

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.

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DIRECT TESTIMONY OF THAD SHUMWAY

ON BEHALF OF

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

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

Q. Please state your full name and business address.

A. Thad Shumway, 13561 S.W. Bayshore Drive, Suite 2200, Traverse City, MI
49684.

Q. What is your title?

A. My title is Director of Marketing for Quicksilver Resources, Inc. ("Quicksilver"), a
Complainant in this proceeding.

Q. Please state your background and business experience.

A. Prior to my employment with Quicksilver, I was the President of Cinnabar Energy
Services & Trading, LLC. Prior to that, I was a Business Development Manager
with Carthage Energy Services where my responsibilities included administering,
buying and selling natural gas supplies in Northern Michigan. From 1989
through 1999 I was employed by CMS Energy Corporation in various positions
relating to natural gas production, transportation and sales in Northern Michigan.

Q. Have you previously testified before the Michigan Public Service Commission?

A. Yes, my written testimony was included as part of the Complaint Case No. U-
12342.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to provide information on the communications,
contracts, and actions that transpired between Michigan Consolidated Gas
Company and MichCon Gathering Company (collectively, "MichCon") and Terra
Energy, Ltd. ("Terra") and Quicksilver regarding MichCon's attempts to

1 unilaterally and without MPSC approval impose a new carbon dioxide removal
2 content gas standard on producers on the AEP.

3 Q. What relationship does Terra have to Quicksilver?

4 A. Terra is a wholly owned subsidiary of Quicksilver.

5 Q. Are you sponsoring any exhibits?

6 A. Yes, I am sponsoring the following:

- 7 1. Antrim Gas Service Agreement dated September 12, 1994 between Terra
8 Energy, LTD and Michigan Consolidated Gas Company (referred to herein
9 as Exhibit TRS-1);
- 10 2. Antrim Gas Transportation Agreement dated December 18, 1997 between
11 Terra Energy, LTD and MichCon Gathering Company (referred to herein
12 as Exhibit TRS-2);
- 13 3. Antrim Gas Transportation Agreement dated January 1, 1998 between
14 Mercury Exploration Company, Inc. and MichCon Gathering Company
15 (referred to herein as Exhibit TRS-3);
- 16 4. Antrim Gas Service Agreement dated April 1, 2000 between Quicksilver
17 Resources, Inc. and Michigan Consolidated Gas Company (referred to
18 herein as Exhibit TRS-4);
- 19 5. First Amendment to Antrim Gas Transportation Agreement dated October
20 26, 2005 between Quicksilver Resources, Inc. and Michigan Consolidated
21 Gas Company (referred to herein as Exhibit TRS-5); and
- 22 6. Antrim Gas Transportation Agreement dated March 1, 2006 between
23 Quicksilver Resources, Inc. and Michigan Consolidated Gas Company
24 (referred to herein as Exhibit TRS-6);

1 Q. Please provide background on the relationship of Quicksilver/Terra and MichCon
2 as it pertains to this case.

3 A. Quicksilver and Terra are producers of natural gas in Michigan. Quicksilver and
4 Terra have Antrim Gas Transportation and Treating Service Agreements
5 ("ASATT") with MichCon. (See Exhibits TRS 1-6.) Pursuant to the ASATTs,
6 Quicksilver and Terra transport their gas to receipt points. From there, MichCon
7 transports the gas to facilities located on the AEP which remove the CO₂ from the
8 gas. MichCon then delivers the gas back to Terra and Quicksilver at delivery
9 points.

10 Q. What is MichCon's role in the Antrim Expansion Pipeline ("AEP")?

11 A. MichCon owns and operates the AEP, and it receives and transports Antrim gas
12 to downstream Delivery Points designated by producers via the AEP. MichCon
13 is a common carrier and the AEP is a common carrier pipeline subject to the
14 provisions of 1929 PA 9, as amended, MCL 483.101 et seq.

15 Q. Are you familiar with the Michigan Public Service Commission's Order allowing
16 MichCon to construct and operate the AEP?

17 A. Yes. On March 29, 1995, the Commission issued its Opinion and Order in
18 MPSC case number U-10547, in which it granted MichCon authority to construct
19 and operate the AEP. In its March 29, 1995 Opinion and Order, the Commission,
20 among other things, authorized MichCon to construct and operate the AEP
21 through a subsidiary entity. MichCon did so, and the AEP was constructed and
22 is operated by its subsidiary, MichCon Gathering. The March 29, 1995 Opinion
23 and Order established rates for transportation services on the AEP, but did not
24 establish any rates for CO₂ ("carbon dioxide") treatment. The March 29, 1995

1 Opinion and Order required that MichCon operate the AEP in a manner that
2 maintained carbon dioxide content of gas delivered at downstream Delivery
3 Points at or below 2.0%. The March 29, 1995 Opinion and Order required that
4 MichCon not discriminate as between producers for transportation on the AEP.
5 The in-service date of the AEP was November 8, 1995.

6 Q. Have Quicksilver and Terra entered into Antrim Gas and Treating Agreements
7 with MichCon?

8 A. Yes. MichCon entered into a number of Antrim Gas Treating and Transportation
9 Agreements ("ASATTS") with producers, including Quicksilver, Mercury
10 Exploration Company, Inc. (since purchased by Quicksilver) and Terra. The
11 practice of pipeline operators has been to file with the Commission copies of
12 Transportation Agreements and Transportation and Treating Agreements in
13 compliance with MCLA 483.110 (Section 10 of Act 9 of 1929).

14 Q. What is the difference between an ASAT and an ASATT?

15 A. An ASAT is a transportation only agreement. An ASATT is a treating and
16 transportation agreement.

17 Q. Has MichCon filed tariffs with the Commission for the AEP?

18 A. It is my understanding that MichCon has not filed tariffs with the Commission
19 governing transportation and/or treating services for the AEP.

20 Q. Are you familiar with the terms of the ASATTS?

21 A. Yes. Each of the ASATTS required, as a condition of firm transportation service,
22 that the producer execute a dedication of reserves, committing those reserves to
23 the pipeline for the term of the contract. Each of the ASATTS provided for both
24 transportation services and for carbon dioxide removal services. The carbon

1 dioxide removal services contemplated that MichCon would assure that the
2 carbon dioxide content of the Antrim gas would be 2.0% or less at all
3 downstream Delivery Points on the AEP.

4 Q. Do the ASATTs limit the CO₂ content of the gas that can be delivered to the
5 AEP?

6 A. Yes, the quality provision of the ASATT agreements says "at any Receipt Point
7 the carbon dioxide content of the Gas shall not exceed 25 mole percent,
8 provided, however, that Shipper's aggregate Receipt Point gas hereunder shall
9 not exceed 14 mole percent..."

10 Q. Where those quality provisions ever amended?

11 A. Yes, there were amendments made to some ASATT agreements whereby the
12 Quality Provisions were changed from 25 mole percent to 35 mole percent for the
13 carbon dioxide content of shipper's gas at recent points. Also, revisions were
14 made so that the 14 mole percent was "as determined through the use of
15 MichCon Gathering's TIPS (The Intelligent Pipeline System) allocation program
16 at the Receipt Points and/or at the outlet of the pre-treatment facilities."

17 Q. Were these amendments done without the consent of the Shippers?

18 A. No, the Shippers were involved with the changes and requirements to either
19 amend the ASAT, ASATT or provide additional means to treat the shipper's
20 aggregate Receipt Point Gas. Also the MPSC Gas Division had oversight and
21 involvement during the process to acquire additional treating facilities necessary
22 to meet the Quality specifications in the ASATT and ASAT agreements.

23 Q. At any time during the period when additional CO₂ removal treating facilities were
24 necessary to treat Receipt Point Gas in excess of 14% did MichCon claim it had

1 the unilateral right to amend the Quality specifications of the ASATT and ASAT
2 agreements?

3 A. No. MichCon did claim it could require additional treating at the expense of
4 Producers because the Producers were not within the Quality specifications of
5 the ASATT and ASAT agreements. But MichCon did not take the position that it
6 had the right to unilaterally alter such quality provisions.

7 Q. Are you familiar with the testimony of Mr. Todd F. Persells and Mr. Arthur
8 Raymond Lyle II for MPSC case U-14754?

9 A. Yes, both Mr. Persells and Mr. Lyle provided testimony about the complicated
10 and delicate nature of balancing the blending of unprocessed antrim gas with that
11 of antrim gas after the removal of CO₂ and managing the CO₂ levels to be at 2%
12 or less at the Delivery Points on the AEP. I believe that characterization has been
13 greatly exaggerated and MichCon has failed to disclose the actions it has
14 employed over the past 6 years that have caused MichCon to be in a situation
15 whereby it must now try to restrict the producers receipt point gas qualities.

16 Q. Can you explain that belief further?

17 A. Yes, MichCon, or its affiliates, own the Vienna Treating facility which removes
18 CO₂ from Antrim gas and then directs that "clean" pipeline quality gas back into
19 an unprocessed high CO₂ commingled gas stream to blend the high CO₂ gas
20 down to a level sufficient to avoid an "Out-of-Spec" service fee pursuant to a
21 treating agreement between Michigan Consolidated Gas Company and CMS
22 Antrim Gas ("CMS"). This is similar in nature to fees paid by Quicksilver and
23 Terra to Wilderness Chester for gas with an aggregate CO₂ content in excess of
24 14%. MichCon, or its affiliates, employ the same practice from the outlet of its

1 Turtle Creek Plant site which also treats Antrim Gas down to pipeline Quality, yet
2 the gas is delivered back into an unprocessed high CO₂ commingled gas stream
3 as a means to avoid the same "Out-of-Spec" service fee. If MichCon used these
4 "clean gas streams" as a means to blend gas at the Delivery Points it might not
5 be such a challenge to manage the Delivery Point CO₂ content levels on the
6 AEP.

7 Q. But wouldn't MichCon have to pay a charge to CMS?

8 A. That may be true, but since 1999, MichCon has been collecting an "Out-of-Spec"
9 fee from shippers (dedicated to MichCon for Out-of Spec service) that have
10 delivered their gas to the AEP, and such fees were intended to offset the
11 amendment to the Quality provisions of the ASATT agreements. If the charges of
12 CMS exceed those charged and collected by MichCon, that is a result of
13 Michcon's actions, not the Shippers on the AEP. It is not appropriate, however,
14 for MichCon to require Producers not affected by the contractual relationship of
15 MichCon and CMS to submit gas of lower CO₂ treatment levels just to offset
16 Michcon's failure to have the capacity to blend gas streams at the Delivery
17 Point(s).

18 Q. Is there anything else that MichCon has done that has put the Quality
19 specifications of the gas at risk at the Delivery Points?

20 A. Yes, MichCon has allowed Antrim Gas (containing a CO₂ content greater than
21 2%) west of Kalkaska into the Wet Header pipeline system with the intent of
22 blending this high CO₂ gas with lower CO₂ content gas from either the AEP or
23 other pipeline systems. MichCon collected a treating fee from the producers for
24 the waiver of the CO₂ content yet never arranged for any means to treat or blend

1 the gas to meet downstream pipeline quality specifications. MichCon did the
2 same with Antrim gas on the Lovells lateral pipeline by directing that untreated
3 gas to the Saginaw Bay Pipeline for blending at Kalkaska. All of these blending
4 arrangements have diminished Michcon's blending capacity on the AEP and they
5 have all been done at the sole direction of MichCon. The shippers on the AEP
6 have no control over the physical flow or delivery of gas and now that MichCon
7 has "changed its policy" and is requiring a lower CO₂ content standard at the
8 outlet of the treating plants the AEP Shippers are penalized for Michcon's lack of
9 blending capacity.

10 Q. What is the relationship of MichCon to CMS Antrim Gas, LLC ("CMS") on the
11 AEP?

12 A. MichCon has entered into a treating agreement with CMS for carbon dioxide
13 removal on the AEP. CMS owns and operates carbon dioxide removal plants
14 that are interconnected with the AEP and other pipelines. Quicksilver and Terra
15 have entered into ASATTs with MichCon under which MichCon treats gas for
16 CO₂ removal on the AEP under the treating agreement between MichCon and
17 CMS and Quicksilver and Terra have entered into treating agreements directly
18 with CMS under which CMS treats gas for CO₂ removal on the AEP.

19 Q. Is that the only way gas is treated for CO₂ Removal on the AEP?

20 A. No, MichCon owns and operates a CO₂ Removal facility in the general area of
21 the CMS plant sites, which is known as the Turtle Lake facility, and the
22 Wilderness-Chester Limited Partnership also owns and operates a CO₂ removal
23 facility in the general area of the CMS Plant site, which is known as the

1 Wilderness-Chester plant. These plants also remove Co₂ from the commingled
2 gas stream on the AEP.

3 Q. Has MichCon entered into ASATTs with other producers?

4 A. Yes. MichCon has entered into a number of other ASATT agreements with
5 Antrim producers other than Quicksilver and Terra, including Wolverine Gas and
6 Oil Company (now Dominion Midwest Energy) and Dominion Reserves, Inc., all
7 with substantially similar terms.

8 Q. Has Quicksilver or Terra entered into any Antrim Gas Transportation Agreements
9 with MichCon?

10 A. Yes. On January 1, 1998, Mercury Exploration Company, Inc. (predecessor to
11 Quicksilver) entered into a contract (entitled Antrim Gas Transportation
12 Agreement) with MichCon for transportation services on the AEP ("January 1,
13 1998 ASAT"). The January 1, 1998 ASAT provides in Section VI (e) that at "any
14 Receipt Point, the carbon dioxide content of Gas may not exceed two mole
15 percent (2%) unless Shipper can demonstrate that it has downstream processing
16 satisfactory to MichCon Gathering which provide that the carbon dioxide content
17 of the gas will not exceed two mole percent (2%) at the outlet of the processing
18 plant."

19 Q. Has MichCon entered into similar contracts with other Producers?

20 A. Yes. I believe that MichCon has entered into the same type contracts with DTE
21 Gas & Oil Co., HRF Exploration and Production, J-5 Inc., Jordan Development
22 Co., Merit Energy Co., NuEnergy Operating Co., Paxton Resources, Inc. and
23 Ward Lake Energy.

24 Q. Why is it significant that MichCon has ASAT contracts with other Producers?

1 A. Because MichCon allows these other Producers to deliver gas to the AEP with a
2 requirement that the CO₂ will not exceed two mole percent (2%) at the outlet of
3 the processing plant, yet it does not allow Quicksilver/Terra the same opportunity
4 for its gas from three properties also on the AEP. As mentioned later in this
5 testimony, Quicksilver sought to add the Bagley East, Bagley Livingston and
6 Bagley 15 NW to its ASAT Agreement. These properties, which have been
7 producing for years were being transported and treated by a different pipeline
8 and CO₂ treating facility that was shut-down. MichCon would not allow for the
9 properties to be added to our existing ASAT Agreement. This amounts to
10 discrimination, preference and economic harm to Quicksilver/Terra.

11 Q. Has the ASAT between MichCon and Quicksilver been amended?

12 A. Yes, it has been amended a few times either to add Receipt Points or for an
13 Oxygen Quality provision amendment. Most recently on October 26, 2005 New
14 Receipt Points were added to the Agreement. (See Exhibit TRS-5).

15 Q. What has happened recently between MichCon and Terra and Quicksilver
16 relative to the ASAT?

17 A. On or about February 14, 2006, Quicksilver requested to add certain Receipt
18 Points (the before mentioned Bagley East, Bagley Livingston, and Bagley 15
19 NW) to its January 1, 1998 ASAT agreement with MichCon. MichCon would not
20 authorize such additions unless Quicksilver provided evidence of a treating
21 agreement sufficient to treat the CO₂ content of the subject properties down to
22 .75%. MichCon stated that the reason for the requirement was a "new policy"
23 and it had the legal right to impose such a requirement. As an alternative to
24 Quicksilver, however, MichCon indicated that Quicksilver could enter into an

1 ASATT (Treating and Transportation Agreement) with MichCon, which would not
2 contain such a requirement.

3 Q. Was this described by MichCon as a "New Policy"?

4 A. Yes, Mr. Todd Persells said it was in fact a new policy and when questioned as
5 to it being discriminatory he said that Michcon's legal council had determined that
6 they had the legal right to impose such a requirement.

7 Q. Do you have an opinion on whether or not MichCon violated Act 9?

8 A. Yes, MichCon has violated MCLA 483.110 (Section 10 of Public Act 9 of 1929)
9 by altering the terms and conditions of service for transportation services on the
10 AEP (MPSC U-10547) without Commission approval. The demand for a lower
11 carbon dioxide content standard is contrary to the provisions of the Commission's
12 March 29, 1995 Opinion and Order, and constitutes illegal preference, in violation
13 of MCLA 483.106 (Section 6 of Public Act of 1929), by imposing terms different
14 and more onerous on Quicksilver than are imposed on other producers. MichCon
15 has violated MCLA 483.104 (Section 4 of Public Act 9 of 1929) by discriminating
16 against Quicksilver and Terra by transporting gas of certain producers with a
17 requirement that CO₂ be treated down to a 2% CO₂ level, while at the same time
18 prohibiting Quicksilver and Terra from transporting their additional gas on the
19 same terms due to a purported "new policy" whereby gas must be treated down
20 to a level of .75%.

21 Q. What about MichCon's offer to transport and treat the gas under the terms of an
22 ASATT agreement?

23 A. I believe MichCon has also violated MCLA 483.104 and MCLA 483.106 (Sections
24 4 and 6 of Public Act 9 of 1929) by providing a direct preference to the gas that

1 MichCon transports and treats under the ASATTs as opposed to other CO₂
2 treating providers providing the treating services and utilizing an ASAT for
3 transportation services just like other Producers are allowed on the AEP.

4 Q. Do you have an opinion as to whether Michcon's actions violate the ASATs?

5 A. Yes, MichCon's actions violate the past practice and standards of the AEP
6 pipeline system that have been in effect since the certification of the AEP in Case
7 No. U-10547. Michcon's actions directly contradict the January 1, 1998 ASAT
8 which requires that at "any Receipt Point, the carbon dioxide content of Gas may
9 not exceed two mole percent (2%) unless Shipper can demonstrate that it has
10 downstream processing satisfactory to MichCon Gathering which provide that the
11 carbon dioxide content of the gas will not exceed two mole percent (2%) at the
12 outlet of the processing plant."

13 Q. What, if any damages, will Quicksilver and Terra suffer as a result of Michcon's
14 actions?

15 A. Quicksilver and Terra will suffer from higher costs to meet the treating
16 requirements to transport gas on the AEP pipeline system if MichCon is able to
17 unilaterally alter the terms and conditions of the service of the AEP without
18 Commission approval. Quicksilver and Terra will not be able to predict or plan
19 for future requirements or restrictions if MichCon can unilaterally dictate "policy
20 changes" to the terms and conditions of service on the AEP without first obtaining
21 Commission approval. The AEP is a monopoly system, regulated by the MPSC,
22 built for the purpose of transporting gas of certain quality restrictions to Delivery
23 Points where it can be sold or transported to other pipelines or markets. If
24 MichCon can act in a unilateral fashion to amend, alter or adjust the terms of

1 service in a fashion that directly affects Quicksilver and Terra's operations, either
2 in the present situation or future events, Quicksilver's investments are subject to
3 the potential of unfair business practices. Section 10 of Public Act 9 of 1929 says
4 that a common carrier may alter or amend its condition service by application to
5 and approval by the commission. MichCon has acted in a manner that
6 circumvents such process by claiming a unilateral right to alter the quality
7 provisions of the ASAT agreements. Quicksilver and Terra are damaged by the
8 preference given to MichCon transportation and treating services which limits the
9 access Quicksilver and Terra have to more reliable service from other CO₂
10 treaters on the AEP system. There have been several occasions when MichCon
11 has curtailed CO₂ treating capacity and other CO₂ treater(s) on the AEP system
12 have not curtailed treating capacity. Michcon's "new policy" restricts access to
13 the more reliable CO₂ treating service. Quicksilver and Terra have incurred, and
14 will continue to incur, additional expenses to transport gas on the AEP as a result
15 of Michcon's "new policy". Quicksilver and Terra are and will continue to suffer
16 damages as a result of Michcon's unlawful actions. Michcon's unilateral actions
17 in attempting to impose a 0.75% carbon dioxide removal standard on Quicksilver
18 and Terra has caused Quicksilver and Terra to incur additional and higher
19 charges for treatment than Quicksilver and Terra would incur under the
20 conditions of service established for the AEP under Case No. U-10547.

21 Q. What are you asking the Michigan Public Service Commission to do?

22 A. Determine that MichCon may not condition future transportation services on the
23 AEP to require that Quicksilver and Terra either sign a treating agreement with
24 MichCon, or reduce the carbon dioxide content of Quicksilver's and Terra's gas

1 from 2.0% to 0.75% and determine that MichCon does not have the unilateral
2 authority to impose carbon dioxide content standards lower than 2.0% as a
3 condition of transportation services on the AEP. MichCon should be required to
4 refund any administrative charges for additional contracts required by Quicksilver
5 and Terra to transport and treat gas from those properties denied access to
6 Quicksilver's existing ASAT agreement. MichCon should be required to re-
7 imburse Quicksilver for all legal expenses and costs incurred by Quicksilver in
8 connection with this complaint. MichCon should be required to file a tariff with the
9 conditions of service for the AEP and such tariff should not be allowed to be
10 amended without the consent of the Commission.

11 Q. Does this conclude your direct testimony?

12 A. Yes.

EXHIBIT TRS-1

U-14821
QRMC-1.2/2
Ierra Energy, Ltd
Complete
ASATT #3

ANTRIM GAS SERVICE AGREEMENT

ANTRIM GAS SERVICE AGREEMENT

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MICHIGAN CONSOLIDATED GAS COMPANY
ANTRIM GAS SERVICE AGREEMENT

THIS AGREEMENT is entered into as of this 12 day of SEPT, 1994,
by and between TERRA ENERGY Ltd.
("Shipper"), having office at 1503 N. GARFIELD ROAD, TRAVERSE CITY,
MICHIGAN 49684 and MICHIGAN CONSOLIDATED GAS
COMPANY ("MichCon"), having its principal offices at 500 Griswold, Detroit,
Michigan 48226.

RECITALS

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

WHEREAS MichCon is willing to provide the requested transportation and
treating 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 agree as follows:

ARTICLE I

REGULATORY APPROVAL AND CONDITIONS

1.1 MichCon has filed Case No. U-10547 with the Michigan Public Service Commission (the "Commission") for authority to construct, cause to be constructed, acquire, own and operate facilities and services which MichCon has determined are necessary to permit receipt, carbon dioxide (CO₂) treating, transportation and redelivery (hereinafter collectively referred to as "Gas Transportation Service") of natural gas produced from the Antrim shale formation ("Antrim Gas" or "Gas") delivered to MichCon pursuant to this Agreement. The term "Antrim Header System", as used in this Agreement, will incorporate by reference the system ultimately approved by the Commission in Case No. U-10547, together with all future extensions, modifications, or loops thereof as well as use of existing pipelines and related facilities.

1.2 This Agreement is specifically conditional upon the continued prosecution by MichCon of its application in MPSC Case No. U-10547, approval by the appropriate regulatory agencies of the facilities and services in Case No. U-10547, and acceptance of a Commission order by MichCon, at its sole discretion. If Case U-10547 is not approved and accepted by 4/15/95, Shipper has the option to declare this agreement null and void. Provided, however, if MichCon receives and accepts an order after 4/15/94, but before Shipper exercises its option, then Shipper may no longer declare this agreement null and void.

1.3 This Agreement is specifically conditional upon MichCon's agreement to create a priority in the 30-inch pipeline expansion downstream of Kalkaska for transportation of Gas from the wetheader or dry Antrim header. Also, MichCon shall provide for and make any future pipeline interconnections, consistent with its then prevailing receipt point program, upon written request by Shippers with all costs to be borne by Shippers.

ARTICLE II

DEDICATION OF RESERVES

2.1 For any Antrim Gas to be transported and treated on a firm basis pursuant to this Agreement, the party who owns or controls the acreage from which the gas to be transported and treated is produced shall have first committed, by a Letter of Dedication, all previously undedicated Antrim reserves which it owns and controls and which can be reasonably serviced by the Antrim Header System (Initial Acreage Dedication). Furthermore, Antrim Gas which is produced from after acquired or controlled acreage and which desires firm transportation must also first be committed to the Antrim Header System by a Letter of Dedication. (Additional Acreage Dedication). Such dedications shall be made on a form provided or approved by MichCon. MichCon may refuse firm service for any Antrim Gas which has not been committed as provided for above.

ARTICLE III

TERM

3.1 All terms and conditions of this Agreement, except Sections 1.2 and 1.3 shall be effective on the in-service date ("In-Service Date") of the Antrim Header System, which is the date the 16" Kalkaska to South Chester Pipeline facilities approved under U-10547 are placed in service, and shall terminate ten (10) years later unless terminated earlier as provided in Section 3.2. MichCon shall provide Shipper written notice of the In-Service Date. Sections 1.2 and 1.3 shall be effective upon execution of this Agreement.

3.2 Shipper shall have the right to terminate this Agreement during the period of 60 days immediately following the date this Agreement is executed, provided that upon termination Shipper enters into an equivalent Agreement for transportation on the Antrim Header System (at a basic charge of 9 cents per MMBtu) all subject to approval by the appropriate regulatory agencies of the facilities and services in MPSC Case No. U-10547.

ARTICLE IV

GAS TRANSPORTATION SERVICE

4.1 Shipper shall deliver or cause to be delivered to MichCon, Antrim Gas for Gas Transportation Service up to a maximum daily quantity ("MDQ") of 125,000 MMBtu. MichCon shall provide Gas Transportation Service for Shipper or for the

account of Shipper and shall redeliver an Equivalent Quantity of natural gas in MMBtu's at the delivery points nominated pursuant to this agreement. For purposes of this agreement the term "Equivalent Quantity(ies)" shall mean the quantity of Gas received from Shipper less any amount withheld by MichCon for Pipeline Loss and/or Plant Shrinkage . Carbon dioxide treating is provided as part of the Gas Transportation Service such that CO₂ is removed to ensure that the gas at the Delivery Point(s) meets at a minimum, the quality specifications set forth in the attached Exhibit D. Gas Transportation Service pursuant to this agreement shall be provided on a FIRM Basis.

4.2 MichCon will allocate proportionately among all Shippers who flow quantities of Gas during the month, the combined volumetric Gas stream loss in MMBtu's associated with CO₂ removal and the fuel actually used each month at all the CO₂ treating plant(s) on the Antrim Header System (together collectively referred to as "Plant Shrinkage"). Provided, however, that the amount of fuel actually used shall never exceed the amount of fuel that would be customarily used by the type of treating plants employed in their normal course of operation. This proportional allocation will be based on the level of CO₂ in each Shipper's Gas as MichCon determines by Gas analysis at least every 90 days and the Shipper's quantity of Antrim gas that is delivered into the Antrim Header system during any month at each Receipt Point as specified in Exhibit B. MichCon shall retain 0.5% of all Nominated, Authorized and Unauthorized Overrun Quantities for pipeline losses ("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 of 0.5% shall be borne by the downstream transporter. Plant Shrinkage and Pipeline Loss will be calculated and withheld from the quantity of Gas that is redelivered for the account of Shipper at each Delivery Point.

4.3 The CO₂ treating plants at which Antrim Gas will be treated as part of the Gas Transportation Service provided under this Agreement, shall be operated on a run time of at least 94% in any calendar year including time allowed for shut downs due to scheduled and routine repairs and maintenance. In the event that the percentage of CO₂ treating plant run time is less than 94% for any calendar year and, as a result, a Shipper cannot get Gas to market because its untreated Gas would not be received, transported or exchanged by a designated downstream pipeline, then for each one percent deficiency below 94% MichCon shall pay Shipper one cent for each MMBtu of Gas that cannot reach its intended market. The provisions of Section 17.1 shall control over this Section.

ARTICLE V

RATES

5.1 For the services provided for herein, Shipper shall pay MichCon a monthly amount as follows:

1. A monthly customer administrative charge of \$300.

2. A Basic Charge equal to the quantities of Gas Shipper actually flowed during the month up to its MDQ times 20.0¢ per Mcf.
3. Shipper shall be billed, in addition to the Basic Charge, an Overrun Charge of \$3.20 per Mcf for any quantities of Gas delivered that exceed the MDQ ("Unauthorized Overrun Gas") provided, however, an Overrun Charge shall not be incurred;
 - a. In any month where Shipper, after meeting the criteria set forth in 5.1.4 herein, delivers Gas in excess of the MDQ ("Authorized Overrun Gas"); or
 - b. In any month where the overage averages no more than five (5) percent above (i) the MDQ or (ii) the MDQ plus any Authorized Overrun Gas (the "Swing Percentage").
 - c. In circumstances where Overrun Gas 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 shall be allowed in any calendar month. .
4. Shipper must meet one of the following criterion before flowing Authorized Overrun Gas:

- a. Shipper must obtain MichCon's written permission to flow gas in excess of Shipper's MDQ prior to submitting a nomination; or
- b. Shipper must notify MichCon by facsimile 48 hours prior to the deadline for submitting a nomination, or by EBB 24 hours prior to the deadline, of its intent to submit a nomination to flow gas in excess of Shipper's MDQ. Such intent shall be clearly identified on the request. If Shipper does not receive notification of MichCon's denial of Shipper's request by facsimile or by EBB by the nomination deadline, then Shipper may assume MichCon's permission has been granted and may flow gas in excess of its MDQ up to the amount indicated in the facsimile to MichCon.

This implied approval shall be good only for one month.

- 5. Any Shipper not able to flow its nominated quantity up to its MDQ as a result of Unauthorized Overrun Gas shall receive, on a calendar year quarterly basis, its proportionate share of 80% of the actual funds MichCon collects as Overrun Charges. Shipper's proportionate share shall be an amount equal to Shipper's quantity of Gas which did not flow during the calendar quarter as a result of Unauthorized Overrun Gas up to Shipper's MDQ divided by

the total quantity of Gas which did not flow because of
Unauthorized Overrun Gas during the calendar quarter.

5.2 All charges set forth in this Article except the monthly customer administrative charge shall be applied to quantities in units of Mcf delivered at the Receipt Point(s) as measured in accordance with the terms of Exhibit D of this Agreement.

5.3 Actual billing shall be on an MMBtu basis. The rate per MMBtu shall be determined according to the following formula:

$$\frac{1,000}{\text{Actual Btu}} \quad \times \quad \begin{array}{c} \text{Appropriate} \\ \text{Mcf Rate} \end{array}$$

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 D: General Terms and Conditions.

6.2 Pursuant to the terms of Exhibit D, MichCon shall establish an Electronic Bulletin Board (EBB) as part of its Antrim Header System within one year of the "in-service" date. MichCon shall provide Shipper notice once it has established its EBB and detailed procedures for nominating using the EBB. After a reasonable phase-in period MichCon may require all Shippers to nominate their quantities of gas using the EBB.

ARTICLE VII

RECEIPT POINT(S)

7.1 Shipper shall deliver or cause to be delivered Antrim Gas at the Receipt Point(s) set forth in Exhibit A. All Gas delivered to MichCon shall meet the quality specification set out in Exhibit D.

7.2 MichCon, at its sole option, may refuse to accept Gas at any Receipt Point(s) listed on Exhibit A which is not subject to a signed Receipt Point Agreement between MichCon or its designee and the party responsible for the Receipt Point.

ARTICLE VIII

DELIVERY POINT(S)

8.1 MichCon shall redeliver to Shipper, or for the account of Shipper; at the Delivery Point(s) set forth in Exhibit B, Equivalent Quantities of Gas; provided, however, that the allowable routing of any Gas Transportation Service shall be within the parameters defined by Exhibit C.

ARTICLE IX

DISPOSITION OF GAS

9.1 Because of the inability of MichCon 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 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 In-Service Date, MichCon 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 In-Service Date, MichCon shall be obligated to 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 determines that retrofitting Receipt Points with EGM is necessary for the efficient operation of the Antrim Header System, then MichCon can mandate installation of EGM at such points with costs borne by the Receipt Point holder.

9.2 MichCon shall have the right to commingle Gas delivered hereunder with Gas owned by MichCon and/or transported by MichCon for others so long as the resulting commingled gas stream meets the Delivery Point quality specifications in Exhibit D.

ARTICLE X

POSSESSION AND RESPONSIBILITY

10.1 As between MichCon and Shipper, Shipper shall be deemed in exclusive control and possession of the gas transported hereunder and responsible for any damage or injury caused thereby until it is delivered to MichCon at the Receipt

Point(s) and after it is redelivered by MichCon at the Delivery Point(s). MichCon shall be deemed in exclusive control and possession of the gas and responsible for any damage or injury caused thereby after it is delivered by Shipper, or for Shipper's account, at the Receipt Point(s) and before it is redelivered by MichCon at the Delivery Point(s).

ARTICLE XI

DELIVERY PRESSURE

11.1 Shipper shall deliver quantities of Antrim Gas or cause quantities of Antrim Gas to be delivered to MichCon at the Receipt Point(s) at MichCon's prevailing line pressure but not to exceed its maximum allowable operating pressure (MAOP). Shipper shall receive quantities of Antrim Gas, or cause quantities of Antrim Gas to be received by a third party transporter, at the Delivery Point(s) as noted in Exhibit B.

ARTICLE XII

TAXES

12.1 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, exclusive however of taxes based on the net income of MichCon, property taxes, and MichCon's single business taxes. Shipper shall reimburse MichCon for any such taxes, tariffs and duties which are collected and remitted or paid on Shipper's behalf by MichCon because of Shipper's failure to pay. MichCon or its Vendors shall not be entitled to Internal Revenue Code-Section 29 tax credits on any Gas under this Agreement.

ARTICLE XIII

WARRANTY OF RIGHT TO DELIVER

13.1 Shipper warrants that at the time of delivery it shall have the right to deliver the Gas and that it shall indemnify, defend, and save MichCon 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 XIV

BILLING AND PAYMENT

14.1 On or about the twentieth day of each calendar month, MichCon shall render a statement to Shipper based on the charges set forth in Section 5. Shipper shall pay MichCon on or before the 25th day of the month or ten (10) days after receipt of the statement, the amount billed in that statement. All such payments shall

be made in the form of immediately available funds directed to a bank account designed by MichCon's Treasurer.

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

14.3 Shipper shall have the right at all reasonable times to examine the books, records and charts of MichCon 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 Should Shipper fail to pay any undisputed amount of any statement rendered by MichCon when such amount is due, a late payment charge equal to that month's NBD prime plus 2% per month of the undisputed amount of the statement, net of taxes, not compounded, shall be added to the statement, and MichCon in its sole discretion may after 10 days prior written notice suspend further Gas Transportation Service to Shipper until the undisputed amount is paid.

14.5 If Shipper shall find at any time within twenty-four months after the date of any statement rendered by MichCon that it has been overcharged due to an error by MichCon in the amount billed in such statement, and if the overcharge has been paid, and Shipper has made a written claim thereof within twenty-four months from the date of such error, the overcharge, when verified by MichCon, shall be refunded within 30 days. If MichCon shall find at any time within twenty-four months after the date of any statement rendered by it that there has been an undercharge in the amount billed

in such statement, it may submit a statement for such undercharge within twenty-four months of such error, and Shipper, upon verifying the same, shall pay such amount within 30 days.

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 shall 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 shall be liable in damages, or in any other remedy, legal or equitable, to the other for 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 suspension 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 suspension.

16.2 Such causes of contingencies affecting the performance of this Agreement by either party, however, shall not relieve it of liability in the event of its concurring negligence or in the event of its failure to use due diligence to remedy the situation and remove the cause in an adequate manner and with all reasonable dispatch, nor shall such causes or contingencies affecting the performance of this Agreement relieve either party from its obligation to make payments of amounts then due thereunder, nor shall such causes or contingencies relieve either party of liability unless such party shall give 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 Gas Transportation Service provided by MichCon under this Agreement, if in interstate commerce, is subject to the provisions of Subpart C, Part 284 of the regulations of the Federal Energy Regulatory Commission.

17.4 THIS AGREEMENT SHALL BE GOVERNED BY THE LAW OF THE STATE OF MICHIGAN. It is agreed that any and all litigation related to this Agreement shall be brought in either a state or federal court located within the State of 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 Any notice, request, demand, statement or payment provided for in this Agreement shall be sent in writing to the parties at the following addresses:

Shipper:

TERRA ENERGY LTD
1503 N. GARFIELD RD.
TRAVERSE CITY, MI 49684

Telephone: (616) 941- 7919
Telecopy: (616) 941 - 3426

MichCon:

Payments: As directed on the invoice

Nominations: Manager, Transportation & Exchange
Telecopy:

All Other: Manager, Gas Supply & Transportation

Michigan Consolidated Gas Company
500 Griswold Street, 26th Floor
Detroit, Michigan 48226
Telephone: (313) 256-5541
Telecopy: (313) 256-6416

18.2 Either party may change its address under this Agreement by notice to the other party. Unless otherwise provided, all notices given by one party to the other shall be sent by registered mail, overnight mail or by telecopy and shall be effective upon receipt. However, routine communications, including monthly invoices, shall be considered as duly delivered when mailed by either registered, overnight or ordinary mail.

ARTICLE XIX

MISCELLANEOUS PROVISIONS

19.1 Assignment: Shipper or MichCon shall not broker, assign, convey or transfer its interests, rights and obligations under this Agreement to anyone not

meeting the credit worthiness standards hereunder. Either Shipper or MichCon 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 shall succeed by purchase, merger, or consolidation to the properties, substantially as an entirety, of Shipper or of MichCon, as the case may be, shall be entitled to the rights and shall be subject to the obligations of its predecessor in title under this Agreement.

19.3 Successors and Assigns: This Agreement shall be binding upon and shall enure to the benefit of the parties hereto 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 Counterparts: This Agreement may be executed in counterparts, each of which when so executed shall be deemed to be an originally executed copy, and it shall not be necessary to produce all counterparts in order to prove this Agreement.

19.7 Entirety: This Agreement and Exhibits A, B, C, and D constitute the entire agreement between MichCon 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 in counterparts, each of which is an original and all of which are identical, as of the day and year first above written.

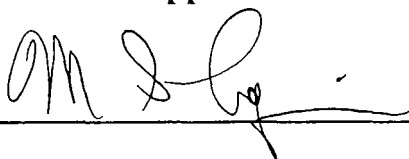
MICHIGAN CONSOLIDATED GAS COMPANY

By:  9/12/99
(date)

Title: Senior Vice President

TERRA ENERGY LTD

Shipper

By:  CEO

(date)

Title: _____

EXHIBIT B

Delivery Points

<u>Number</u>	<u>Facility Name</u>	<u>Location</u>	<u>Pressure (psig)</u>	Total Meter Capacity <u>MMcf/d</u>
	MichCon 30" T&D Line	Outlet Kalkaska Gas Plant	950	360
	Consumers Power 12" T&D Line	Goose Creek	960	190
	Consumers Power 2-12" T&D Lines	Inlet Kalkaska Gas Plant	600	190
	ANR 24" Transmission Line	S. Chester Treating Plant	1040	75
	ANR 36" Storage Line	Outlet Kalkaska Gas Plant	950	150
	Great Lakes 36" Transmission Line or alternate points per ANR guarantee	ANR-Deward or alternate Interconnect	950	50
	Great Lakes 36" Transmission Line	South Hayes Twn.	970	100

EXHIBIT C

Allowable Routing

From

To

Any approved
Receipt Points
subject to
7.2 of this
Agreement

Delivery Points
(From Exhibit B)

Percent of
Total MDQ

As PROVIDED FOR

IN MONTHLY NOMINATIONS

EXHIBIT D

ANTRIM GAS SERVICES AGREEMENT

GENERAL TERMS & CONDITIONS

- I. Service Request
- II. Nominations, Scheduling and Allocations
- III. Paper Pooling
- IV. Imbalances
- V. Measurement
- VI. Quality Specifications
- VII. Diversion of Gas
- VIII. Electronic Bulletin Board
- IX. Creditworthiness Standards

I. SERVICE REQUESTS

- A. Gas Transportation Service provided pursuant to this Agreement shall be offered on a Firm Basis until 100% of the capacity of the pipeline is subscribed. Thereafter, service shall be offered on an Interruptible Basis. MichCon shall be authorized to provide service on an Interruptible Basis only to the extent capacity exceeds its firm commitments.

- B. In order for a request for Gas Transportation Service to be considered valid, a party must provide MichCon with a completed, fully executed Antrim Header Service Service Request Form providing such information as the form may require.
- C. MichCon shall respond to each request. If the request is not valid, MichCon shall send a letter within 15 days of receipt of such request pointing out the deficiency(ies). MichCon shall respond to each valid request by forwarding this Service Agreement to the requesting party within 30 days.
- D. If there is insufficient capacity to meet the initial valid requests for service, then the expected system capacity shall be allocated among all valid requests on a pro-rata basis.
- E. If after one year of the date of first flow under this agreement, Shipper transports and treats an amount of gas less than its total MDQ, then such MDQ may be adjusted downward to equal Shipper's prior three months' average flowing quantities. If a Force Majeure event occurred during any of the prior three months, then such month shall be excluded and the next prior month used in its stead. Furthermore, if Shipper's transported and treated quantities exceed Shipper's total MDQ, then Shipper may request a pro-rata increase of its MDQ, and MichCon shall

grant a pro-rata increase for all Shippers at the end of each calendar quarter.

- F. After the initial valid requests are filled, additional requests shall be filled as they are received. However, if there is more requested capacity than capacity available, then such requests shall be filled by prorating the total system capacity among existing Shippers and the new requests. Such system capacity reallocations shall be done at the end of each calendar quarter.

II. NOMINATIONS, SCHEDULING and ALLOCATIONS

All nominations shall be via MichCon's Electronic Bulletin Board or in writing via facsimile and telecommunication. Any written nomination shall be made on a form provided or approved by MichCon. Shipper shall include for each nomination the daily quantities of Gas on a MMBtu basis that it desires MichCon to treat and transport during each Service Month from each Receipt Point and the daily quantities that Shipper desires MichCon 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 must make adjustments pursuant to allocations below.

Further, the sum of the quantities nominated at all Receipt Points hereunder shall 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 to MichCon's Transportation and Exchange Department at a telephone number to be provided by MichCon.
- C. Nomination Changes after the beginning of the Month: Shipper shall give MichCon's Gas Control Department at least twenty-four (24) hours notice prior to any proposed change of a daily nomination to be effective for the next day. MichCon shall waive such notice upon request if, in its view, the Antrim Gas Pipeline operating conditions permit such waiver. Shipper shall also be allowed to change the order of priority of Receipts and Deliveries by twenty-four (24) hour notice.
- D. MichCon shall confirm each nomination or change of nomination. MichCon shall promptly notify each Shipper of its failure to confirm any nomination hereunder.
- E. Shipper may designate in writing an agent to nominate and schedule Gas Transportation Service on Shipper's behalf. Such designation shall be in writing. An agent may provide nomination(s) for multiple Shippers. Shipper shall indemnify and save MichCon 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, provided, however, that such indemnification shall not excuse MichCon from liability for actions taken when MichCon is acting as Shipper's agent.

- F. Hourly Variation. Shipper shall maintain uniform hourly rates at all Receipt Points hereunder to the extent practicle.
- G. Delivery of Gas. MichCon shall make daily delivery of thermally Equivalent Quantities of gas, at each Delivery Point that Shipper nominates, provided, however, that Shipper shall not have the right to take delivery of gas for quantities it has not nominated and delivered to MichCon at Receipt Point(s).
- H. Scheduling and Allocation of Capacity. There are four service levels: Firm Service, Authorized Overrun Gas (AOG), Unauthorized Overrun Gas (UOG), and Interruptible Service. For each day, MichCon will schedule receipts and deliveries of gas on the basis of Shippers' confirmed nominations pursuant to the following:
 - i.) If System Shippers fail to use their full MDQ, then excess capacity will exist such that MichCon is able to receive (a) AOG nominations in excess of a Shipper's MDQ, or (b) Interruptible Service nominations;
 - ii.) Unauthorized Overrun Gas shall occur when a Shipper exceeds its MDQ and fails to comply with the criteria set forth in 5.1.4 herein;

- iii.) Firm Service, AOG, or Interruptible Service shall 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 shall allocate Receipt Point capacity, if required, pro rata by confirmed nominations up to the Firm MDQ at each Receipt Point;
- v.) MichCon shall allocate Antrim Header System capacity, if required, pro rata by confirmed nominations up to the Firm MDQ;
- vi) MichCon 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 Deliver Point. If allocation of Delivery Point capacity is required among Shippers with firm transportation priority, then such allocation shall be based on each Shipper's instructions to MichCon;
- vii.) In the event that Shipper is transporting UOG and MichCon determines that it will curtail such UOG, then MichCon 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 shall forward to Shipper a report, either written or by Electronic Bulletin Board, which contains the monthly plant shrinkage, any fuel, and each Shipper's quantities in MMBtu's.

ii.) Allocation of Deliveries.

All deliveries shall be allocated throughout the month based on confirmed nominations at each Delivery Point. Delivery Point quantities shall 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 shall be made throughout the month pro rata, based on Shipper's confirmed nominations for each such Receipt Point. Receipt Point quantities shall be reconciled at the end of each calendar month.

iv.) Electronic Information

MichCon shall 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 shall assume that receipts and/or deliveries are equal to nominations, provided, however, that MichCon 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 shall not cause a penalty upon any Shipper hereunder.

III. PAPER POOLING

- A. Once MichCon has allocated gas pursuant to this agreement, then over deliveries by a Shipper at one Receipt or Delivery Point may be offset by underdeliveries by that Shipper at another Receipt or Delivery Point, respectively (Paper Pooling). Such netting shall be used by MichCon for determining any penalties under this agreement..
- B. Paper Pooling shall not relieve any Shipper from its obligation to make valid nominations or its obligation for gas imbalances hereunder.

IV. MONTHLY IMBALANCES

- A. At the end of each month, MichCon shall provide each Shipper with a gas imbalance statement either via EBB or written copy. Shipper will be afforded the opportunity to make up the imbalance during the subsequent month, subject to IV.B below.
- B. If at end of a month a Shipper's imbalance exceeds its confirmed nomination by 10% or greater, then Shipper shall incur an imbalance penalty of 10¢ per MMBtu. Such penalty shall also apply to any gas imbalance not resolved by the end of the month following the service

month in which an imbalance is occurred 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 at the Point(s) of Receipt, quantities of gas that are equal to those that Shipper has taken at the Point(s) of Delivery, plus those quantities retained by MichCon as compensation for use and loss and CO₂ plant shrinkage, the term of this Agreement shall be extended for a period of up to 60 days during which time Shipper shall cause the deficient quantity to be delivered to MichCon at a mutually agreeable daily rate. Should Shipper fail to correct this imbalance within the 60 day period, Shipper shall pay MichCon, 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 atmospheric (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 point of delivery 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 orifice 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 point of receipt or point of delivery.

- 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:
 - (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 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, 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. Shipper may install check measuring equipment, provided that such equipment shall be installed so as not to interfere with the operations of MichCon. Shipper, in the presence of MichCon, 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. 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. The records from such measuring equipment shall remain the property of

MichCon, 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 there of 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 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 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 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 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 or Producer 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 or Producer and MichCon. All measured variables for differential pressure, static pressure, and temperature shall be sampled at lest 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 installations, the battery capacity shall be at least twenty-four (24) hours when fully charged.
- (f) **Local Display:** Shipper or Producer 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 shall perform such inspections and test of the accuracy of the equipment used in the EGM system calibrations. A copy of any inspection, test or certification report, whether performed monthly or annually by MichCon or an outside third party, shall be made available to Shipper or Producer personnel upon written request. MichCon shall provide Shipper or Producer 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 or Producer 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 and shall not interfere with MichCon'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 these 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, all Gas received and delivered under the terms of this Agreement shall conform to the following specifications:

- (a) The Gas shall 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 shall not contain anything which might adversely affect the safe and efficient operation of MichCon's downstream facilities:

(c) The water content of the Gas shall not exceed 7 pounds per million cubic feet, however, every reasonable effort shall be made to keep the water content at or below 5 pounds per million cubic feet;

(d) The Gas shall not contain oxygen. Operator shall maintain its equipment to insure the gas is free of oxygen;

(e) At each Delivery Point the carbon dioxide content of the Gas shall not exceed two (2%) mole percent; at any Receipt Point, the carbon dioxide content of the Gas shall not exceed 25 mole percent, provided, however, that Shipper's aggregate Receipt Point gas hereunder shall not exceed 14 mole percent;

(f) The Gas shall not contain more than 1/4 grain of hydrogen sulfide per 100 cubic feet;

(g) The Gas shall not contain more than 1/2 grain of mercaptan sulfur per 100 cubic feet;

(h) The Gas shall 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 shall 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 on a dry basis or as further provided in the downstream pipelines' tariff; the Gas at each Receipt Point shall 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 degrees fahrenheit on a dry basis; however, Shipper's aggregate Receipt Point Gas shall 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 shall notify Shipper of such deficiency and thereupon may, at its option, refuse to accept deliveries pending correction. Upon demonstration acceptable to MichCon 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 shall commence or resume, as the case may be, taking delivery of Gas.

(k) Shipper agrees to indemnify and hold MichCon harmless for any and all liability resulting from MichCon's movement of Gas 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 Antrim Pipeline (System) is a stand-alone system for the CO₂ treating and transportation gathering of Antrim Shale Gas. This System has no direct End User or Distribution markets, but rather interconnects with four pipelines that do have direct markets. The Parties recognize that the System is thus not subject to diversion of gas. However, to the extent System gas is delivered into each of the four pipelines hereunder, then such gas is subject to the diversion rules that apply to each such pipeline.

VIII. ELECTRONIC BULLETIN BOARD (EBB).

MichCon shall establish an EBB system that can be accessed twenty-four (24) hours a day, seven days a week, to obtain such information as:

- (a) Operational notices detailing the nature of any problem(s),
- (b) Available System capacity along each pipeline segment.
- (c) the total daily nominations for each System Receipt and Delivery Point along with the total and available capacities at each Delivery Point,
- (d) a list of Shippers and each Shipper's MDQ.
- (e) an end of month Allocation Report

Sections VIII a-e are provided as examples of the type of information the MichCon EBB may be able to provide. Nothing contained shall obligate MichCon to make available any specific information on its EBB.

IX. CREDITWORTHINESS STANDARDS.

MichCon shall not be required to commence Gas Transportation Service or to continue to provide Gas Transportation Service under this Agreement if Shipper is or has become insolvent and is not paying its bills hereunder to MichCon, or if Shipper, when requested by MichCon to demonstrate credit worthiness, fails to do so pursuant to MichCon's reasonable requirements provided, however, that Shipper may receive Gas Transportation Service if Shipper deposits with MichCon and maintains, on prepaid account, an amount equal to amounts which would be due for one months service at the full MDQ; or furnishes, within fifteen days, good and sufficient security, as reasonably determined by MichCon, of a continuing nature and in an amount equal to such amounts which would be due. Shipper shall be deemed to be creditworthy if it has made a prepaid account deposit each month over a six consecutive month period, provided, however, that if such Shipper has a late payment in any subsequent month, it is no longer creditworthy and must again comply with the foregoing.

EXHIBIT TRS-2

ASAT: 42

ANTRIM GAS TRANSPORTATION AGREEMENT

ANTRIM GAS TRANSPORTATION AGREEMENT

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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 18th day of December, 1997 by and between TERRA ENERGY LTD., ("Shipper"), having an office at 1475 Terra Road, Traverse City, Michigan 49686-9005 and MICHCON GATHERING COMPANY ("MichCon Gathering"), having its principal offices at 500 Griswold, 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 \$0.09/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 0.5% 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 committed as provided for above.

ARTICLE III

TERM

3.1 All terms and conditions of this Agreement are effective on December 18, 1997 and will continue for a term of 10 years. This Agreement will continue in effect from year to year thereafter until terminated by either party giving written notice to the other at least 90 days prior to the next anniversary date.

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 25,000 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:

Terra Energy Ltd.
1475 Terra Road
Traverse City, Michigan 49686-9005
Attn: Mr. Thad Shumway
Telecopy: (616)946-5636

MICHCON GATHERING:

MichCon Gathering Company
500 Griswold
Detroit, Michigan 48226
Attn: Director, System Planning and Transportation Services
Fax: (313) 256-6416

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: William J. Wolter
William J. Wolter
Title: V.P.

TERRA ENERGY LTD.

By: William H. Stephens
William H. Stephens
Title: Exec VP

MTE

Amendment No. 1 to Exhibit A for ASAT No. 42 (_____) between MichCon Gathering Company and Terra Energy Ltd. dated December 18, 1997.

The parties hereby agree to delete the existing Exhibit A and replace it with the following effective January 1, 1999:

<u>Receipt Point Number</u>	<u>Receipt Point Name</u>	<u>Allocation Number</u>	<u>Allocation Name</u>	<u>Shipper's % Dedicated</u>	<u>Shipper's % Gas Flow</u>
80182	Little Bear RMS	81399	Head Start	100	10
80182	Little Bear RMS	81400	Miller Time	100	100
80182	Little Bear RMS	81401	Uncle Emil's	100	10
80182	Little Bear RMS	81402	Ant. Slam Duncan	100	100
80182	Little Bear RMS	81403	Edgewood East	100	50
80182	Little Bear RMS	81404	Art Carney	100	100
80182	Little Bear RMS	81407	Edgewood West	100	50
80182	Little Bear RMS	81412	Mother Hubbard	100	100
80182	Little Bear RMS	81414	Blue Herron	100	10
80182	Little Bear RMS	81415	Minke Coat	100	10
80182	Little Bear RMS	81417	Beaver Lake	100	10
80182	Little Bear RMS	81418	Jack Spratt	100	10
80182	Little Bear RMS	81429	Carbon Black	100	10
80182	Little Bear RMS	81430	Rohmann Empire	100	10
80182	Little Bear RMS	81432	Dubie Brothers	100	10
80182	Little Bear RMS	81441	Little Rascals	100	10
80182	Little Bear RMS	81458	- Brady Bunch	100	10
80195	Vienna #4	80195		100	20
80198	Vienna #23	80198		100	95.86939
80199	Vienna #27	80199		100	97.7976
80200	Vienna #14	80200		100	92.49121
80201	Scenic Unit	80201		100	100
80202	Pair O'Dice	80202		100	96.815461

Terra Energy Ltd.

By: _____

Its: _____

Dated: _____

MichCon Gathering Company

By: _____

Its: _____

Dated: _____

Exhibit A for ASAT No. _____ (_____)
between MichCon Gathering Company and Terra Energy Ltd.
dated _____.

<u>Receipt Point Number</u>	<u>Receipt Point Name</u>	<u>Allocation Number</u>	<u>Allocation Name</u>	<u>Shipper's % Dedicated</u>	<u>Shipper's % Gas Flow</u>
80179	Voyer Lake				100
80182	Little Bear RMS	81399	Head Start	100	10
80182	Little Bear RMS	81400	Miller Time	100	100
80182	Little Bear RMS	81401	Uncle Emil's	100	10
80182	Little Bear RMS	81402	Ant. Slam Duncan	100	100
80182	Little Bear RMS	81403	Edgewood East	100	50
80182	Little Bear RMS	81404	Art Carney	100	100
80182	Little Bear RMS	81407	Edgewood West	100	50
80182	Little Bear RMS	81412	Mother Hubbard	100	100
80182	Little Bear RMS	81414	Blue Herron	100	10
80182	Little Bear RMS	81415	Minke Coat	100	10
80182	Little Bear RMS	81417	Beaver Lake	100	10
80182	Little Bear RMS	81418	Jack Spratt	100	10
80182	Little Bear RMS	81429	Carbon Black	100	10
80182	Little Bear RMS	81430	Rohmann Empire	100	10
80182	Little Bear RMS	81432	Dubie Brothers	100	10
80182	Little Bear RMS	81441	Little Rascals	100 -	10
80182	Little Bear RMS	81456	Ant. Ace of Hearts	100	10
80182	Little Bear RMS	81458	Brady Bunch	100	10
80192	Vienna #2	53490		100	100
80193	Vienna #3	53491		100	100
80194	Black Antrim	53492		100	100
80195	Vienna #4	53497		100	20
80197	Vienna #1	53542		100	100
80198	Vienna #23	53550		100	95.86939
80199	Vienna #27	53554		100	97.7976
80200	Vienna #14	53557		100	92.49121
80201	Scenic Unit	53608		100	100

Terra Energy Ltd.

By: W.H. Stephens
William H. Stephens
Its: Exec VP

Dated: 12/18/97

MichCon Gathering Company

By: William J. Wolter
William J. Wolter
Its: V.P.

Dated: 12/19/97

MTK

EXHIBIT B

Delivery Points

<u>Number</u>	<u>Facility Name</u>	<u>Location</u>	<u>Pressure (psig)</u>	Total Meter Capacity <u>MMcf/d</u>
	MichCon 30" T&D Line	Outlet Kalkaska Gas Plant	950	360
	Consumers Power 12" T&D Line	Goose Creek	960	190
	Consumers Power 2-12" T&D Lines	Inlet Kalkaska Gas Plant	600	190
	ANR 24" Transmission Line	S. Chester Treating Plant	1040	75
	ANR 36" Storage Line	Outlet Kalkaska Gas Plant	950	150
	Great Lakes 36" Transmission Line or alternate points per ANR guarantee	ANR-Deward or alternate Interconnect	950	50
	Great Lakes 36" Transmission Line	South Hayes Twn.	970	100

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 "Fpv" 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 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 two mole percent (2%), 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 two mole percent (2%) 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.

EXHIBIT D

ANTRIM EXPANSION PROJECT

DEDICATION OF RESERVES

This Dedication Agreement made this _____ day of _____, 199__,
between _____ ("Producer") and MICHCON GATHERING
COMPANY ("MichCon Gathering") is the Dedication of Reserves referred to in Article II of the
Antrim Gas Transportation Agreement ("ASAT") between the parties dated
_____. Terms not otherwise defined in this Dedication Agreement, have the
meanings given such terms in the ASAT.

In consideration for, and subject to, the mutual covenants and agreements set forth in this
Dedication Agreement and the ASAT, the parties agree as follows:

1. Producer dedicates to the transportation services provided on the Antrim
Expansion Project ("AEP"), all of the natural gas produced from the Devonian
age Antrim shale formation which it 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 the effective date of the ASAT.
3. It is the intent of the parties that the dedication of reserves provided for in this
Dedication Agreement is a transfer of an interest in 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 ASAT to which it refers constitute the entire agreement between MichCon Gathering and Producer concerning dedication of reserves for transportation under the ASAT on the AEP. Any prior understandings, representations, promises, undertakings, agreements or inducements, whether written or oral, concerning dedication of reserves for transportation under the ASAT on the AEP have no force and effect. This Dedication Agreement may be modified or amended only in writing and signed by both parties.

PRODUCER

By: _____

Title: _____

Witness

Witness

MICHCON GATHERING COMPANY

By: _____

Title: _____

Witness

Witness

Attachment 1

ACKNOWLEDGMENTS

STATE OF MICHIGAN)
) ss
COUNTY OF _____)

On this ____ day of _____, 199_, before me personally appeared _____ who, being first duly sworn, said that he is the _____ of _____, a Michigan corporation, and that he was duly authorized to and did execute the foregoing Dedication Agreement on behalf of _____.

Notary Public

County, Michigan
My Commission Expires: _____

STATE OF MICHIGAN)
)ss
COUNTY OF WAYNE)

On this ____ day of _____, 199_, before me personally appeared _____ who, being first duly sworn, said that he is the _____ of MichCon Gathering Company, a Michigan corporation, and that he was duly authorized to and did execute the foregoing Dedication Agreement on behalf of MichCon Gathering Company.

Notary Public

County, Michigan
My Commission Expires: _____

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

EXHIBIT TRS-3

U-14821
QRMC-1.3/3

01/17/97

ASAT: 36

ANTRIM GAS TRANSPORTATION AGREEMENT

ANTRIM GAS TRANSPORTATION AGREEMENT

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SCHEDULE OF EXHIBITS

<u>EXHIBIT</u>	<u>SUBJECT</u>
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B.	DELIVERY POINTS
C.	GENERAL TERMS & CONDITIONS
	I. Service Requests
	II. Nominations, Scheduling and Allocations
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	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, 1998, by and between Mercury Exploration Company, Inc. ("Shipper"), having an office at 720 South Otsego Avenue, Gaylord, Michigan 49735 and MICHCON GATHERING COMPANY ("MichCon Gathering"), having its principal offices at 500 Griswold, 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 \$0.09/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 0.5% 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 committed as provided for above.

ARTICLE III

TERM

3.1 All terms and conditions of this Agreement are effective on January 1, 1998 and will through October 30, 2005. *WJW*
~~continue for a term of 10 years.~~ This Agreement will continue in effect from year to year thereafter *P.C.*
until terminated by either party giving written notice to the other at least 90 days prior to the next *right*
anniversary date.

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 2,600 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.

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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 WITHIN THE STATE OF ~~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:

Mercury Exploration Company, Inc.
720 South Otsego Avenue
Gaylord, MI 49735
Attn: Mr. Mike Ryan
Telecopy: 517-732-8819

MICHCON GATHERING:

MichCon Gathering Company
500 Griswold
Detroit, Michigan 48226
Attn: Director, System Planning and Transportation Services
Fax: (313) 256-6416

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: William J. Walter 16.
Title: Vice President

mgr **MERCURY EXPLORATION COMPANY, INC.**

By: Michael J. Ryan
Title: Mgr - Product Marketing

Exhibit A for ASAT No. 36 (66004)

between MichCon Gathering Company and Mercury Exploration Company, Inc.
dated January 1, 1998.

<u>Receipt Point Number</u>	<u>Receipt Point Name</u>	<u>Allocation Number</u>	<u>Allocation Name</u>	<u>Shipper's % Dedicated to Transportation</u>	<u>Shipper's % of Gas Flow</u>
80195	Vienna 4 PMS			100	80

Accepted and Agreed to by the following duly authorized representatives.

mgr Mercury Exploration Company, Inc.

By: Michael J. Ryan

Its: mgr - Product Marketing

Dated: March 12, 1998

MichCon Gathering Company

By: William J. Walter *WB*

Its: Vice President

Dated: 5-11-98

EXHIBIT B

Delivery Points

<u>Number</u>	<u>Facility Name</u>	<u>Location</u>	<u>Pressure (psig)</u>	Total Meter Capacity <u>MMcf/d</u>
	MichCon 30" T&D Line	Outlet Kalkaska Gas Plant	950	360
	Consumers Power 12" T&D Line	Goose Creek	960	190
	Consumers Power 2-12" T&D Lines	Inlet Kalkaska Gas Plant	600	190
	ANR 24" Transmission Line	S. Chester Treating Plant	1040	75
	ANR 36" Storage Line	Outlet Kalkaska Gas Plant	950	150
	Great Lakes 36" Transmission Line or alternate points per ANR guarantee	ANR-Deward or alternate Interconnect	950	50
	Great Lakes 36" Transmission Line	South Hayes Twn.	970	100

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 ("AOG"), 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
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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, ^{i.e., a net over-delivery,} 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.

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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 $s = (Fpv)^2$, in which "Fpv" 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 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 two mole percent (2%), 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 two mole percent (2%) 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.