCE AND DISPOSITION

All volumes in Mmcf except where indicated otherwise.

<u>Line Nbr.</u>	Year MONTH	MichCon Markets	Company Use Lost (Found) Gas	MichCon Sendout	Gas Customer Choice Markets	Total GCR & GCC Markets	MichCon Supply	GCC Supply	Total System Supply	Gas In Kind	Total Supply
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1	<u>2008</u> APRIL	12,541	391	12,931	1,586	14,517	13,743	1,856	15,599	333	15,932
2	MAY	6,565	90	6,655	830	7,485	14,201	1,918	16,119	370	16,489
3	JUNE	4,201	55	4,256	530	4,786	13,911	1,688	15,598	408	16,006
4	JULY	3,261	164	3,424	411	3,835	14,375	1,744	16,119	417	16,536
5	AUGUST	3,432	152	3,583	433	4,016	14,375	1,744	16,119	405	16,524
6	SEPTEMBER	4,497	475	4,972	568	5,540	13,911	1,688	15,598	370	15,969
7	OCTOBER	10,615	591	11,206	1,342	12,548	14,373	1,744	16,117	355	16,471
8	NOVEMBER	16,732	1,584	18,317	2,117	20,434	12,581	1,519	14,100	285	14,385
9	DECEMBER	25,560	1,352	26,913	3,233	30,146	13,321	1,570	14,891	304	15,194
10	<u>2009</u> JANUARY	28,594	1,980	30,574	3,617	34,191	13,637	1,744	15,381	635	16,016
11	FEBRUARY	25,016	619	25,635	3,164	28,799	12,369	1,575	13,944	541	14,485
12	MARCH	21,365	(480)	20,884	2,701	23,585	13,664	1,744	15,408	466	15,874
13	<u>2008-09</u> OPY Total	162,379	6,972	169,351	20,532	189,883	164,459	20,533	184,992	4,889	189,881

MICHIGAN CONSOLIDATED GAS COMPANY
April 2006 - March 2011 GCR Plan
NORMAL WEATHER SOURCE AND DISPOSITION

All volumes in Mmcf except where indicated otherwise.

<u>Line Nbr.</u>	<u>Year MONTH</u>	<u>MichCon Markets</u>	<u>Company Use Lost (Found) Gas</u>	<u>MichCon Sendout</u>	<u>Gas Customer Choice Markets</u>	<u>Total GCR & GCC Markets</u>	<u>MichCon Supply</u>	<u>GCC Supply</u>	<u>Total System Supply</u>	<u>Gas In Kind</u>	<u>Total Supply</u>
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1	<u>2009</u> APRIL	12,575	391	12,966	1,590	14,556	13,761	1,862	15,623	329	15,952
2	MAY	6,586	90	6,676	832	7,508	14,220	1,924	16,144	366	16,510
3	JUNE	4,215	55	4,270	531	4,801	13,930	1,693	15,623	404	16,027
4	JULY	3,271	164	3,434	412	3,846	14,395	1,749	16,144	413	16,557
5	AUGUST	3,443	152	3,594	434	4,028	14,395	1,749	16,144	401	16,546
6	SEPTEMBER	4,512	475	4,987	570	5,557	13,930	1,693	15,623	366	15,989
7	OCTOBER	10,645	591	11,235	1,346	12,581	14,395	1,749	16,144	351	16,495
8	NOVEMBER	16,776	1,584	18,360	2,124	20,484	12,585	1,523	14,108	281	14,389
9	DECEMBER	25,622	1,352	26,975	3,242	30,217	13,437	1,575	15,012	300	15,312
10	<u>2010</u> JANUARY	28,664	1,980	30,645	3,627	34,272	13,715	1,749	15,464	635	16,099
11	FEBRUARY	25,083	619	25,701	3,173	28,874	12,484	1,580	14,064	541	14,605
12	MARCH	21,425	(480)	20,945	2,710	23,655	13,681	1,750	15,431	466	15,897
13	<u>2009-10</u> OPY Total	162,816	6,972	169,788	20,591	190,379	164,931	20,594	185,525	4,852	190,378

MICHIGAN CONSOLIDATED GAS COMPANY

April 2006 - March 2011 GCR Plan

NORMAL WEATHER SOURCE AND DISPOSITION

All volumes in Mmcf except where indicated otherwise.

<u>Line Nbr.</u>	<u>Year MONTH</u>	<u>MichCon Markets</u>	<u>Company Use Lost (Found) Gas</u>	<u>MichCon Sendout</u>	<u>Gas Customer Choice Markets</u>	<u>Total GCR & GCC Markets</u>	<u>MichCon Supply</u>	<u>GCC Supply</u>	<u>Total System Supply</u>	<u>Gas In Kind</u>	<u>Total Supply</u>
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
1	<u>2010</u> APRIL	12,612	391	13,003	1,595	14,598	13,779	1,865	15,644	329	15,972
2	MAY	6,607	90	6,697	835	7,532	14,240	1,927	16,167	366	16,532
3	JUNE	4,229	55	4,283	533	4,816	13,949	1,695	15,644	404	16,048
4	JULY	3,281	164	3,445	413	3,858	14,415	1,752	16,167	413	16,580
5	AUGUST	3,454	152	3,606	435	4,041	14,415	1,752	16,167	404	16,571
6	SEPTEMBER	4,528	475	5,003	572	5,575	13,949	1,695	15,644	369	16,013
7	OCTOBER	10,676	591	11,267	1,350	12,617	14,416	1,752	16,168	351	16,519
8	NOVEMBER	16,823	1,584	18,407	2,129	20,536	12,512	1,526	14,038	281	14,319
9	DECEMBER	25,691	1,352	27,043	3,252	30,295	13,636	1,576	15,212	300	15,513
10	<u>2011</u> JANUARY	28,664	1,980	30,645	3,627	34,272	13,696	1,752	15,448	635	16,083
11	FEBRUARY	25,083	619	25,701	3,173	28,874	12,457	1,582	14,039	541	14,580
12	MARCH	21,425	(480)	20,945	2,710	23,655	13,719	1,753	15,472	466	15,938
13	<u>2010-11</u> OPY Total	163,073	6,972	170,045	20,624	190,669	165,183	20,625	185,808	4,860	190,668

MICHIGAN CONSOLIDATED GAS COMPANY

April 2006 - March 2011 GCR Plan

NORMAL WEATHER SOURCE AND DISPOSITION

All volumes in Mmcft except where indicated otherwise.

<u>Line Nbr.</u>	Year Month	MichCon Storage		Gas Customer Choice Storage		GCR and GCC Storage	
		To/(From) (A)	Balance (B)	To/(From) (C)	Balance (D)	To/(From) (E)	Balance (F)
1			22,085		716		22,800
2	<u>2006</u> APRIL	1,086	23,171	264	980	1,350	24,150
3	MAY	7,918	31,089	1,077	2,057	8,995	33,145
4	JUNE	10,151	41,240	1,155	3,213	11,306	44,451
5	JULY	11,443	52,683	1,329	4,542	12,772	57,223
6	AUGUST	11,288	63,971	1,308	5,850	12,596	69,819
7	SEPTEMBER	9,240	73,211	1,107	6,957	10,347	80,166
8	OCTOBER	3,441	76,652	393	7,350	3,834	84,000
9	NOVEMBER	(5,769)	70,883	(601)	6,748	(6,370)	77,630
10	DECEMBER	(12,980)	57,903	(1,650)	5,098	(14,630)	63,000
11	<u>2007</u> JANUARY	(16,423)	41,480	(1,859)	3,239	(18,282)	44,718
12	FEBRUARY	(12,756)	28,724	(1,576)	1,664	(14,332)	30,386
13	MARCH	(6,638)	22,086	(948)	716	(7,586)	22,800
14	<u>2006-07</u> OPY Total	1		0		0	

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MICHIGAN CONSOLIDATED GAS COMPANY
April 2006 - March 2011 GCR Plan
NORMAL WEATHER SOURCE AND DISPOSITION

All volumes in Mmcf except where indicated otherwise.

Year Month		MichCon Storage		Gas Customer Choice Storage		GCR and GCC Storage	
		To/(From)	Balance	To/(From)	Balance	To/(From)	Balance
		(A)	(B)	(C)	(D)	(E)	(F)
1	<u>2007</u> APRIL	1,141	23,227	271	987	1,412	24,212
2	MAY	7,928	31,155	1,086	2,073	9,014	33,226
3	JUNE	10,086	41,241	1,149	3,223	11,235	44,461
4	JULY	11,386	52,627	1,324	4,547	12,710	57,171
5	AUGUST	11,221	63,848	1,302	5,849	12,523	69,694
6	SEPTEMBER	9,297	73,145	1,111	6,960	10,408	80,102
7	OCTOBER	3,503	76,648	395	7,356	3,898	84,000
8	NOVEMBER	(5,613)	71,035	(601)	6,755	(6,214)	77,786
9	DECEMBER	(13,124)	57,911	(1,662)	5,093	(14,786)	63,000
10	<u>2008</u> JANUARY	(16,450)	41,461	(1,874)	3,219	(18,324)	44,676
11	FEBRUARY	(12,441)	29,020	(1,533)	1,687	(13,974)	30,702
12	MARCH	(6,943)	22,077	(959)	728	(7,902)	22,800
13	<u>2007-08</u> OPY Total	(9)		12		0	

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MICHIGAN CONSOLIDATED GAS COMPANY
April 2006 - March 2011 GCR Plan
NORMAL WEATHER SOURCE AND DISPOSITION

All volumes in Mmcf except where indicated otherwise.

<u>Line Nbr.</u>	Year Month	MichCon Storage		Gas Customer Choice Storage		GCR and GCC Storage	
		To/(From)	Balance	To/(From)	Balance	To/(From)	Balance
		(A)	(B)	(C)	(D)	(E)	(F)
1	<u>2008</u> APRIL	1,145	23,222	270	998	1,415	24,215
2	MAY	7,915	31,137	1,088	2,087	9,003	33,218
3	JUNE	10,062	41,199	1,158	3,244	11,220	44,438
4	JULY	11,368	52,567	1,333	4,577	12,701	57,139
5	AUGUST	11,197	63,764	1,311	5,888	12,508	69,647
6	SEPTEMBER	9,309	73,073	1,120	7,008	10,429	80,076
7	OCTOBER	3,522	76,595	402	7,410	3,924	84,000
8	NOVEMBER	(5,451)	71,144	(598)	6,812	(6,049)	77,951
9	DECEMBER	(13,288)	57,856	(1,663)	5,148	(14,951)	63,000
10	<u>2009</u> JANUARY	(16,302)	41,554	(1,873)	3,275	(18,175)	44,825
11	FEBRUARY	(12,725)	28,829	(1,589)	1,686	(14,314)	30,511
12	MARCH	(6,754)	22,075	(957)	729	(7,711)	22,800
13	<u>2008-09</u> OPY Total	(2)		1		0	

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MICHIGAN CONSOLIDATED GAS COMPANY
April 2006 - March 2011 GCR Plan
NORMAL WEATHER SOURCE AND DISPOSITION

All volumes in Mmcf except where indicated otherwise.

<u>Line Nbr.</u>	Year Month	MichCon Storage		Gas Customer Choice Storage		GCR and GCC Storage	
		To/(From)	Balance	To/(From)	Balance	To/(From)	Balance
		(A)	(B)	(C)	(D)	(E)	(F)
1	<u>2009</u> APRIL	1,124	23,199	272	1,001	1,396	24,196
2	MAY	7,910	31,109	1,092	2,093	9,002	33,198
3	JUNE	10,064	41,173	1,162	3,254	11,226	44,424
4	JULY	11,374	52,547	1,337	4,591	12,711	57,135
5	AUGUST	11,203	63,750	1,315	5,906	12,518	69,653
6	SEPTEMBER	9,310	73,060	1,123	7,029	10,433	80,086
7	OCTOBER	3,511	76,571	403	7,432	3,914	84,000
8	NOVEMBER	(5,494)	71,077	(601)	6,831	(6,095)	77,905
9	DECEMBER	(13,238)	57,839	(1,667)	5,164	(14,905)	63,000
10	<u>2010</u> JANUARY	(16,295)	41,544	(1,878)	3,286	(18,173)	44,827
11	FEBRUARY	(12,676)	28,868	(1,593)	1,692	(14,269)	30,558
12	MARCH	(6,798)	22,070	(960)	732	(7,758)	22,800
13	<u>2009-10</u> OPY Total	(5)		3		0	

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MICHIGAN CONSOLIDATED GAS COMPANY

April 2006 - March 2011 GCR Plan

NORMAL WEATHER SOURCE AND DISPOSITION

All volumes in Mmcf except where indicated otherwise.

<u>Line Nbr.</u>	Year Month	MichCon Storage		Gas Customer Choice Storage		GCR and GCC Storage	
		To/(From)	Balance	To/(From)	Balance	To/(From)	Balance
		(A)	(B)	(C)	(D)	(E)	(F)
1	<u>2010</u> APRIL	1,105	23,175	270	1,002	1,375	24,175
2	MAY	7,909	31,084	1,092	2,094	9,001	33,176
3	JUNE	10,070	41,154	1,162	3,256	11,232	44,408
4	JULY	11,383	52,537	1,339	4,595	12,722	57,130
5	AUGUST	11,213	63,750	1,317	5,911	12,530	69,660
6	SEPTEMBER	9,315	73,065	1,123	7,034	10,438	80,098
7	OCTOBER	3,500	76,565	402	7,436	3,902	84,000
8	NOVEMBER	(5,614)	70,951	(603)	6,833	(6,217)	77,783
9	DECEMBER	(13,107)	57,844	(1,676)	5,157	(14,783)	63,000
10	<u>2011</u> JANUARY	(16,314)	41,530	(1,875)	3,282	(18,189)	44,811
11	FEBRUARY	(12,703)	28,827	(1,591)	1,691	(14,294)	30,517
12	MARCH	(6,760)	22,067	(957)	734	(7,717)	22,800
13	<u>2010-11</u> OPY Total	(3)		1		0	

MICHIGAN CONSOLIDATED GAS COMPANY

APRIL 2006 - MARCH 2007 GCR PLAN

WARMER THAN NORMAL WEATHER SOURCE AND DISPOSITION

All volumes in Mmcf except where indicated otherwise.

Line Nbr.	YEAR/ MONTH	MICHCON SENDOUT	GAS CUSTOMER CHOICE SENDOUT	WTN VOLUMES	TOTAL GCC & GCR SENDOUT with NO weather adjustments	MICHCON SUPPLY	GCC SUPPLY	Total System Supply	WTN PURCHASE VOLUMES	GAS IN KIND	TOTAL SUPPLY	MICHCON STORAGE To/(From)	Balance (M)	GAS CUSTOMER CHOICE To/(From)	Balance (O)	GCR AND GCC TOTAL STORAGE To/(From)	Balance (Q)
		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)
1																	36,900
2	2006 APRIL	13,033	1,586	(1,500)	14,619	13,783	1,851	15,633	(2,600)	336	13,369	(14)	36,172	264	980	250	37,150
3	MAY	6,704	835	0	7,539	14,244	1,912	16,156	(2,600)	378	13,934	5,318	41,490	1,077	2,057	6,395	43,545
4	JUNE	4,214	527	0	4,741	13,952	1,682	15,634	(2,600)	413	13,447	7,551	49,041	1,155	3,212	8,706	52,251
5	JULY	3,392	409	0	3,801	14,418	1,738	16,156	(2,600)	417	13,973	8,843	57,884	1,329	4,541	10,172	62,423
6	AUGUST	3,541	431	0	3,971	14,418	1,738	16,156	(2,600)	412	13,968	8,689	66,573	1,308	5,849	9,997	72,420
7	SEPTEMBER	5,084	576	0	5,659	13,952	1,682	15,634	(2,600)	373	13,407	6,640	73,213	1,107	6,956	7,747	80,167
8	OCTOBER	11,339	1,345	(500)	12,685	14,418	1,738	16,156	0	362	16,518	3,941	77,154	393	7,349	4,333	84,500
9	NOVEMBER	18,656	2,116	(1,000)	20,771	12,563	1,514	14,077	0	324	14,401	(4,769)	72,385	(601)	6,748	(5,370)	79,130
10	DECEMBER	27,090	3,215	(2,400)	30,305	13,772	1,565	15,337	0	338	15,675	(10,580)	61,805	(1,650)	5,098	(12,230)	66,900
10	2007 JANUARY	30,694	3,597	(6,200)	34,291	13,620	1,738	15,358	0	651	16,010	(10,223)	51,582	(1,859)	3,239	(12,082)	54,818
11	FEBRUARY	25,622	3,146	(4,600)	28,768	12,308	1,570	13,878	(300)	558	14,137	(8,455)	43,127	(1,576)	1,663	(10,031)	44,787
12	MARCH	20,766	2,686	(2,800)	23,452	13,637	1,738	15,375	(3,100)	491	12,766	(6,939)	36,188	(948)	715	(7,887)	36,900
	2006-07 OPY																
13	TOTAL	170,134	20,469	(19,000)	190,603	165,082	20,469	185,551	(19,000)	5,054	171,605	2		(1)		0	

Attachment #3

Fixed Price Program Settlement
MPSC Case No. U-14717
MichCon's GCR Plan Apr06-Mar07

1. Fixed Price Program for the Current 06-07 GCR Period:

- Filed Quartile Index method to remain in effect until next plan case filing in Dec06.
- MichCon will have volume target levels for **winter 06-07 flowing** supply locked in at fixed prices, where LTD means last trading day:
 - o 40% by the LTD of the Aug06 NYMEX contract
 - o 50% by October 15, 2006
- When MichCon locks-in fixed prices to achieve these targets for winter 06-07 flowing supply, MichCon will also lock-in fixed prices on a corresponding daily purchase quantity for any remaining months in the summer of 2006.
- The methods used by MichCon to make these fixed price purchases are within the management discretion of MichCon, subject to review (for reasonableness and prudence) in the reconciliation of the 06-07 GCR period.

2. Fixed Price Program for the 07-08 GCR Period:

- Filed Quartile Index method to remain in effect until next plan case filing in Dec06.
- MichCon will have volume target levels for Apr07-Mar08 flowing supply locked in at fixed prices as follows:
 - o 15-20% by December 1, 2006
 - o 25-30% by April 1, 2007
- MichCon will have volume target levels for **winter 07-08 flowing** supply locked in at fixed prices determined at MichCon's discretion as follows:
 - o 35-40% by July 1, 2007
 - o 50% by October 15, 2007
- Any price locks to meet these targets for winter 07-08 flowing supply will encompass all months remaining in the balance of the GCR period.
- The methods used by MichCon to make these fixed price purchases are within the management discretion of MichCon, subject to review (for reasonableness and prudence) in the reconciliation of the 07-08 GCR period.

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

Case No. U-14717

[illegible]

Estella R. Branson

ESTELLA R. BRANSON

Jennifer Evans

Notary Public

MPSC Case No. U-14717
PAPERLESS CASE - ELECTRONIC SERVICE ONLY
2006-2007 MichCon GCR PLAN
April 10, 2006

ADMINISTRATIVE LAW JUDGE

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