

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

QUICKSILVER RESOURCES, INC., and
TERRA ENERGY, LTD.,

Complainants,

Case No. U-14821

v

Hon. Mark D. Eyster

MICHCON GATHERING COMPANY and
MICHIGAN CONSOLIDATED GAS COMPANY

Respondents.

James A. Christopherson (P31585)
DINGEMAN, DANCER &
CHRISTOPHERSON, PLC
Attorneys for Complainants
100 Park Street
Traverse City, MI 49684
(231) 929-0500

Richard P. Middleton (P41278)
Attorney for Respondents
Michigan Consolidated Gas Company
2000 2nd Ave., #688WCB
Detroit, MI 48226
(313) 235-3647

Richard J. Aaron (P35605)
HONIGMAN, MILLER, SCHWARTZ, AND
COHN, LLC
Attorney for Respondents
Michigan Consolidated Gas Company and
MichCon Gathering Company
222 North Washington Square, Suite 400
Lansing, MI 48933-1800
(517) 377 -0701

Emmanuel B. Odunlami (P66255)
Attorney for the Michigan Public Service
Commission Staff
6545 Mercantile Way, Suite 15
Lansing, MI 48911
(517) 241-6680

REBUTTAL TESTIMONY OF THAD SHUMWAY

ON BEHALF OF

**QUICKSILVER RESOURCES, INC. and
TERRA ENERGY, LTD.**

**Rebuttal Testimony Of Thad Shumway
On Behalf Of
Quicksilver Resources, Inc. and Terra Energy, LTD.**

Q. What is the purpose of your rebuttal testimony?

A. I will respond to the testimony of Todd F. Persells and Arthur Lyle, III.

Q. Are you sponsoring any exhibits?

A. Yes, I am sponsoring the following:

1. Antrim Gas Transportation Agreement dated January 1, 2006 between Dominion Reserves, Inc. and MichCon Gathering Company (referred to herein as Exhibit TRS-7).

Q. Where did you get Exhibit TRS-7?

A. Exhibit TRS-7 is an accurate copy of an ASAT provided to Complainants by Respondents during discovery in this case.

Q. What is significant about TRS-7?

A. The CO₂ specifications are different than those contained in other ASATs and ASATTs that Respondents have entered into.

Q. On Page 10, lines 11-20, Mr. Lyle says MGAT is not imposing a .75% standard. Do you agree with that testimony?

A. No. Mr. Lyle states the MGAT is not imposing a .75% standard, and then says MGAT is requiring CO₂ treating to .75% under the terms of an ASAT. The net effect is the same thing. Mr. Lyle goes on to say that Case No. U-10547 set standards approved by the MPSC for deliveries to the AEP at 2% or less under ASAT agreements and .75% for ASATT agreements based on the Capacity Agreement. The order for Case No. U-10547 does not set any quality specifications for gas delivered by shippers to the AEP, nor does it mention

1 ASATT or ASAT agreements, or the Capacity Agreement. Mr. Lyle's testimony
2 implying that such standards were set and approved by the MPSC is not
3 accurate. The conditions for transportation service were set by the agreements
4 executed by MGAT and the shippers (ASAT and ASATT).

5 Q. Do you agree with Mr. Lyle's statements on page 15, line 4-5, wherein he states
6 MGAT did not choose blending for production downstream of the treating
7 facilities?

8 A. No. Pursuant to the ASATTs, MGAT contracts with Shippers to receive gas at
9 the Receipt Points and redeliver it to Shippers at the Delivery Points with MGAT
10 being responsible for the CO2 treating in between those locations. MGAT is the
11 party that made all physical decisions on how to accomplish that result. MGAT
12 makes the decisions to have either (1) have the gas treated at the CMS plants,
13 (2) have the gas treated at the Turtle Lake plant, (3) have the gas blended with
14 other gas to meet the specifications or (4) contract for lower CO2 outlet
15 specifications with CMS in order to achieve the requirements at the Delivery
16 Points. Decisions on blending and outlet specifications for the Capacity
17 Agreement are solely with MGAT's power, not the shippers.

18 Q. Do you agree with Mr. Lyle's description of the original intent of the contracts for
19 the AEP on page 19, lines 10-18?

20 A. No, the shippers never intended that the quality provisions for transportation be a
21 moving target based on the needs of MGAT. The shippers knew the downstream
22 pipeline requirements for CO2 content was 2% or less, and they contracted with
23 either MGAT or others to meet that need. MGAT's allowance of higher CO2
24 content gas into the Wet Header, Saginaw Bay and the expiration of certain

1 ASATT agreements has caused MGAT to attempt to change its conditions of
2 service on the AEP without the approval of the Shippers or the Michigan Public
3 Service Commission. Mr. Lyle's statement that it was "the original intent of the
4 contracts on the AEP. If a producer wants to supply its own treating agreements,
5 it needs to make them at the same level provided to MGAT at the CMS plant. . ."
6 was certainly not the original intent of the Shippers on the AEP. Furthermore, to
7 claim as Mr. Lyle has that "an ASATT agreement asks MGAT to treat on the
8 shippers' behalf and MGAT receives treating to a level of .75% at the CMS plant.
9 The requirement is inherently contained in the ASATT based on service provided
10 under the Capacity Agreement" imposes similar conditions on the shippers is
11 unfounded. The ASATT shippers were not a party to the Capacity Agreement nor
12 were they aware of the Quality Provisions contained therein. MGAT's attempt to
13 now require the different quality provisions is nothing more than MGAT's failure to
14 properly manage its system, given the level of obligations to existing ASATT
15 parties, and its obligation to provide non-discriminatory transportation services
16 under the provision of Act 9. MGAT's claim that the order in Case No. U-10547
17 allowing them to blend gas to meet the quality specifications at the Delivery Point
18 gives them the authority to alter the quality specifications on the shippers on the
19 AEP is unsupported by the language of Case No. U-10547. Pages 40 thru 50 of
20 the order for Case No. U-10547 discusses the location of CO2 treating facilities
21 and blending of gas to optimize CO2 processing operations. Nowhere does it
22 reflect the authority sought by MGAT or granted by the commission to lower the
23 quality specifications on the producers in order for MGAT to achieve its delivery
24 point obligations. Also, MGAT is now taking the position that it may use the AEP

1 with lower CO2 content gas to blend gas with separate pipeline systems (the Wet
2 Header at 2.74% and Saginaw Bay with 2.01%) to meet the MichCon pipeline
3 system tariff requirements. The AEP shippers have clearly met their obligations
4 to remove CO2 from the AEP as the first downstream delivery point (CMS –
5 Goose Creek) is 1.68% (see FMM Exhibit 3). It is only when MGAT has the
6 commingled gas stream from the Wet Header, and Saginaw Bay that causes
7 MichCon to be in danger of not meeting its obligations to be 2% or less at the
8 delivery points.

9 Q. Do you agree with Mr. Persells' statement on page 8, line 16-19?

10 A. No. MGAT did not require producers to enter into reserve dedications at all.
11 Producers were required to enter into reserve dedications if they wanted to
12 receive firm transportation service, not as a requirement to get the system
13 constructed.

14 Q. Do you agree with Mr. Persells' statement on page 9, line 3-4?

15 A. No. MGAT could have sought a rate redetermination if the transport volumes
16 were insufficient to cover the financial risk.

17 Q. Does this complete your testimony?

18 A. Yes, it does.

19
20
21
22
23

 **Thad R. Shumway**
Signature
Not
Verified

Digitally signed
by Thad R.
Shumway
DN: cn=Thad R.
Shumway,
o=Quicksilver
Resources,
c=US
Date:
2006.07.07
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MPSC Case No. U-14281

Exhibit TRS-7

ASAT: _____

ANTRIM GAS TRANSPORTATION AGREEMENT

ANTRIM GAS TRANSPORTATION AGREEMENT**TABLE OF CONTENTS**

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SCHEDULE OF EXHIBITS

<u>EXHIBIT</u>	<u>SUBJECT</u>
A.	RECEIPT POINTS
B.	DELIVERY POINTS
C.	GENERAL TERMS & CONDITIONS
	I. Service Requests
	II. Nominations, Scheduling and Allocations
	III. Paper Pooling
	IV. Imbalances
	V. Measurement
	VI. Quality Specifications
	VII. Diversion of Gas

**MICHCON GATHERING COMPANY
ANTRIM GAS TRANSPORTATION AGREEMENT**

THIS AGREEMENT is entered into as of this 1st day of January, 2006, by and between DOMINION RESERVES, INC. ("Shipper"), having an office at, 16945 Northchase Drive, Suite 1750, Houston, Texas 77060 and MICHCON GATHERING COMPANY ("MichCon Gathering"), having its principal offices at 2000 Second Avenue, Detroit, Michigan 48226.

RECITALS

WHEREAS Shipper has requested MichCon Gathering to transport Antrim Gas on Shipper's behalf; and

WHEREAS MichCon Gathering is willing to provide the requested transportation service subject to the terms and conditions contained in this Agreement;

NOW, THEREFORE, in consideration of the mutual promises, agreements and undertakings in this Agreement, Shipper and MichCon Gathering agree as follows:

ARTICLE I

DEFINITIONS

- 1.1. "Antrim Gas" or "Gas" means natural gas produced from the Antrim shale formation.
- 1.2. "Antrim Expansion Project" or "AEP" means the pipeline expansion project as filed by MichCon Gathering in the Michigan Public Service Commission Case No. U-10547, which includes (i) the utilization of MichCon Gathering's Northern Michigan Wet Header production and gathering system for purposes of providing transportation, and (ii) transportation on the MichCon Gathering laterals.

- 1.3. CO₂ means carbon dioxide.
- 1.4. "Commission" or "MPSC" means the Michigan Public Service Commission.
- 1.5. "Cubic Foot of Gas" means that quantity of Gas which occupies one cubic foot at a temperature of 60 degrees Fahrenheit and at a pressure of 14.65 Psia.
- 1.6. "Day" means a period of 24 consecutive hours beginning at noon Eastern Time of one calendar day and ending at noon Eastern Time on the next following calendar day.
The reference date for any day shall be that of its beginning.
- 1.7. "Delivery Point(s)" means the points set forth on Exhibit B, attached hereto, at which MichCon Gathering shall redeliver Equivalent Quantities of Antrim Gas to Shipper.
- 1.8. "Equivalent Quantity(ies)" means the volume of gas delivered by or for the account of Shipper to MichCon Gathering on any day pursuant to this Agreement multiplied by a fraction, the numerator of which is the average heating value per Mcf of the gas delivered or caused to be delivered by Shipper and the denominator of which is the average heating value per Mcf of the gas redelivered on the same day by MichCon Gathering, less any amount withheld by MichCon Gathering for Pipeline Loss.
- 1.9. "Gas Transportation Charge" is \$0.05104/Mcf.
- 1.10. "Gas Transportation Service" means transportation service by MichCon Gathering on the AEP for Shipper on a daily basis pursuant to the terms and conditions set forth in this Agreement.
- 1.11. "Lateral Charge" means the rate for transportation gas on MichCon's laterals set forth in MichCon's transportation rate schedules on file with the Commission and as may be revised from time to time.

- 1.12. "Mcf" means 1,000 Cubic Feet of Gas.
- 1.13. "MichCon" means Michigan Consolidated Gas Company.
- 1.14. "Month" means the period commencing at noon Eastern Time on the first calendar Day of a calendar month and extending until noon Eastern Time on the first Day of the next following calendar month.
- 1.15. "Pipeline Loss" means 0.12% of all Nominated, Authorized and Unauthorized Overrun Quantities delivered to a Delivery Point for loss of Gas on the AEP.
- 1.16. "Prime Rate" means the rate announced by NBD Bank (or its successor) from time to time as its prime commercial lending rate, or if the prime rate is discontinued, the rate announced from time to time as that being charged to its most creditworthy commercial borrowers for 90 Day unsecured loans.
- 1.17. "Receipt Point(s)" means the points set forth on Exhibit A, attached hereto, at which Shipper may deliver Antrim Gas to MichCon Gathering.

ARTICLE II

DEDICATION OF RESERVES

2.1 Before any Antrim Gas is transported on a firm basis pursuant to this Agreement, the party who owns or controls the acreage from which the gas is produced shall dedicate all previously undedicated Antrim reserves which it owns and controls and which can be reasonably serviced by the AEP. Antrim Gas which is produced from after acquired or controlled acreage must also first be dedicated to the AEP before it will be transported on a firm basis. Such dedications must be made on a form provided or approved by MichCon Gathering. MichCon Gathering may refuse firm service for any Antrim Gas which has not been dedicated as provided for above.

ARTICLE III

TERM

3.1 All terms and conditions of this Agreement are effective on January 1, 2006, and will continue in effect through December 31, 2010.

ARTICLE IV

GAS TRANSPORTATION

4.1 Shipper shall deliver or cause to be delivered to MichCon Gathering at the Receipt Points, Antrim Gas for Gas Transportation Service up to a maximum daily quantity ("MDQ") of 30,000 Mcf. MichCon Gathering shall provide Gas Transportation Service for Shipper or for the account of Shipper and shall redeliver an Equivalent Quantity of natural gas at the Delivery Points nominated pursuant to this Agreement. Gas Transportation Service shall be provided in accordance with Exhibit C, Section I.A.

4.2 MichCon Gathering may retain Pipeline Loss. Provided, however, that if the Delivery Point for Shipper's Gas is into MichCon's transmission and distribution pipeline system, then the Pipeline Loss shall be borne by MichCon or the downstream shipper. Pipeline Loss will be calculated and withheld from the quantity of Gas that is redelivered for the account of Shipper at each Delivery Point.

ARTICLE V

RATES

5.1 Shipper shall pay MichCon Gathering a Monthly amount for transportation as follows:

5.1.1 A Monthly Customer Administrative Charge of \$300.

5.1.2 A basic charge equal to the volumes of Gas in Mcf units received by MichCon Gathering from Shipper at the Receipt Points and transported for or on behalf of Shipper during the Month, multiplied by the Gas Transportation Charge.

5.1.3 A charge for transportation on MichCon's laterals equal to the quantities of Gas transported on the laterals, multiplied by the Lateral Charge.

5.1.4 An Overrun Charge, for any amounts that exceed Shipper's MDQ on any Day ("Unauthorized Overrun Gas"), equal to the sum of \$3.20 per Mcf multiplied by such Unauthorized Overrun Gas; provided, however, no Overrun Charge will be charged under the following circumstances:

- a. in any Month where Shipper, after meeting the criteria set forth in 5.1.5 delivers Gas in excess of its MDQ ("Authorized Overrun Gas");
- b. in any Month where the daily quantities in excess of the MDQ averages no more than five percent above (i) the MDQ or (ii) the MDQ plus any Authorized Overrun Gas; or
- c. in circumstances where Gas delivered in excess of the MDQ occurred temporarily for less than a 24-hour period and resulted from an inadvertent

surge or increase of Gas from Shipper's facilities due to equipment failure.

However, only one such failure will be allowed during any calendar Month.

5.1.5 Shipper may deliver to MichCon Gathering Authorized Overrun Gas if any of the following criterion is met:

- a. Shipper has obtained MichCon Gathering's written permission to flow gas in excess of Shipper's MDQ prior to submitting a nomination;
- b. Shipper has notified MichCon Gathering by ConQuest, MichCon's electronic bulletin board, 24 hours prior to the deadline for submitting a nomination of its intent to submit a nomination to deliver Gas in excess of Shipper's MDQ. Such intent shall be clearly identified on the request. Unless Shipper receives notification of MichCon Gathering's denial of Shipper's request for Authorized Overrun Gas by ConQuest by the nomination deadline, then Shipper has authorization to deliver gas in excess of its MDQ up to the amount indicated in the ConQuest transmittal to MichCon Gathering. This approval shall be good only for one Month at a time.
- c. Permission to flow Authorized Overrun Gas will be granted unless the AEP is transporting firm Gas at full capacity.

5.1.6 If MichCon Gathering is not able to transport Shipper's nominated quantity up to Shipper's MDQ due to Unauthorized Overrun Gas on the system, Shipper shall receive, on a calendar year quarterly basis, its proportionate share of 80% of the actual funds MichCon Gathering collects as Overrun Charges from all Shippers.

Shipper's proportionate share will be an amount equal to Shipper's quantity of Gas, up to its MDQ, that did not flow during the calendar quarter as a result of Unauthorized Overrun Gas divided by the total quantity of Gas that did not flow on the AEP because of Unauthorized Overrun Gas during the calendar quarter.

- 5.2 All charges set forth in this Article V, except the Monthly Customer Administrative Charge, will be applied to quantities in units of Mcf delivered at the Receipt Point as measured in accordance with the terms of Exhibit C, Section V.

ARTICLE VI

NOMINATIONS, DELIVERIES

- 6.1 Shipper must nominate all quantities of Gas that will be transported pursuant to this Agreement and as further detailed in Exhibit C, Section II.

ARTICLE VII

RECEIPT POINT(S)

- 7.1 Shipper shall deliver or cause to be delivered Antrim Gas at the Receipt Point(s). All Gas delivered to MichCon Gathering must meet the quality specification set out in Exhibit C, Section VI.

- 7.2 MichCon Gathering, at its sole option, may refuse to accept Gas at any Receipt Point(s) that is not subject to an executed Receipt Point Agreement between MichCon Gathering or its designee and the party responsible for the Receipt Point.

ARTICLE VIII**DELIVERY POINT(S)**

8.1 For all Antrim Gas delivered by Shipper to MichCon Gathering at the Receipt Points, MichCon Gathering shall redeliver to Shipper, or for the account of Shipper, Equivalent Quantities of Gas at the Delivery Point(s).

ARTICLE IX**DISPOSITION OF GAS**

9.1 Because of the inability of MichCon Gathering and Shipper to maintain precise control over the rate of flow and quantities of Gas to be received and delivered, the parties shall exercise reasonable efforts to keep Gas receipts and deliveries in balance. Subject to the limitations contained in this section, MichCon Gathering will use Electronic Gas Measurement (EGM) for any Receipt Point under this Agreement. In the case of new Receipt Points, that is Receipt Points installed after the effective date of this Agreement, MichCon Gathering will install EGM pursuant to its then prevailing Receipt Point program on all new interconnects. As to existing Receipt Points, that is Receipt Points installed prior to the effective date of this Agreement, MichCon Gathering shall retrofit existing Receipt Points with EGM only in those cases where a Receipt Point owner requests such a retrofit in writing and agrees to pay any costs associated with the retrofit. However, if MichCon Gathering determines that retrofitting Receipt Points with EGM is necessary for the efficient operation of the AEP, then MichCon Gathering may mandate installation of EGM at such points and the associated costs will be borne by the Receipt Point holder.

9.2 MichCon Gathering may commingle Gas delivered under this Agreement with Gas owned by MichCon Gathering and/or transported by MichCon Gathering for others if the resulting

commingled gas stream meets the Delivery Point quality specifications in Exhibit C or any quality specifications subsequently authorized by the MPSC.

ARTICLE X

POSSESSION AND RESPONSIBILITY

10.1 As between the parties, Shipper is deemed to be in exclusive control and possession of the Gas transported under this Agreement and is responsible for any damage or injury caused thereby until the Gas is delivered by Shipper to MichCon Gathering at the interconnection with the Antrim Expansion Project and after it is redelivered by MichCon Gathering at the Delivery Point(s). MichCon Gathering is deemed to be in exclusive control and possession of the Gas and responsible for any damage or injury caused thereby after it is delivered to MichCon Gathering, by Shipper or for Shipper's account, at the interconnection with the Antrim Expansion Project, and before it is redelivered by MichCon Gathering at the Delivery Point(s).

ARTICLE XI

DELIVERY PRESSURE

11.1 MichCon Gathering has no obligation to receive Antrim Gas at Receipt Points from Shipper unless such Gas is delivered at MichCon Gathering's prevailing line pressure, but not to exceed its maximum allowable operating pressure (MAOP). Shipper has no obligation to receive quantities of Antrim Gas, or cause quantities of Antrim Gas to be received by a third party transporter under this Agreement, unless such gas is delivered at pressures set forth in Exhibit B for each Delivery Point. MichCon Gathering will not compress the Gas it transports in order to redeliver such Gas at the Delivery Point.

ARTICLE XII**WARRANTY OF RIGHT TO DELIVER**

12.1 Shipper warrants that at the time of delivery it has the right to deliver the Gas to MichCon Gathering at the Receipt Point(s) and shall indemnify, defend, and save MichCon Gathering harmless from suits, actions, debts, accounts, damages, costs, losses and expenses arising from or out of adverse claims of any and all persons to the gas or to royalties, taxes, license fees or charges thereon.

ARTICLE XIII**TAXES**

13.1 Shipper shall pay all taxes, tariffs, and duties however designated, levied, or charged resulting from services provided under this Agreement, including, without limitation, all state and local privilege or excise taxes, and any amount in lieu of such taxes, tariffs and duties paid or payable by MichCon Gathering, exclusive however of taxes based on the income of MichCon Gathering, property taxes, and MichCon Gathering's single business taxes and taxes imposed to replace income, property or single business taxes. Shipper shall reimburse MichCon Gathering for any such taxes, tariffs and duties which are collected and remitted or paid on Shipper's behalf by MichCon Gathering because of Shipper's failure to pay. MichCon Gathering and its Vendors are not entitled to Internal Revenue Code-Section 29 tax credits on any Gas under this Agreement.

ARTICLE XIV**BILLING AND PAYMENT**

14.1 On or before the twentieth Day of each calendar Month, MichCon Gathering will render a statement and supporting documentation to Shipper based on the applicable charges set

forth in Section 5.1 for the previous calendar Month. Shipper shall tender payment to MichCon Gathering for the amount billed in the statement on or before the later of (i) the 25th Day of the Month in which the statement was received or (ii) ten (10) Days after receipt of the statement. All payments must be made by wire transfer directed to a bank account designated by MichCon Gathering.

14.2 The statements rendered pursuant to this Agreement will be denominated in U.S. Dollars (\$U.S.), and all payments must be made in \$U.S.

14.3 Shipper has the right at all reasonable times to examine the books, records and charts of MichCon Gathering to the extent necessary to verify the accuracy of any statement, charge or computation made under or pursuant to any provisions of this Agreement.

14.4 Shipper shall notify MichCon Gathering of any disputed amount in any statement, so that reasonable efforts may be made to resolve the dispute as quickly as possible.

14.5 If Shipper fails to pay any amount in any statement rendered by MichCon Gathering that is not in dispute when such amount is due, unless otherwise agreed by Shipper and MichCon Gathering, interest will accrue on the unpaid, undisputed amount at a rate equal to the Prime Rate from the due date until the date of payment.

14.6 If either MichCon Gathering or Shipper discovers any error or inaccuracy in invoices, statements, billings, payment, calculations or determinations under this Agreement, then proper adjustment and correction thereof will be made as promptly as practicable. If errors or inaccuracies are not identified by either Shipper or MichCon Gathering and reported to the other party within 36 Months from the date of such invoices, statements, billings, payments, calculations, or determinations, the same are deemed conclusively to be correct.

14.7 If Shipper fails to pay the uncontested amount of any invoice when it is due, MichCon Gathering may, after 10 days prior notice, suspend transportation services to Shipper until such amount is paid. Shipper may continue to receive Gas Transportation if Shipper deposits with MichCon Gathering and maintains, on prepaid account, an amount equal to amounts which would be due for three Months service at the full MDQ; or furnishes, within 15 Days, good and sufficient security, as reasonably determined by MichCon Gathering, of a continuing nature and in an amount equal to such amounts which would be due. The obligation to maintain a deposit will terminate if Shipper has made a prepaid account deposit each Month over six consecutive Months, but if Shipper has a late payment in any subsequent Month, it must again comply with the foregoing.

ARTICLE XV

NON-WAIVER OF FUTURE DEFAULTS

15.1 No waiver by either party of any one or more defaults by the other in the performance of any provision of this Agreement will operate or be construed as a waiver of any future default or defaults, whether of a like or a different character.

ARTICLE XVI

FORCE MAJEURE

16.1 Neither Shipper nor MichCon Gathering will be liable in damages, or in any other remedy, legal or equitable, to the other for failure to perform obligations under this Agreement due to any force majeure event, which is defined as any act, omission or circumstances occasioned by or in consequence of any acts of God, strikes, lockouts, acts of the public enemy, wars, sabotage, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, arrests, restraints of rulers and peoples, civil disturbances, explosions, breakage or

accident to machinery, lines of pipe, wells, flowlines, production facilities of related equipment, or CO₂ treating plants or the necessity to make unscheduled shutdowns (for purposes of necessary maintenance, repairs, tests, or alterations to machinery, lines of pipe or CO₂ treating plants), well or line freezeups, the binding order of any court or governmental authority which has been resisted in good faith by all reasonable legal means, or any other cause, whether of the kind herein enumerated, or otherwise, not within the control of the party claiming force majeure and which by the exercise of due diligence such party is unable to prevent or overcome. A failure to settle or prevent any strike or other controversy with employees or with anyone purporting or seeking to represent employees shall not be considered to be a matter within the control of the party claiming force majeure.

16.2 Any force majeure event affecting the performance of this Agreement by either party, however, will not relieve such party of liability (i) in the event of its continuing negligence; (ii) in the event of its failure to use due diligence to remedy the event of force majeure and to remove the cause of such force majeure in an adequate manner and with all reasonable dispatch or (iii) from its obligations to make payments of amounts then due thereunder, unless such party gives notice and full particulars of the same in writing or by telecopy to the other party as soon as possible after the occurrence relied on.

ARTICLE XVII

LAWS, ORDERS, RULES AND REGULATIONS

17.1 The performance by the parties of their obligations set forth in this Agreement shall be subject to all valid and applicable laws, orders, rules and regulations of any duly constituted authority having jurisdiction.

17.2 Authority for Gas Transportation Service under this Agreement is provided pursuant to 1929 PA 9, as amended (Act 9); MCL 483.101 et seq.

17.3 THIS AGREEMENT IS GOVERNED BY THE LAW OF THE STATE OF MICHIGAN. IT IS AGREED THAT ANY AND ALL LITIGATION RELATED TO THIS AGREEMENT MUST BE BROUGHT IN EITHER A STATE OR FEDERAL COURT LOCATED IN WAYNE COUNTY, MICHIGAN, AND EACH PARTY, FOR PURPOSES OF ANY SUCH LITIGATION, SUBMITS TO THE EXCLUSIVE JURISDICTION AND VENUE OF THAT COURT.

ARTICLE XVIII

NOTICE

18.1 Unless otherwise provided herein, all notices given hereunder by one party to the other shall be sent to the addresses provided below by registered mail, overnight mail or by facsimile transmission and shall be effective upon receipt thereof. However, routine communications, including monthly statements, will be considered as duly delivered when mailed by either registered, overnight or ordinary mail.

SHIPPER:

Dominion Reserves, Inc.
16945 Northchase Drive,
Suite 1750
Houston, TX 77060
Attn: Director, Gas Marketing

Operational Notices:

Dominion Reserves, Inc.
226 East Sixteenth Street
Traverse City, MI 49684
Attn: Ray Barnhart

MICHCON GATHERING:

MichCon Gathering Company
2000 Second Avenue
Detroit, Michigan 48226
Attn: Director, Storage and Transmission Design
Fax: (313) 235-1045

18.2 Each party may, by prior written notice to the other, change its address or addresses given above at any time.

ARTICLE XIX

MISCELLANEOUS PROVISIONS

19.1 Assignment: Shipper or MichCon Gathering may not broker, assign, convey or transfer its interests, rights and obligations under this Agreement without the prior written consent of the other party, which shall not be unreasonably withheld. Either Shipper or MichCon Gathering may, however, without relieving itself of its obligations, assign any of its rights and obligations hereunder to a corporation with which it is affiliated at the time of such assignment, provided that such assignment does not materially change the duty of the other party, or increase the burden or risk imposed on the other party under this Agreement, or impair the other party's entitlement to performance.

19.2 Reorganization: Any company which succeeds by purchase, merger, or consolidation to the properties, substantially as an entirety, of Shipper or of MichCon Gathering, as the case may be, will be entitled to the rights and will be subject to the obligations of its predecessor in title under this Agreement.

19.3 Successors and Assigns: This Agreement will be binding upon and enure to the benefit of the parties and their respective successors and permitted assigns.

19.4 Headings: The headings used throughout this Agreement are inserted for convenience of reference only and are not be considered or taken into account in construing the terms or provisions hereof nor are they to be deemed in any way to qualify, modify or explain the effect of any such provisions or terms.

19.5 Gender, Number and Internal References : Unless the context otherwise requires, words importing the singular include the plural and vice versa, and words importing gender include all genders. The words "herein", "hereunder" and words of similar import refer to the entirety of this Agreement and not only to the section in which such use occurs.

19.6 Entirety: This Agreement and Exhibits A, B, and C constitute the entire agreement between MichCon Gathering and Shipper concerning the subject matter hereof. Any prior understandings, representations, promises, undertakings, agreements or inducements, whether written or oral, concerning the subject matter hereof not contained herein shall have no force and effect. This Agreement may be modified or amended only by a writing duly executed by both parties.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed as of the day and year first above written.

MICHCON GATHERING COMPANY

By: _____

Title: _____

Date: _____

DOMINION RESERVES, INC.

By: _____

Title _____

Date: _____

EXHIBIT A
RECEIPT POINTS

Receipt Point Number	Receipt Point Name	Allocation Meter Number	Allocation Meter Name	Shipper's % Dedicated to Transportation
80003	Charlton 34	81004	ANT MARSTRAND	100
80056	Loud 13B	81466	ANT GILCHRIST CREEK	100
80094	Charlton 26	81219	ANT MID-CHARLTON W	100
80094	Charlton 26	81220	ANT MID-CHARLTON E	100
80213	ANT ALBERT E 17A			100
80120	ANT DOVER 36 RMS			100
80185	ANT RUST S 7 RMS			100
80067	ANT RUST S 10 RMS			100
80099	ANT CHESTER SOUTH 1			100
80040	ANT OTSEGO LAKE 34			100
80047	ANT LOUD 15	81574		100
80047	ANT LOUD 15	81575		100
90050	ANT ALBERT W 11	81576		100
80050	ANT ALBERT W 11	81577		100
80052	ANT LOUD 18			100
80053	ANT LOUD 13	81572		100
80053	ANT LOUD 13	81573		100

EXHIBIT B
DELIVERY POINTS

<u>Facility Name</u>	<u>Location</u>	<u>Pressure (psig)</u>	<u>MDQ</u>
MichCon 30" T&D Line (Kalkaska MichCon)	Outlet Kalkaska Gas Plant	950	360
Consumers Energy 12" T&D Line (GC-CE)	Goose Creek	960	190
ANR 24" Transmission Line (South Chester-ANR)	S. Chester Treating Plant	1040	75
ANR 36" Storage Line (Kalkaska - ANR)	Outlet Kalkaska Gas Plant	950	150
Great Lakes 36" Transmission Line or Alternate points per ANR guarantee	Goose Creek	950	50

EXHIBIT C

ANTRIM GAS TRANSPORTATION AGREEMENT

- I. Service Requests
- II. Nominations, Scheduling and Allocations
- III. Paper Pooling
- IV. Imbalances
- V. Measurement
- VI. Quality Specifications
- VII. Diversion of Gas

I. SERVICE REQUESTS

- A. Transportation Service provided pursuant to this Agreement will be offered on a firm basis until 100% of the capacity of the AEP is subscribed. Thereafter, service will be offered on an interruptible basis. MichCon Gathering may provide service on an interruptible basis only to the extent capacity exceeds its firm commitments.
- B. If more capacity is requested than is available, then all requests will be filled by prorating the total system capacity among shippers with dedicated reserves received by MichCon Gathering before September 30, 1995. System capacity reallocations will be made at the end of each calendar quarter for the term of this Agreement.

- C. One year after the effective date of this Agreement, if for any consecutive twelve month period, Shipper transports an amount of Gas on a daily basis that averages less than 90% of Shipper's total MDQ, then MichCon Gathering may adjust such MDQ downward to equal Shipper's daily average of transported quantities for such prior twelve Month period, unless Shipper provides MichCon Gathering with reasonable assurances that the average amount of gas that Shipper will make available for transportation within the next twelve Months shall equal or exceed Shipper's MDQ. If a Force Majeure event occurred during any of the prior twelve Months, or if Shipper's MDQ was reduced during any of the prior twelve Months due to MichCon Gathering's lack of capacity on the AEP, then such Month(s) shall be excluded and the next prior Month(s) used in its stead. Furthermore, if Shipper's transported quantities of Gas on a daily basis for a three Month period exceed Shipper's total MDQ, then Shipper may request an increase of its MDQ, and MichCon Gathering will, at the end of the calendar quarter, grant Shipper's request on pro rata basis with all other shippers' requests for MDQ increases subject to capacity restraints on the AEP.

II. NOMINATIONS, SCHEDULING and ALLOCATIONS

- A. Nominations must be made via MichCon's Electronic Bulletin Board, ConQuest. Shipper shall include for each nomination the daily quantities of Gas that it desires MichCon Gathering to transport during each Month from each Receipt Point and the daily quantities that Shipper desires MichCon Gathering to redeliver at each

Delivery Point. Shipper shall also identify the quantity it intends to deliver to each downstream shipper by name, by downstream contract number for interstate deliveries, and the order of priority in the event MichCon Gathering must make adjustments pursuant to allocations below. The sum of the quantities nominated at all Receipt Points hereunder may not exceed the aggregate MDQ as specified in this Agreement, unless by Authorized Overrun Service.

- B. Initial Monthly Nominations. Each Shipper shall submit a nomination at least five (5) working Days prior to the first Day of each Month.
- C. Nomination Changes after the beginning of the Month. Shipper shall give MichCon Gathering at least twenty-four (24) hours notice prior to any proposed change of a daily nomination to be effective for the next Day. MichCon Gathering shall waive such notice upon request if, in its view, the AEP operating conditions permit such waiver. Shipper will be allowed to change the order of priority of receipts and deliveries by providing twenty-four (24) hour notice.
- D. Shipper's nominations are not effective until confirmed either in writing or via ConQuest. Nominations will be confirmed or rejected within 24 hours of receipt. Nominations will not be rejected without cause.
- E. Shipper's Agent. Shipper may designate in writing an agent to nominate and schedule Gas Transportation Service on Shipper's behalf. Such designation must be in writing. An agent may provide nomination(s) for multiple Shippers. Shipper shall indemnify and save MichCon Gathering harmless from all suits, actions, debts,

accounts, damages, costs, losses and expenses arising in any way from Shipper's agent's actions on behalf of Shipper.

- F. Hourly Variation. Shipper shall maintain uniform hourly rates at all Receipt Points hereunder to the extent practicable.
- G. Delivery of Gas. MichCon Gathering shall make daily delivery of Equivalent Quantities of gas, at each Delivery Point that Shipper nominates, provided, however, that Shipper may not take delivery of gas for quantities it has not nominated and delivered to MichCon Gathering at Receipt Point(s).
- H. Scheduling and Allocation of Capacity. There are four service levels: Firm Service, Authorized Overrun Gas ("AGO"), Unauthorized Overrun Gas ("UOG"), and Interruptible Service. For each Day, MichCon Gathering will schedule receipts and deliveries of gas on the basis of Shippers' confirmed nominations pursuant to the following:
- i. If the AEP is not at full capacity due to the transportation of shippers' firm MDQ, then excess capacity will exist such that MichCon Gathering is able to receive (a) AOG nominations in excess of a Shipper's MDQ, or (b) Interruptible Service nominations;
 - ii. UOG shall occur when a Shipper exceeds its MDQ and fails to comply with the criteria set forth in Section 5.1.5 of the Agreement;
 - iii. Firm Service, AOG, or Interruptible Service will be curtailed on a pro rata basis within each service category; however, any AOG is subordinate to

Firm Service and shall be curtailed if any other Firm Shipper(s) wish to nominate up to their MDQ; and further provided that any Interruptible Service is subordinated to AOG and shall be curtailed if a Firm Shipper wishes to use AOG;

- iv. MichCon Gathering may allocate Receipt Point capacity, if required, pro rata by confirmed nominations up to the Firm MDQ at each Receipt Point;
- v. MichCon Gathering may allocate AEP capacity, if required, pro rata by confirmed nominations up to the Firm MDQ;
- vi. MichCon Gathering shall allocate Delivery Point capacity, if required, pursuant to each Shipper's Antrim transportation priority (Firm, AOG, or Interruptible) up to the MDQ at each Delivery Point. If allocation of Delivery Point capacity is required among Shippers with firm transportation priority, then such allocation will be based on each Shipper's instructions to MichCon Gathering;
- vii. In the event that Shipper is transporting UOG and MichCon Gathering determines that it will curtail such UOG, then MichCon Gathering may identify any volumes by Points of

Receipt as the volumes that must be curtailed in order to bring Shipper into compliance with its MDQ.

I. Accounting for Receipts and Deliveries.

i. Following each Month, MichCon Gathering will forward to Shipper a report, either written or via ConQuest detailing Shipper's quantities in Mcf's and MMBtu's.

ii. Allocation of Deliveries.

All deliveries will be allocated throughout the Month based on confirmed nominations at each Delivery Point. Delivery Point quantities allocated among Shippers will be reconciled at the end of each calendar Month.

iii. Allocation of Receipts.

Where there is more than one Shipper at a Receipt Point, then allocation of actual quantities will be made throughout the Month pro rata, based on Shipper's confirmed nominations for each such Receipt Point. Receipt Point quantities will be reconciled at the end of each calendar Month.

iv. Electronic Information

MichCon Gathering will operate its allocation procedures using electronic information available at Receipt Point(s) and/or Delivery Point(s). If such electronic information is not available on any Day, then MichCon Gathering will assume that receipts and/or deliveries are equal to nominations, provided, however, that MichCon Gathering shall adjust such assumed receipts and/or deliveries to actual receipts and/or deliveries as soon as is reasonably practicable after the actual information becomes available. Any

such prior period adjustments will not cause a penalty upon Shipper hereunder.

III. PAPER POOLING

- A. Once MichCon Gathering has allocated gas pursuant to this Agreement, then any over deliveries or under deliveries by Shipper at one Receipt or Delivery Point may be offset by underdeliveries or overdeliveries by Shipper at another Receipt or Delivery Point, respectively ("Paper Pooling"). Such netting will be used by MichCon Gathering for determining any imbalance penalties under this Agreement.
- B. Paper Pooling does not relieve Shipper from its obligation to make valid nominations or its obligation for gas imbalances under the terms of this Agreement.

IV. MONTHLY IMBALANCES

- A. At the end of each Month, MichCon Gathering will provide each Shipper with a gas imbalance statement for that Month ("Imbalance Month") either via ConQuest or written copy. Shipper will be afforded the opportunity to make up the imbalance during the subsequent Month, as follows:
 - i. If the imbalance resulted from an overdelivery of gas based on Receipt Point volumes less Pipeline Loss, then for the Month following the Imbalance Month, Shipper shall nominate and receive for redelivery at the Delivery Point, volumes equivalent to the amount of the overdelivery.
 - ii. If the imbalance resulted from an underdelivery of gas based on Receipt Point volumes less Pipeline Loss, then for the Month following the

Imbalance Month, Shipper shall nominate and deliver to the Receipt Point, volumes equivalent to the amount of the underdelivery.

- iii. Gas nominated pursuant to Sections IV.A.i. and IV.A.ii. ("Pay-back Gas") must be the first gas nominated for the Month following the Imbalance Month. If Pay-back Gas is not the first gas nominated, MichCon Gathering, at its discretion, may refuse nominations for Shipper's transport gas.

- B. If at the end of any Month following an Imbalance Month, Shipper's net imbalance, after paper pooling, exceeds its confirmed nomination by a tolerance of 10% or greater, then Shipper will incur an imbalance penalty of 10¢ per Mcf for the amount of the imbalance in excess of the 10% tolerance. Such penalty will apply to any gas imbalance not resolved by the end of the Month as provided in Section IV.A. above and for each Month thereafter until the imbalance is resolved.
- C. If upon termination of this Agreement, Shipper has not caused to be delivered to MichCon Gathering at the Receipt Points, quantities of gas in MMBtu's that are equal to those that Shipper has taken at the Delivery Point(s), plus those quantities retained by MichCon Gathering as compensation for Pipeline Loss, the term of this Agreement will be extended for a period of up to 60 Days during which time Shipper shall cause the deficient quantity to be delivered to MichCon Gathering pursuant to this Agreement at a mutually agreeable daily rate of delivery. Should Shipper fail to correct this imbalance within the 60 Day period, Shipper shall pay MichCon Gathering, as liquidated damages, an amount equal to 110% of the

currently effective Gas Cost Recovery Factor (pursuant to MichCon's Rules, Regulations and Rate Schedules on file with the Michigan Public Service Commission) for any remaining deficient quantities.

- D. If upon termination of this Agreement, Shipper has delivered to MichCon Gathering at the Point(s) of Receipt, quantities of gas that are in excess of those that Shipper has taken at the Point(s) of Delivery, plus those quantities retained by MichCon Gathering as compensation for Pipeline Loss, the term of this Agreement will be extended, for a period of up to 60 Days, during which time Shipper shall receive the excess quantities from MichCon Gathering pursuant to this Agreement at a mutually agreeable daily rate of receipt. Should MichCon Gathering fail to correct this imbalance within the 60 Day period, MichCon Gathering shall pay Shipper, as liquidated damages, an amount equal to 110% of the currently effective Gas Cost Recovery Factor (pursuant to MichCon's Rules, Regulations and Rate Schedules on file with the Michigan Public Service Commission) for any remaining deficient quantities.

V. MEASUREMENT AND MEASUREMENT EQUIPMENT

A. Measurement

- i. The unit of volume for the purpose of measurement shall be one thousand cubic feet of gas at a temperature base of sixty degrees (60°) Fahrenheit and a pressure base of 14.65 pounds per square inch absolute (psia).

- ii. The average atmosphere (barometer) pressure at each point of receipt and each point of delivery shall be assumed to be fourteen and four-tenths (14.4) pounds per square inch, irrespective of the actual location or elevation above sea level of the Delivery Point or of any variation in actual atmospheric pressure from time to time.
- iii. The flowing temperature of the gas(es) shall be determined by means of an instrument of standard manufacture accepted in the industry for this purpose.
- iv. The supercompressibility factor used in computing the volume of gas delivered through an office meter shall be determined in a manner consistent with the method contained in the American Gas Association "Manual for the Determination of Supercompressibility Factors for Natural Gas (AGA Report No. 8)" as such publication may be revised from time to time.
- v. The specific gravity of the gas used in computing the volume of gas delivered shall be determined at intervals of not more than ninety (90) Days by means of an instrument(s) of standard manufacture accepted in the industry for this purpose using a sample of gas, or a representative sample of gas, of the gas stream flowing to the Receipt or Delivery Points.
- vi. The compressibility ratio factors "s" used in computing the volume of gas delivered through a turbine meter or a positive displacement meter shall be determined by the equation $s = (F_{pv})^2$, in which "F_{pv}" is the supercompressibility factor determined as described in Subsection iv hereof.

- vii. In determining the flow temperature factor, supercompressibility factor, and compressibility ratio factor "s" for use in computing the volume of gas delivered through a meter, the flowing gas temperature for only the period(s) of time of that gas was flowing through the meter shall be used.

B. Measurement Equipment

- i. The volume of gas delivered at the Receipt or Delivery Point(s) shall be measured by utilizing one of the following, as mutually agreed to between MichCon Gathering and Shipper:
 - (a) An orifice meter designed, installed, maintained and operated as recommended in the latest issue of American National Standard ANSI/API 2530 (American Gas Association Gas Measurement Report No. 3), entitled "Orifice Metering of Natural Gas and Other Related Hydrocarbon Fluids", as such publication may be revised from time to time (hereinafter referred to as "AGA Report No. 3") (revisions will be incorporated within a reasonable time period); or
 - (b) A turbine meter designed, installed, maintained and operated as recommended in the latest issue of American Gas Association Transmission Measurement Committee Report No. 7 entitled "Measurement of Fuel Gas by Turbine Meters", as such publication may be revised from time to time (hereinafter referred to as "AGA Report No. 7" (revisions will be incorporated within a reasonable time period); or

(c) A positive displacement meter installed and operated in accordance with generally accepted industry practices.

The construction and installation of the metering facilities shall be in accordance with the recommendations and specifications set forth by the reports specified in Section i(a) hereof or by the meter manufacturer specified in Section i(b) hereof.

- ii. Any auxiliary measuring equipment, if utilized, shall be installed, maintained and operated in accordance with generally accepted industry practices. Chromatographs calculating the heating value (Btu) of the gas shall be programmed having the Gas Processors Associated (GPA) Standard 2145 Table of Paraffin Hydrocarbons and Other Components of Natural Gas.
- iii. The volume of gas delivered at each Receipt or Delivery Point shall be calculated by means of an electronic flow computer located at, or by the processing of meter charts recorded at, each Receipt or Delivery Point. The calculation or processing, in either case, shall be performed in the following manner:
 - (a) When the measuring equipment is an orifice meter, the flow of gas through the meter shall be computed in the manner recommended in AGA Report No. 3, properly using all factors set forth therein.

- (b) When the measuring equipment is a turbine meter, the volume of gas delivered through the meter shall be computed in the manner recommended in AGA Report No. 7, properly using all facts set forth therein.
- (c) When the measuring equipment is a positive displacement meter, the volume of gas delivered through the meter shall be computed by properly applying, to the volume delivered at flowing gas pressures and temperatures, correction factors for (1) absolute static pressure, (2) flowing gas temperature, (3) compressibility ratio and (4) specific gravity.
- iv. The operator, for purposes of this subsection, shall be MichCon Gathering, or such other person as the parties may agree in writing. All flow, measuring, testing and related equipment shall be of standard manufacture, and type approved by MichCon Gathering. Shipper may install check measuring equipment, provided that such equipment shall be installed so as not to interfere with the operations of MichCon Gathering. Shipper, in the presence of MichCon Gathering, if applicable shall have access to measuring equipment at all reasonable times, but the reading, calibrating and adjusting thereof and the changing of charts, if any, shall be done by MichCon Gathering. Shipper shall have the right to be present at the time of the installing, reading, cleaning, changing, repairing, inspecting, testing, calibrating or adjusting done by MichCon Gathering. The records from such measuring equipment shall remain the property of MichCon Gathering, but

upon request, Shipper may request record, including charts, if any, together with calculations therefrom for inspection, subject to return within ten (10) working Days after receipt thereof or extended by mutual agreement. Reasonable care shall be exercised in the installation, maintenance and operation of the measuring equipment to avoid any inaccuracy in the determination of the volume of gas received and delivered. The accuracy of all measuring equipment shall be verified by MichCon Gathering at intervals of not more than three (3) Months for orifice meters and six (6) Months for turbine and positive displacement meters, and if requested, in the presence of representatives of the Shipper, but neither MichCon Gathering nor Shipper shall be required to verify the accuracy of such equipment more frequently than once in any thirty (30) Day period. However, if an electronic measurement system is utilized, its components shall be calibrated at least once every ninety (90) Days pursuant to Section viii below. If MichCon Gathering agrees to verification and testing of measuring equipment and fails to perform the verification and testing, then Shipper shall have the right to cease or temporarily discontinue Gas Transportation Service under this Agreement relative to such measuring equipment. If either party at any time desires a special test of any measuring equipment, it will promptly notify the other party and the parties shall then cooperate to secure a prompt verification of the accuracy of the equipment. The expense of any special

test shall be borne by the party requesting it if the measuring equipment is found to be in error by not more than 2% for manual equipment or for EGM equipment the percentage cited in viii(a). If, upon any test, any measuring equipment is found to be in error, such errors shall be taken into account in a practical manner in computing the deliveries. If the resultant aggregate error in the computed receipts or deliveries is not more than 2% for chart records or pursuant to viii(a) for EGM equipment, then previous receipts or deliveries shall be considered accurate. All equipment shall, in any case, be adjusted at the time of testing to record correctly. If, however, the resultant aggregate error in computing receipts or deliveries exceeds 2 % for chart records or pursuant to viii(a) for EGM equipment, at a recording corresponding to the average hourly rate of gas flow rate for the period since the last preceding test; the previous recordings of such equipment shall be corrected to zero error for any period that is known definitely or agreed upon, but in case the period is not known definitely, or agreed upon, the correction shall be for the period extending over one-half of the time elapsed since the date of the last test.

- v. In the event any measuring equipment is out of service, or is found registering inaccurately, previous recordings of receipts or deliveries through such equipment shall be corrected using the following procedures:

- (a) by using the registration of any check meter or meters, if installed and accurately registering, or in the absence of (a);
- (b) by correcting the error if the percentage of error is ascertainable by calibration, special test or mathematical calculation, or in the absence of both (a) and (b) then;
- (c) by estimating the quantity of receipt or delivery based on receipts or deliveries during preceding periods under similar conditions when the meter was registering accurately.

The correction period shall not exceed twelve (12) Months from the most recent test.

- vi. If at any time during the term of service a new method or technique is developed with respect to gas measurement or the determination of the factors used in gas measurement, the new method or technique may be substituted upon mutual agreement by both parties.
- vii. The parties agree to preserve for a period of at least two (2) years or such longer period as may be required by public authority, all test data, charts, and other similar records.
- viii. Electronic Gas Measurement (EGM) Technical Requirements
 - (a) Accuracy: The meter system should use instruments that will provide an overall measurement accuracy of + or - 0.5% of flow, taking into account all the sources of error, including calibrated span of instruments, linearity,

hysteresis, repeatability, ambient temperature, stability, vibration, and power supply fluctuation. Generally, this accuracy can be achieved only by the use of high accuracy smart transmitters with a published accuracy of $\pm 0.1\%$. If the EGM is a retrofit to replace existing mechanical chart recorders, an overall accuracy of $\pm 1.0\%$ of flow will be acceptable. This accuracy can generally be achieved by utilizing transmitters with a published accuracy of $\pm 0.25\%$.

Differential Pressure Transmitters shall be of a type that selfcompensate for static pressure effect or manufacturer's published compensation factor shall be programmed into the flow computer (RTU).

All instruments should operate on a temperature range of 30 degrees Fahrenheit to + 120 degrees Fahrenheit and a non-condensing relative humidity range of 0 to 95%. The unit must be able to withstand mechanical shock of at least 1 G and Shipper will to be held responsible for any accidental damage to the equipment as a result of mechanical shock of over 1 G.

(b) Computation: The flow computer of the meter system shall as a minimum perform flow calculation per AGA-3, AGA-7, and AGA-8 requirements. As the aforementioned calculation methods are revised from time to time, new releases shall be implemented within twelve Months from the release data. All other methods of computation must be approved by

both Shipper and MichCon Gathering. All measured variables for differential pressure, static pressure, and temperature shall be sampled at least once per second. All volume calculations shall be made at least once per second.

Calculation of supercompressibility shall occur at least once every 30 seconds.

(c) Data Security: The flow computer must have password protection before data can be accessed or any parameters be changed. The computer must have a log of all changes made to the configuration.

(d) Safety: The EGM system must meet standards for Class I, Division 2, Group D installations.

(e) Power: The flow computer (RTU) and the related hardware should run on re-chargeable batteries. These batteries can be charged by either 120VAC, 24VDC or solar panels. For previously installed equipment, the battery capacity shall not be less than eight (8) hours. For future EGM installation, the battery capacity shall be at least twenty-four (24) hours when fully charged.

(f) Local Display: Shipper shall be provided with capability to monitor volume information being recorded by measurement system on an ongoing basis with either RTU display or transmitters with local display.

(g) Calibration: All equipment used for EGM shall be tested and calibrated every 90 Days, or in accordance with the requirements of the agency(ies) having jurisdiction, or in accordance with contractual agreements, whichever of these requirements are more stringent. All test and calibration equipment shall be certified to 0.1% accuracy and traceable back to an NGS primary standard. All test and calibration equipment shall be re-certified by a third party at least annually. In addition, MichCon Gathering shall perform such inspections and test of the accuracy of the equipment used in the EGM system calibrations. A copy of any inspection, test of certification report, whether performed monthly or annually by MichCon Gathering or an outside third party, shall be made available to Shipper personnel upon written request. MichCon Gathering shall provide Shipper with documentation on the tests and inspection and the annual certification planned for the equipment used to calibrate the EGM equipment. Calibration equipment must satisfy all applicable safety codes for the location in which it is being used, or the area must be checked and confirmed as gas free (less than 5 % LEL) prior to and during use. A full loop (end device through RTU) test/calibration is required on all ANALOG inputs. Any adjustments to or calibration of the equipment shall be documented and kept as part of the audit trail.

Provisions shall be made for Shipper to tap into meter run with an electronic transmitter for periodic calibration comparison, provided, however, any such tap shall be done with permission from MichCon Gathering and shall not interfere with MichCon Gathering's measurement operations at that point. The flow computer and/or RTU shall freeze the analog transmitter values during transmitter calibration and orifice plate removal and use the frozen values for the flow computation during calibration and orifice plate removal and re-installation. (h) Audit: The following information must be kept for a minimum of two (2) years following the calendar year of production, unless required by contract to be kept longer or by the applicable, valid requirements of any governmental bodies having or asserting jurisdiction:

- (1) All calculated volumes, energies, and daily averages must be maintained in their original unaltered form.
- (2) Any changes to the data to correct for inaccuracies must be fully documented, including assumptions and factors used in calculating the adjustment.
- (3) All event logs, alarm logs, test/calibration reports, gas analyses, preventive maintenance documentation, or any other document containing EGM related data.

All audit information will be available to Shipper personnel during normal business hours, upon request.

VI. GAS QUALITY SPECIFICATIONS

Unless prior approval is obtained from MichCon Gathering, all Gas received and delivered under the terms of this Agreement must conform to the following specifications:

- (a) The Gas must be commercially free from dust, gum, gum-forming constituents, and all other solid and liquid matters which may interfere with its merchantability or cause injury to or interfere with proper operation of the pipelines, regulators, meters or other appliances through which it flows;
- (b) The Gas may not contain anything which might adversely affect the safe and efficient operation of MichCon Gathering's downstream facilities;
- (c) The water content of the Gas may not exceed 7 pounds per million cubic feet, however, every reasonable effort must be made to keep the water content at or below 5 pounds per million cubic feet;
- (d) The Gas may not contain oxygen. Shipper is responsible for insuring that its operator maintains its equipment to insure the gas is free of oxygen;
- (e) At any Receipt Point, the carbon dioxide content of the Gas may not exceed three fourths of one mole percent (0.75%), unless Shipper can demonstrate that it has downstream processing agreements satisfactory to MichCon Gathering which provide that the carbon dioxide content of the gas will not exceed three fourths of one mole percent (0.75%) at the outlet of the processing plant, in which case the carbon dioxide content may not exceed twenty-five mole percent (25%), provided,

however, that Shipper's aggregate Receipt Point Gas hereunder may not exceed 14 mole percent;

- (f) The Gas may not contain more than 1/4 grain of hydrogen sulfide per 100 cubic feet;
- (g) The Gas may not contain more than 1/2 grain of mercaptan sulfur per 100 cubic feet;
- (h) The Gas may not contain more than 5 grains of total sulfur per 100 cubic feet, including the sulfur in any hydrogen sulfide, mercaptan, sulfides and residual sulfur.
- (i) The Gas redelivered at each Delivery Point must have a total heating value per cubic foot of not less than 950 British thermal units at a base pressure of 14.65 pounds per square inch at 60 degrees Fahrenheit. If the Gas has been included in a downstream Gas treating agreement, the Gas at each Receipt Point must have a total heating value per cubic foot of not less than 730 British thermal units at a base pressure of 14.65 pounds per square inch at 60 degree Fahrenheit on a dry basis; however, Shipper's aggregate Receipt Point Gas must have a total heating value per cubic foot of not less than 834 British thermal units.
- (j) In the event the Gas delivered by Shipper at the Receipt Point(s) fails at any time to meet these quality specifications, MichCon Gathering shall notify Shipper of such deficiency and thereupon may, at its option, refuse to accept deliveries pending correction. Upon demonstration acceptable to MichCon Gathering that the Gas being tendered for delivery meets these quality specifications or that Shipper has arranged for the necessary treatment, processing or other action required for the Gas

to meet these quality specifications, MichCon Gathering shall commence or resume, as the case may be, taking delivery of Gas.

- (k) Shipper agrees to indemnify and hold MichCon Gathering harmless for any and all liability resulting from MichCon Gathering's movement of Gas received by Shipper which fails to meet the specifications hereunder and which have not been waived in writing, including contamination or damage to other Gas being transported.

VII. DIVERSION OF GAS.

The AEP is a stand-alone system for the CO₂ treating and transportation of Antrim Gas.

The AEP has no direct end user or distribution markets, but interconnects with (i) Michigan Consolidated Gas Company, (ii) ANR Pipeline Company, (iii) Great Lakes Gas Transmission and (iv) Consumers Power Company ("Four Pipelines"), that do have direct markets. The parties recognize that the AEP is thus not subject to diversion of gas.

However, when AEP gas is delivered into each of the Four Pipelines, then such gas is subject to the diversion rules that apply to each such pipeline.

ASAT DEDICATION OF RESERVES
_____ COUNTY

ANTRIM EXPANSION PROJECT

This Dedication Agreement made this _____ day of _____, 2005, between MICHCON GATHERING COMPANY ("MichCon Gathering") and DOMINION MIDWEST ENERGY INC. ("Producer") dedicates those projects identified on Attachment 1 to the transportation services provided by MichCon Gathering on its Antrim Expansion Project ("AEP").

In consideration for transportation services provided on the AEP, and subject to the mutual covenants and agreements set forth in this Dedication Agreement, the parties agree as follows:

1. Producer dedicates to the gas transportation services provided on the AEP, all of the natural gas produced from the Devonian age Antrim shale formation which Producer owns or controls and is produced from the unitized acreage set forth on Attachment 1 ("Dedicated Reserves"). Producer represents that it either owns valid leases covering the interests in or under, or that it has the legal right to dedicate, the real property described on Attachment 1. MichCon Gathering has no obligation to provide firm transportation on the

AEP for any Antrim Gas delivered or caused to be delivered by Producer that is not covered by this Dedication Agreement.

2. This Dedication Agreement will be effective as of _____.
3. It is the intent of the parties that the dedication of reserves provided for in this Dedication Agreement runs with the real property described on Attachment 1 and, as such, binds all subsequent transferees of any interests in that real property. Accordingly, Producer agrees that this document may be recorded by MichCon Gathering in the appropriate governmental office in order to place any such subsequent transferees on notice that they are bound by this Dedication Agreement. MichCon Gathering will provide Producer with a copy of the recorded instrument promptly following recordation.
4. This Dedication Agreement and the Transportation Agreement under which Producer's gas is shipped on the AEP constitute the entire agreement between MichCon Gathering and Producer concerning dedication of reserves for gas transportation services on the AEP. Any prior understandings, representations, promises, undertakings, agreements or inducements, whether written or oral, concerning dedication of reserves for transportation on the AEP have no force and effect. This Dedication Agreement may be modified or amended only in writing and signed by both parties.
5. This Dedication Agreement may be executed in counterpart and shall be binding upon all parties executing the same, their heirs, personal representatives, successors and assigns, whether or not

executed by all parties owning an interest in the real property referenced in Attachment 1.

IN WITNESS WHEREOF, the parties have caused this Dedication Agreement to be executed this _____ day of _____, _____.

WITNESSES:

MICHCON GATHERING COMPANY

By: _____
Name: _____
Title: _____

WITNESSES:

DOMINION MIDWEST ENERGY INC.:

By: _____
Name: _____
Title: _____

ACKNOWLEDGMENTS

STATE OF MICHIGAN)
) ss
 COUNTY OF _____)

On this _____ day of _____, 2005, before me, a Notary Public in and for the State and County aforesaid, personally appeared _____, the _____ of **MICHCON GATHERING COMPANY**, a Michigan corporation, on behalf of which he executed the foregoing Dedication Agreement, and acknowledged the same to be the free act and deed of said corporation, effective as of the _____ day of _____, 2005.

 Notary Public
 _____ County, Michigan
 My Commission Expires: _____

STATE OF MICHIGAN)
) ss
 COUNTY OF _____)

On this _____ day of _____, 2005, before me, a Notary Public in and for the State and County aforesaid, personally appeared _____, the _____ of _____, a _____ corporation, on behalf of which he executed the foregoing Dedication Agreement and acknowledged the same to be the free act and deed of said corporation, effective as of the _____ day of _____, 2005.

 Notary Public
 _____ County, Michigan
 My Commission Expires: _____

This instrument prepared by:
 Julie A. Cohen
 MichCon Gathering Company
 2000 Second Street
 Detroit, Michigan 48226