April 21, 2009

Ms. Mary Jo Kunkle  
Executive Secretary  
Michigan Public Service Commission  
6545 Mercantile Way  
Lansing, MI  48911

Dear Ms. Kunkle:

**RE: MPSC Case No. U-15701**

Enclosed for filing in the above-captioned case please find the *Direct Testimony and Exhibit of Ralph E. Miller on behalf of the Attorney General Michael A. Cox*, together with a proof of service. This filing is being submitted electronically pursuant to the Commission's Paperless Electronic Filings Program.

Sincerely,

Michael Moody  
2009.04.21  
16:15:27 -04'00'

Michael E. Moody (P51985)  
Assistant Attorney General  
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MEM/wjc  
Enclosures  
c: All Parties
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, 2010.

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PROOF OF SERVICE - U-15701

The undersigned certifies that a copy of the Direct Testimony and Exhibit of Ralph E. Miller on behalf of the Attorney General Michael A. Cox was served upon the parties listed below by mailing the same to them at their respective addresses with first class postage fully prepaid thereon on the 21st day of April, 2009.

____________________________________
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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 2009 – March 2010

____________________________________________/

Direct Testimony
of Ralph E. Miller

On behalf of
Attorney General Michael A. Cox

April 21, 2009
Qualifications

Q. PLEASE STATE YOUR NAME, OCCUPATION, AND ADDRESS.

A. My name is Ralph E. Miller. I am an independent consulting economist. My office is at 5502 Western Avenue, Chevy Chase, Maryland 20815.

Q. PLEASE SUMMARIZE YOUR PROFESSIONAL QUALIFICATIONS.

A. I am an economist specializing in the fields of utility regulation, industrial organization, and public policy towards business. I have more than thirty-five years of experience in public utility and related energy work, both as a consultant and in government. I am the author of several published reports and papers on public utility economics and energy matters, and I have testified in more than 30 different jurisdictions in a total of more than 300 public utility and other proceedings. I also have several additional years of experience in government and as a university teacher in antitrust, energy demand forecasting and supply analysis, and other areas of economics and energy.

Over the years, I have addressed almost all aspects of gas and electric utility regulation, including rate of return, accounting and revenue requirements, rate design and cost of service, electric fuel and purchased gas cost recovery, industry structure and the role of competition, incentive ratemaking and other types of innovative rate designs, gas and electric supply planning and power plant licensing, productivity and efficiency, and the determination of marginal, incremental, and avoidable costs.

Q. WHAT IS YOUR EMPLOYMENT EXPERIENCE?
A. I have been an independent consultant for more than twenty years. I also have ten years of experience as president or vice president of two different consulting firms specializing in public utility and energy matters. Before that, I spent three years in the federal government, where I was employed in positions at the Federal Power Commission (now the Federal Energy Regulatory Commission, or FERC), the Antitrust Division of the U.S. Department of Justice, and the Federal Energy Administration (now part of the U.S. Department of Energy, or DOE). I was on the faculty of the University of California for three years, where I taught economics courses at both the graduate and undergraduate levels.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

A. I did my undergraduate work at Harvard College, where I received the A. B. degree summa cum laude in mathematics in 1961, and I was elected to Phi Beta Kappa. I then went on to graduate work in economics at Harvard, where I received a Master's degree in 1963. I continued my graduate studies there until 1966, and I completed all of the course requirements for the Ph.D. degree, but not a doctoral dissertation.

Q. WHAT IS YOUR EXPERIENCE IN THE SPECIFIC AREA OF GAS SUPPLY PLANNING AND GAS COST RECOVERY?

A. I have 30 years of experience in this area. I have reviewed the gas supply planning and/or gas cost recovery arrangements of more than 15 gas distribution companies (GDCs) in numerous regulatory proceedings in seven states, and I have extensive experience in gas pipeline cases at the FERC.
Beginning in 1981, I analyzed the way Southern Union Gas Company acquired gas supplies for its New Mexico distribution system, and I testified on aspects of this subject in U.S. District Court in 1982.

At the FERC, I reviewed requests by three interstate pipelines for recovery of take-or-pay buyout and contract reformation costs under Order No. 500. I did this work on behalf of customers of the pipelines or their representatives. It included detailed analysis of the gas purchase contracts and other materials obtained in the discovery process. I also testified in many pipeline rate proceedings and two pipeline gas inventory charge (GIC) proceedings, and I reviewed the gas supply restructuring plans proposed by two pipelines as part of their Order 636 compliance. I also reviewed the implementation of Order 637 by two pipelines.

At the state level, I (along with one or more colleagues) have performed many management/performance audits of the gas purchasing practices and policies of gas distribution companies in Ohio, and our reports on these audits were submitted to the Public Utilities Commission of Ohio (PUCO). The companies that I have audited include three of the major GDCs in Ohio, as well as two smaller gas utilities that relied to a large extent on purchases of local production for their system gas supplies.

Here in Michigan, I have reviewed and testified on the gas supply plans and gas cost recovery (GCR) reconciliations of Consumers Energy Company (Consumers) and Michigan Consolidated Gas Company (MichCon) in each year since 1988, except for the three years when their GCR clauses were suspended. I have also reviewed and testified
on many of the gas supply plans and GCR reconciliations of Michigan Gas Utilities
Corporation (MGUC) and SEMCO Energy Gas Company (SEMCO) during this period.

In New Jersey, I participated in the levelized gas adjustment clause (LGAC) proceedings
as a consultant to the Ratepayer Advocate (or its predecessor, the Public Advocate) for
ten years. During this period I have reviewed the LGAC filings and gas supply planning
of all four of the New Jersey GDCs. I also participated extensively in the consideration
of gas cost recovery issues in the unbundling proceedings and base rate cases of the New
Jersey GDCs.

In Maryland, I have for more than 25 years been reviewing the gas supply planning and
gas purchases of several Maryland utilities, including Baltimore Gas and Electric
Company ("BGE") and Washington Gas Light Company, in a variety of proceedings in
which I have worked on behalf of Maryland People's Counsel. Other states in which I
have done similar work include Pennsylvania, Arizona, Nevada, and Utah.
Prepared Direct Testimony

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. I have been asked by the Michigan Department of Attorney General to make an independent analysis of MichCon’s GCR plan for the period April 2009 through March 2010. This testimony presents a report of that analysis.

Q. WHAT TOPICS ARE YOU ADDRESSING IN YOUR TESTIMONY THIS YEAR?

A. I am addressing three topics this year. The first is MichCon’s proposed use of fixed basis pricing for some of its gas commodity purchases. The second is MichCon’s proposal to increase the cap on the NYMEX increases recognized in the GCR factor contingency mechanism. The third is MichCon’s guideline for making fixed price commodity purchases.

Q. IS YOUR TESTIMONY ACCOMPANIED BY EXHIBITS?

A. Yes. I selected Exhibit AG-3 (REM-1) to accompany this testimony.

Fixed Basis Pricing for Commodity Purchases

Q. WHAT IS FIXED BASIS PRICING?

A. As Mr. Chapel explains at page 36 of his testimony, MichCon purchases some of its gas supplies at the “NYMEX [price] plus a basis.” For these purchases, MichCon and the seller agree on a fixed basis amount (per Dth), and the total price for the purchase is the
NYMEX close (which has not yet occurred at the time the basis is fixed) plus or minus the agreed fixed basis amount.

Q. IS THERE AN ISSUE WITH FIXED BASIS PURCHASES?

A. Yes. Extensive use of fixed basis pricing would reduce the price diversity in MichCon’s supply portfolio. By fixing the basis before the final NYMEX price is known, MichCon makes the price risk for its fixed basis purchases depend upon market developments affecting the Louisiana Gulf Coast gas supply area, even if the gas will actually be delivered in a different supply basin. The problem arises because the NYMEX price is the price of gas delivered at a specific location in the Louisiana Gulf Coast supply area, and that part of the total price is still subject to change after the basis differential between the Louisiana Gulf Coast and MichCon’s actual purchase location has already been fixed.

Q. HAS THIS ISSUE BEEN ADDRESSED IN PRIOR GCR PLAN CASES?

A. Yes. I addressed it in my testimony last year on MichCon’s GCR plan for 2008-2009, in Case No. U-15451, and others have also addressed it in prior years. This issue is one that the parties to last year’s GCR plan case agreed to resolve in a partial settlement agreement filed July 16, 2008, which the Commission approved on August 26, 2008. Paragraph 6.F of that settlement agreement states:

6.F. MichCon will limit the volume of fixed basis supplies to no more than 20-25% of its total supply portfolio and limit the term for such fixed basis to extend no further than the current season at the time of execution (i.e. contracts executed during March through September would expire on or before October 31st of the
current season, and contracts executed during October through February would expire on or before March 31st). This limitation is with the express understanding that MichCon may acquire a portion or all of its Emerson supplies at the AECO/C index plus a fixed or cost-based basis differential between Emerson and AECO/C, rather than at a fixed basis relative to the NYMEX. Furthermore, such purchases that are tied to the AECO/C index would be viewed as index-based rather than “fixed basis” purchases.

Q. WHAT ACTION IS NEEDED THIS YEAR?

A. In response to an interrogatory from the Attorney General, MichCon stated that it plans to continue to limit its fixed basis purchases in accord with paragraph 6.F of the U-15451 settlement. The language of paragraph 6.F of last year’s settlement should therefore be included in any settlement agreement or order resolving this year’s proceeding, to ensure that the restrictions therein become part of MichCon’s GCR plan again this year. A copy of MichCon’s discovery response AGMC-1.32/100, which addresses this issue, accompanies my testimony as Exhibit AG-3 (REM-1).

GCR Factor Ceiling Price Adjustment (Contingency) Mechanism

Q. WHAT IS THE ISSUE WITH THE GCR FACTOR CEILING PRICE ADJUSTMENT MECHANISM?

A. The contingency mechanism approved for MichCon in last year’s GCR plan proceeding, Case No. U-15451, allowed adjustments for increases in the NYMEX gas futures prices up to $3.00 per Dth above those in MichCon’s GCR plan filing. Company witness Jennifer C. Schmidt is proposing to increase the cap on the NYMEX price increases recognized in the contingency mechanism to $5.00 per Dth.
Q. DO YOU AGREE WITH THIS CHANGE?

A. No, I do not. An increase of $5.00 per Mcf or even $4.00 per Mcf in the GCR factor is too large for MichCon to be permitted to implement automatically on a contingent basis, without a hearing or opportunity for consideration of other alternatives, and without an opportunity for the Commission to hear from other interested parties.

Q. COMPANY WITNESS SCHMIDT TESTIFIES AT PAGE 11 THAT MichCon IS NOT PROPOSING A MAXIMUM CONTINGENT FACTOR $5.00 PER MCF ABOVE THE BASE FACTOR IN ITS GCR PLAN. DO YOU AGREE?

A. No. The increase in the GCR factor is related to the NYMEX increases by the “Multiplier” percentages in the contingency factor matrix, which appears on pages 2-5 of Ms. Schmidt’s Exhibit A-29. Those percentages are unusually low this year because MichCon has already placed a large fraction of its planned commodity purchases under fixed price contracts, as Ms. Schmidt explains. In other years, the multipliers may be much larger. Last year, for example, the sum of the three multipliers exceeds 0.8 for the first and second quarters. Also, MichCon is proposing that the GCR factor ceiling price in the third and fourth quarters can remain at the second quarter level if NYMEX prices remain as high as for the second quarter, even though the multipliers for the third and fourth quarters are smaller than for the second quarter. A NYMEX cap of $5.00 per Dth thus allows ample room in future years for automatic “contingent” increases in the GCR factor of $4.00 per Mcf or more.

Q. WHAT ALTERNATIVE DO YOU RECOMMEND?
A cap should apply to the allowable increase in the GCR factor ceiling above the filed base GCR factor, not to the amount of the NYMEX increase recognized in the contingency factor matrix. The cap that I would recommend for this purpose would be $1.60 per Mcf. In other words, the contingency factor matrix can be extended to a NYMEX increase of $5.00 or even more, but MichCon should not be permitted to implement a GCR factor more than $1.60 per Mcf higher that the approved base GCR factor.

Q. WHY ARE YOU RECOMMENDING THIS NEW APPROACH TO CAPPING THE CONTINGENCY FACTOR INCREASE?

A. A cap is needed to protect customers against the occurrence of unlimited increases in the GCR factor without Commission consideration and approval, supported by consideration of presentations from the Company, Staff, and other interested parties including the Attorney General. The relevant consideration for customers is the price they pay — i.e., the GCR factor — not the NYMEX. The cap should therefore apply to the amount of increase in the maximum or ceiling GCR factor, not to the size of the NYMEX increase recognized in the contingency factor matrix.

Q. COMPANY WITNESS SCHMIDT CLAIMS AT PAGE 10 OF HER TESTIMONY THAT CONTINGENT FACTOR CALCULATIONS SHOULD REFLECT THE FULL RANGE OF NYMEX PRICE VOLATILITY THAT HAS BEEN EXPERIENCED RECENTLY. DO YOU AGREE?
A. No. If it were appropriate for the contingency mechanism to reflect the full range of NYMEX price volatility that is experienced — however large that range may happen to be — then there should be no cap at all. That view is a misunderstanding of the proper purpose of the contingency mechanism. The proper purpose is to allow automatic adjustments of the GCR factor ceiling within a modest and reasonable range, to avoid additional evidentiary hearings when gas prices rise moderately. But when gas price increases become extreme, as occurred for example in the late summer and fall of 2005 in response to hurricanes Katrina and Rita, then it is appropriate to require a reopening of the GCR proceedings.

Fixed Price Purchases

Q. WHAT IS MichCon’S FIXED PRICE PURCHASE PLAN?

A. MichCon’s proposed fixed price purchase plan is Exhibit A-8. The parties also submitted a partial settlement agreement that would modify this plan on an interim basis, pending completion of the present proceeding. It is my understanding that this partial settlement is awaiting action by the Commission at the time my testimony is being prepared.

Q. SHOULD THE COMMISSION APPROVE MichCon’S FIXED PRICE PURCHASE PLAN, EITHER AS FILED OR WITH THE MODIFICATIONS IN THE INTERIM PARTIAL SETTLEMENT?

A. No. MichCon’s fixed price purchase plan should be curtailed drastically.
Q. WHAT CHANGES DO YOU RECOMMEND?

A. I recommend the following changes as initial steps towards a complete reformulation of MichCon’s fixed price purchase plan:

(1) In the Quartile Index Method for long-term purchases (“QIM”), the provision for second quartile purchases should be eliminated. QIM purchases should be encouraged only when the NYMEX strips for future periods are in or below the First Quartile.

(2) The Milestone Default Method should be eliminated for both long-term and short-term purchases. It is my understanding that MichCon has already met the long-term and short-term milestones for fixed price purchases for the current 2009-2010 GCR period, and that it has already met the long-term milestones for the 2010-2011 period. Elimination of these milestones will therefore have no effect on MichCon’s fixed purchases until the summer of 2010 at the earliest, and there is ample time before then to consider whether and how the milestone default requirements should be replaced.

(3) The 21-Day Moving Average Method (“21-DMA”) for short-term purchases should also be eliminated. The purpose of this method is to assist MichCon in timing its purchases within the current GCR period to meet the short-term milestones for this GCR period. Elimination of the milestones renders the 21-DMA superfluous.

the current 2009-2010 GCR period. That benchmark price is $8.241 per Dth. That
benchmark is so high in relation to the market prices current when it was filed that
MichCon could have immediately purchased the maximum quantity allowable under the
Benchmark Price Method. This situation indicates that the Benchmark Price Method is
too coarse an indicator to be used for making fixed price purchases applicable to the
remainder of the current GCR period.

Q. WHY ARE YOU RECOMMENDING SUCH A DRASTIC CURTAILMENT OF
MICHCON’S FIXED PRICE PURCHASE PLAN?

A. There are two major reasons. First, for the past several years, MichCon’s fixed price
purchases have consistently cost much more than MichCon would have spent if it had
instead waited and purchased its gas supplies in the monthly market at first-of-the-month
(“FOM”) prices. Second, I have reviewed the QIM pricing data for the past four years
and found that NYMEX futures prices have been persistently and consistently higher
than the NYMEX prices available each month in bid week for the purchase monthly
supplies at FOM prices. These observations indicate that the price stability and price
certainty obtained by making fixed price purchases has come at a very high cost. Unless
and until the behavior of the gas futures market changes, advance purchases at fixed
prices are appropriate only at times when the NYMEX futures prices are especially
attractive. Pending the development of alternative and hopefully better strategies, I
would recommend using the first quartile of the QIM — but not the second quartile — as
an indication that futures prices are especially advantageous and that fixed price
purchases are therefore appropriate.
Q. CAN YOU EXPLAIN IN MORE DETAIL THE PROBLEM WITH THE QIM IN ITS PRESENT FORM?

A. Yes. The QIM is a reasonably good way to decide when to purchase fixed price gas commodity supplies, and in what quantities. It does so by comparing current (i.e., today’s) NYMEX futures prices to those that have prevailed in the past. This comparison tells us whether today is a relatively good day to make fixed price purchases, compared to the fixed price purchase opportunities that have been available in the past. But the QIM bypasses and effectively ignores a prior question, which is whether to make fixed price purchases.

To decide whether to make fixed price purchases, one should compare futures prices to the alternative, which is spot market or first-of-the-month (FOM) prices. The reason is that fixed price purchases (as that term is used here in Michigan) are made in the futures market, and the alternative is to purchase gas each month at FOM prices. The shortcoming of the QIM is that it does not involve any such comparison. It therefore tells us nothing about the way today’s fixed price purchase opportunities compare to the FOM prices one can expect MichCon to pay if it eschews fixed price purchases and waits for bid week to purchase its gas requirements in the monthly market at FOM prices.

Q. HAVE YOU BEEN ABLE TO COMPARE THE NYMEX FUTURES PRICES USED IN THE QIM TO FIRST-OF-THE-MONTH PRICES FOR MONTHLY GAS SUPPLIES?
A. Yes. Obviously no one can compare current NYMEX futures prices to the FOM prices that will eventually appear for the future months now being traded on the NYMEX. But we can compare the NYMEX 12-month strips used to develop the QIM to the FOM prices that have already occurred. I have made such a comparison for the 36 gas purchase months from April 2006 through March 2009.

For these comparisons, I used the NYMEX close for each monthly futures contract as the FOM price for that month. The NYMEX close is the settlement price on the last trading day of each contract. For example, the NYMEX close for the March 2009 futures contract was the settlement price of $4.056 per Dth on February 25, 2009, which is the last day the March 2009 futures contract was traded.

I compared the NYMEX close for each monthly contract to the average of the 12 NYMEX futures prices for that contract included in the 12-month strips used to develop the QIM. For example, the price of the March 2009 contract was included in the 12-month strip on the last trading day of each monthly contract from April 2008 (last traded on March 27, 2008) through March 2009. The last of these 12 comparison futures prices is, of course, the NYMEX close or FOM price itself, but the other 11 comparison futures prices are the prices one would have had to pay to purchase March 2009 supplies up to 11 months in advance.

Q. WHAT RESULTS DID YOU OBTAIN FROM THIS ANALYSIS?

A. For the 36 gas purchase months from April 2006 through March 2009, the NYMEX futures prices used to develop the QIM were an average of $1.45 per Dth higher than the
FOM prices. In other words, if MichCon had purchased a 12-month strip of fixed price
supplies on the last trading day of each monthly contract, the cost of those fixed price
purchases would have been an average of $1.45 per Dth higher than the costs of
purchasing all of the supplies for each month at the FOM price on the last trading day for
that month’s contract.

An example may help clarify this perspective. The futures price for the March 2009
contract was included in 12 of the QIM 12-month strips — once in the March 27, 2008
strip (last trading day for the April 2008 contract), once again in the April 28, 2008 strip
(last trading day for the May 2008 contract), and so forth. The twelfth and last
appearance of the March 2009 contract in the QIM strips was February 25, 2009, which
was the last trading day for the March 2009 contract. The settlement price of the March
2009 contract was $4.056 per Dth on February 25, 2009, and that it the FOM price for
March 2009. But the average of the 12 prices of the March 2009 contract, in its 12
appearances in the QIM strips, was $9.664 per Dth, or $5.608 higher than the FOM
price. This difference of $5.608 is the additional cost that MichCon (or any other
purchaser) would have incurred to purchase 24 Bcf (for example) of March 2009 gas
supplies in 12 installments of 2 Bcf each, with prices fixed on the dates used to establish
the QIM index, compared to the cost of purchasing all 24 Bcf at the FOM price of $4.056
per Dth.

I made similar calculations for each purchase month from April 2006 through March
2009. The average difference was $1.45 per Dth, not the $5.608 per Dth that occurred
for March 2009, which was an exceptional month. But even $1.45 per Dth is a steep
price to pay for the certainty and predictability of having gas under fixed price contracts.

Q. YOUR EXAMPLE IS STATED IN TERMS OF “DOLLAR COST AVERAGING”,
WHEREAS THE QIM PROVIDES A “BUY” SIGNAL ONLY WHEN THE
CURRENT 12-MONTH STRIP IS IN OR BELOW THE SECOND QUARTILE OF
THE STRIPS USED TO DEVELOP THE QIM. CAN YOU APPLY YOUR
ANALYSIS MORE SPECIFICALLY TO THE QIM?

A. Yes. One way to interpret my analytical results is to observe that the QIM provides a
“buy” signal only if the current 12-month strip is more than $1.45 per Dth lower than the
average of the QIM strips over the past 36 months. Second quartile purchases are
unlikely to meet this standard, because the second quartile extends up to the median of
the 36 strips. That is the reason I am now recommending that QIM purchases should be
indicated only when the current 12-month strip is in or below the first quartile.

Q. DOES YOUR ANALYSIS ALSO ENCOMPASS OTHER PERSPECTIVES ON
THE RELATIONSHIP OF NYMEX FUTURES PRICES TO FOM PRICES?

A. Yes. For example, if one limits one’s dollar cost averaging (DCA) purchases to only the
last six months a NYMEX futures contract is traded, then the cost differential compared
to the FOM price is only $0.84 per Dth instead of the $1.45 per Dth average differential
for the 12 months of advance purchases. An additional cost of $0.84 per Dth is still
large, but obviously it is much better than $1.45 per Dth. I have not yet developed a way
to incorporate this possible benefit (or mitigation of the cost penalty) into the QIM, but
analytical results such as these may be helpful for the development of new commodity
gas purchasing strategies. To permit further elaboration of this process, I am including
an Excel spreadsheet with my complete NYMEX price analysis in a work paper that the
AG expects to circulate to the other parties to this proceeding.

Q. DOES THIS CONCLUDE YOUR PREPARED DIRECT TESTIMONY?

A. Yes, it does.
Question: At page GHC-36, Mr. Chapel identifies the use of the NYMEX settlement price plus or minus a fixed basis differential as one method for purchasing gas that is not locked at fixed prices. Does MichCon plan to continue to limit its fixed basis purchases in accord with paragraph 6.F of the partial settlement filed July 16, 2008 in Case No. U-15451? If not, please identify the changes that MichCon proposes, and explain the reasons for those changes.

Answer: Yes.