

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the complaint of QUICKSILVER)
RESOURCES, INC. AND TERRA ENERGY, LTD.)
against MICHCON GATHERING COMPANY)
and MICHIGAN CONSOLIDATED GAS COMPANY.)
_____)

Case No. U-14821

QUALIFICATIONS
AND
DIRECT TESTIMONY
OF
TODD F. PERSELLS

MICHCON GATHERING COMPANY AND
MICHIGAN CONSOLIDATED GAS COMPANY
QUALIFICATIONS OF TODD F. PERSELLS

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

2 **A.**My name is Todd F. Persells. My business address is 2000 Second Avenue, Detroit,
3 Michigan 48226. I am employed by Michigan Consolidated Gas Company (MichCon)
4 and hold the position of Director Asset Management and Engineering.

5

6 **Q. Would you please summarize your educational background and work experience?**

7 **A.**I graduated in April 1978 from Oakland University, Rochester, Michigan with a
8 Bachelor of Science Degree in Mechanical Engineering with a concentration in
9 Management. I received a MBA from Oakland University in 1980. In 1978, I began
10 my career with ANR Pipeline Company as a Staff Engineer in the System Engineering
11 Planning Activity. From 1978 through 1995, I held various positions of increasing
12 responsibility within ANR Pipeline's Engineering Planning activity where I was
13 responsible for the design, cost analysis, economic evaluation, capital budget and
14 preparation of engineering regulatory exhibits and material specifications for complete
15 system design proposals involving pipeline gathering, transmission and storage
16 facilities. In 1995, I was appointed Assistant Vice President of Facility Planning at
17 ANR Pipeline and was responsible for providing strategic direction and policy to the
18 activity as related to an integrated natural gas system. In 1997, I was appointed
19 Assistant Vice President of Project Development and Marketing and was responsible for
20 policy and strategic direction associated with commercial development for new business
21 ventures and facility expansions. I held that position until 2001. In April 2001, I took a
22 position with DTE Energy Trading as Director of Marketing, where I was responsible

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1 for the origination of business opportunities involving gas supply, pipeline transport,
2 storage, power plant fuel management and sales services. In August 2003, I took a
3 position with DTE Gas Storage, Pipelines and Processing as Director of Business
4 Development, where I was responsible for the origination of business opportunities
5 involving development of natural gas pipeline transport, storage and processing
6 services. On April 17, 2006, I took my present position with MichCon.

7

8 **Q. What are your current duties and responsibilities in your position?**

9 **A.** I am responsible for the engineering, construction and planning activities for MichCon.
10 These responsibilities include the development of policy for MichCon's northern
11 Michigan gathering systems.

12

13 **Q. Have you been involved in any prior regulatory proceedings?**

14 **A.** Yes. I have provided testimony in rate case proceedings before the Federal Energy
15 Regulatory Commission. I have also filed testimony with the Michigan Public Service
16 Commission in case number U-14754.

MICHCON GATHERING COMPANY AND
MICHIGAN CONSOLIDATED GAS COMPANY
DIRECT TESTIMONY OF TODD F. PERSELLS

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

2 **A.** The purpose of my testimony is to review MichCon's and MichCon Gathering
3 Company's (MGAT) role in northern Michigan with respect to transporting and treating
4 natural gas. My testimony will show that Quicksilver Resources, Inc. and Terra Energy,
5 Ltd. are wrong in their allegations that MGAT and MichCon's policy has changed
6 concerning the management of CO₂ over the life of the Antrim Expansion Project
7 (AEP). I will also document that MGAT was given the authority in MPSC Case No. U-
8 10547 to manage the gas quality of northern Michigan production delivered to its
9 pipelines, that MGAT was given authority to blend natural gas streams in its pipelines
10 and that MGAT assures that natural gas delivered to specified delivery points would
11 have levels of CO₂ at two percent or less. Additionally, I will respond to certain
12 portions of testimony filed by Complainants.

13

14 **Q. Are you sponsoring any exhibits?**

15 **A.** Yes, I am sponsoring the following Exhibits:
16 Exhibit MGAT-1 (TFP-1) Map of Northern Michigan
17 Exhibit MGAT-2 (TFP-2) Letter from Michael J. Kidd

18

19 **Q. What is Exhibit TFP-2?**

20 **A.** It is an accurate and complete copy of a letter dated May 3, 1999 received by MichCon
21 on May 6, 1999. The letter is from Michael J. Kidd, Director of the Gas Division of the
22 Michigan Public Service Commission Staff and addresses CO₂ content on the AEP.

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1 **Q. How did you obtain a copy of Exhibit TFP-2?**

2 **A** The letter was retrieved from MichCon's normal business records.

3

4 **Q. How do you recognize this exhibit to be complete and accurate copy?**

5 **A.** I have seen and read this letter previously and recognize it to be a complete copy. In the
6 normal course of business, MichCon corresponds with the Staff from time to time.
7 When letters like this are received, they are date stamped and maintained in MichCon
8 files, which are under my direction and control.

9

10 **Q. Did MichCon rely upon the content of this letter for the conduct of MichCon's**
11 **business?**

12 **A.** Yes.

13

14 **Q. Were these exhibits prepared by you or under your direction and supervision?**

15 **A.** Exhibit TFP-1 was prepared under my direction and supervision. TFP-2 was copied at
16 my direction.

17

18 **Q. Can you explain the organizational relationship between MGAT and MichCon**
19 **and their associated operating responsibilities?**

20 **A.** MichCon is a utility pipeline, providing transportation and distribution services. MGAT
21 is a wholly owned subsidiary of MichCon. MGAT owns the AEP and provides
22 transportation and treating services for customers delivering gas to the AEP. MichCon
23 originally built the pipeline under the authorization granted in Case No. U-10547. The

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1 assets of the AEP were legally transferred to MGAT in the fourth quarter of 1995. I will
2 refer to MGAT in this testimony as the successor to MichCon in references to building,
3 authorizations and operation of the AEP when in fact the legal entity at the time may
4 have been MichCon.

5

6 **MichCon's Role Regarding the AEP**

7 **Q. What is MichCon's role with respect to the AEP?**

8 **A.** MichCon accepts gas deliveries from the terminus of the AEP into its system at
9 Kalkaska, Michigan to serve its markets; including residential customers, off system
10 customers, storage customers, and End User Transportation customers.

11

12 **Q. What is MichCon's gas quality standard with respect to CO₂ at receipt points**
13 **into its transmission and distribution systems?**

14 **A.** All deliveries into MichCon's system must be made in accordance with the gas
15 quality standards set forth in its MPSC Tariff, Section F3.1, Quality. The specific
16 standard for deliveries is a CO₂ content of no more than 2%.

17

18 **Q. Is this CO₂ standard consistent with industry requirements?**

19 **A.** Yes it is. All of the delivery point requirements with other interstate and intrastate
20 companies accepting gas from the AEP or MichCon have an identical standard for
21 CO₂ content of no more than 2%. Further, ANR and Consumers (with deliveries at
22 Goose Creek) have informed MichCon's Gas Control that gas deliveries with CO₂
23 content exceeding 2% will be rejected.

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1 **Q. Has the maximum CO₂ content limit of 2% or less at the delivery points varied**
2 **since the AEP went into service?**

3 **A.** No. The 2% CO₂ maximum limit at the delivery points has not varied since the AEP
4 went into service.

5
6 **Q. Has the Michigan Public Service Commission Gas Safety Staff addressed the**
7 **maximum CO₂ content limit of 2% or less?**

8 **A.** Yes. MichCon was informed by the Gas Safety Staff that deviations from the 2% or less
9 standard were not acceptable under any circumstances for even short durations of
10 time. The Staff and MichCon set up strict standards and reporting requirements
11 which remain in place today. Those standards hold MichCon operationally
12 accountable for maintaining 2% or less CO₂ at all delivery points. A copy of a letter
13 dated May 3, 1999, from the MPSC Gas Safety Staff is attached as Exhibit TFP-2.

14
15 **Q. Why is this “standard” important?**

16 **A.** The primary reason for the standard is to assure that corrosive effects caused by CO₂
17 and water in the piping systems are minimized to avoid premature deterioration of
18 major transmission and distribution piping networks and storage fields that could fail
19 and create safety problems.

20
21 **Role of MGAT in Northern Michigan**

22 **Q. Can you describe MGAT’s role in northern Michigan with respect to**
23 **transporting and treating natural gas?**

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1 **A.** MGAT is owner and operator of the AEP and provides transportation and treating
2 service to shippers on the AEP and related lateral piping systems in northern
3 Michigan as shown on the map identified as Exhibit TFP-1. Additionally, MGAT is
4 responsible for metering of all gas volumes which ultimately flow on the AEP and
5 final allocation of volumes (less CO₂ and fuel use) at final delivery points into Great
6 Lakes Gas Transmission Company (GLGT), ANR Pipeline Company (ANR),
7 Consumers Energy Company (Consumers) or MichCon. MGAT offers shippers the
8 opportunity to contract for transportation and CO₂ treating services under what is
9 called an ASATT agreement. For shippers who contract directly for CO₂ treating
10 services, MGAT provides transportation only services under what is called an ASAT
11 agreement.

12

13 **Q. Why was the AEP built?**

14 **A.** The AEP was built to transport dry Antrim gas, to deliver the gas to CO₂ treating
15 facilities, and to ultimately deliver the gas to delivery points described above and
16 shown on Exhibit TFP-1. At the time of AEP construction, Antrim drilling was
17 expanding rapidly, production volumes were increasing and CO₂ levels were
18 considerably lower than they are today.

19

20 **Q. How has the operation of the AEP evolved since it was originally put into service?**

21 **A.** The AEP went into service in November 1995. Initially, there were approximately
22 3400 wells and about 135 receipt points connected to the system. Over the years,
23 producers have drilled hundreds of wells and established many additional receipt

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1 points. The Antrim volumes grew until the late 1990's when the production volume
2 peaked. Today there are over 4900 Antrim wells and over 170 receipt points
3 connected to the AEP. While new wells and receipt points continue to be added,
4 natural gas volumes continue to decline and CO₂ levels continue to rise into the
5 AEP.

6

7 **Q. What business risks did MGAT accept when it agreed to construct the AEP**
8 **facilities?**

9 **A.** MGAT agreed to invest in facilities and take on fixed payment obligations in return
10 for revenues generated by commodity rates collected for firm transportation and
11 treating services. Significant business risk was taken based on reserve estimates that
12 existed at the time MGAT requested approval to construct the pipeline.

13

14 **Q. What guarantees did MGAT require to ensure that shippers' Antrim volumes**
15 **would be delivered into the AEP system to support these risks?**

16 **A.** As described in Mr. Lyle's testimony, MGAT required producers to enter into
17 reserve dedication agreements for their reserves. These dedications were put in
18 place to ensure that when the reserves were produced that they would be treated
19 when necessary and transported on the AEP.

20

21 **Q. Was there anything else placed in the contracts with the producers that would**
22 **guarantee that the reserves would flow into the AEP?**

23 **A.** No.

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1 **Q. Would the AEP have been built by MGAT without the dedication of lifetime**
2 **reserves?**

3 **A.** No. Without such a guarantee, the financial risk of the AEP would have been far too
4 great and MGAT would not have constructed the pipeline.

5

6 **Authority to Manage Gas Quality**

7 **Q. What are the CO₂ standards on the AEP at the delivery points?**

8 **A.** As stated above, the standard on the AEP is a CO₂ content of 2% or less at the
9 delivery points.

10

11 **Q. Where does the maximum CO₂ content limit of 2% or less at all delivery points**
12 **on the AEP come from?**

13 **A.** The maximum CO₂ content limit of 2% comes from the MPSC's order in Case No.
14 U-10547, dated March 29, 1995. That order for the AEP required that gas deliveries
15 at all delivery points into MichCon, Consumers, GLGT and ANR systems be made
16 with a CO₂ content at or below 2%. Additionally, GLGT, ANR, Consumers, and
17 MichCon all maintain pipeline gas quality standards and will turn back any gas
18 streams that contain more than 2% CO₂.

19

20 **Q. How has MGAT maintained control over the 170 receipt points to ensure that**
21 **the CO₂ content at the delivery points is at or below 2%?**

22 **A.** As described by Mr. Lyle, MGAT entered into an agreement with CMS that allows
23 for the treating of up to 260 MMcf/d of gas volumes to an outlet specification of

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1 0.75% of CO₂. By treating MGAT's volumes to an outlet specification of 0.75% of
2 CO₂, MGAT has been able to blend volumes containing higher CO₂ contents from
3 shippers that do not have access to treating. Additionally, MGAT manages the flow
4 from all the receipt points where in some cases CO₂ levels are now over 30%. This
5 requires understanding and managing pre-treating services, and all other treating
6 services to ensure delivery of gas at 2% or less.

7

8 **Q. Did the order in Case No. U-10547 provide for blending (indirect treating of**
9 **high CO₂ gas by combining it with low CO₂ gas to meet the CO₂ requirements)**
10 **and why?**

11 **A.** Yes. The order was specific relative to blending to accommodate existing
12 production that was not adjacent to CO₂ treating plants and was impractical and too
13 costly to re-route to a plant. In fact, Savoy and the Attorney General advocated in
14 Case No. U-10547 that additional treating facilities be built throughout northern
15 Michigan. The Commission, however, determined in its findings that such
16 expenditures would make construction of the pipelines to these facilities
17 economically infeasible.

18

19 **Q. What benefit did this provide?**

20 **A.** The order provided that the AEP could operate the system to accommodate treating
21 for customers who can not economically justify the construction of facilities linking
22 them to an existing treating facility or to construct their own treating facilities by
23 allowing them to produce volumes and be treated through blending. In general, it

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1 also allowed producers to transport their gas at an economic rate. If producers would
2 have built processing facilities, they would also have had to build gathering lines to
3 these facilities. All of this would have meant significantly greater costs to the
4 producing community.

5

6 **Q. Who maintains the required CO₂ content obligation limit of 2% or less at the**
7 **delivery points from the AEP?**

8 **A.** The Commission, as it has with all common carrier pipelines in Michigan, authorized
9 MGAT, the AEP owner and operator, to monitor and manage all supply inputs,
10 interconnected treating facilities and delivery points and set standards that maintain
11 the CO₂ content at 2% or less for the benefit of all shippers into the downstream
12 pipeline delivery points.

13

14 **Q. How has the maximum CO₂ content limit of 2% been maintained by MGAT on**
15 **the AEP?**

16 **A.** MGAT monitors the production volumes in northern Michigan, which on average is
17 declining at 6% per year, while CO₂ on an annual basis is increasing by 0.4-0.6% per
18 year. While the overall CO₂ treating capacity within northern Michigan is more than
19 adequate for existing and anticipated production, there are certain occurrences (plant
20 outages, plant or pipeline upset conditions or even unique operations) which can and
21 do cause CO₂ levels at delivery points to exceed the 2% maximum if left unchecked.
22 Consequently, MGAT monitors flows and outlets at treating facilities, receipt and
23 delivery locations to allow the system to meet the downstream obligations of 2% or

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1 less CO₂ at the delivery locations. The location of new Receipt Meter Sites (RMS)
2 also changes the delicate balance of CO₂ levels at delivery points. If an RMS is
3 located downstream of treating, additional upstream treating is required in order to
4 blend the new stream.

5

6 **Q. Can you describe how the production that flows on the AEP is received from**
7 **the producers?**

8 **A.** The sources of gas that ultimately flow into the AEP are scattered across several
9 counties in northern Michigan at approximately 170 metering sites or RMS. This
10 gas is transported from these RMS by various laterals and other pipelines until it
11 ultimately is received by the AEP. The gas at receipt points is accepted by MGAT if
12 the producer/shipper can demonstrate a contractual relationship with a treater
13 (typically downstream of the RMS) to physically remove CO₂ so that the 2% **or less**
14 standard at the delivery point locations is not compromised.

15

16 **Q. What factors have changed that led to this complaint?**

17 **A.** As previously stated, the overall production volumes in northern Michigan are in a
18 constant state of change. While on average gas volumes continue to decline, the
19 average CO₂ content of the gas stream is increasing slightly each year. MGAT has
20 relied on its ability to set both standards for gas volumes delivered into its system
21 and to use its existing treating contract with CMS that provides for a 0.75% outlet at
22 the CMS plant for MGAT's volumes to maintain its obligation to deliver gas at a
23 CO₂ content of 2% or less. Because of the variability of gas volumes, their

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1 associated and variable CO₂ content, and the physical location of each receipt point
2 on the AEP, MGAT must continuously monitor and adjust its management formulas
3 to maintain proper CO₂ content. Through this careful management, MGAT has
4 avoided curtailments and shut-ins which would otherwise occur due to excess CO₂
5 content, i.e., percentages above 2% at the delivery points. With the rising levels of
6 CO₂, and the desire to keep as much production flowing as possible, MGAT has
7 advised producers requesting new services that it will require all new ASAT
8 contracts (AEP transportation only) to contract for treating to meet the outlet
9 specification of 0.75% of CO₂ at the South Chester facility. This is the same treating
10 service provided under the ASATT agreements, for all gas delivered to the South
11 Chester facility. As part of the operation of the AEP, MGAT must police the
12 gathering system to maintain its ability to satisfy all obligations to transmission and
13 distribution deliveries with firm CO₂ specifications. The MPSC gave MGAT the
14 operational responsibility to set the specifications through contractual or other
15 means.

16

17 **Q. Are there alternatives to blending?**

18 **A.** Yes. The alternatives are:

- 19 1. Treat each and every receipt point to 2% or less CO₂
20 2. Shut-in all gas at the RMS that is above 2% CO₂
21 3. Allow MichCon / MGAT, as it has prior to the commencement of this case, to
22 specify by contract the CO₂ treating percentage.

23

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1 **Q. What are some of the requirements and impacts under alternative number 1**
2 **above?**

3 **A.** To have each and every receipt point treated to a level of 2% or less CO₂ content
4 would require construction of various gathering pipelines and numerous CO₂ treating
5 facilities. As mentioned above, there are 170 RMS locations that bring gas to the
6 AEP, and each would need to be at 2% or less at the RMS. The existing treating
7 facilities would no longer be needed, but an extraordinary amount of capital to build
8 the additional infrastructure would be needed.

9

10 **Q. Is this a reasonable alternative?**

11 **A.** No. This alternative was cost prohibitive when the Commission rejected this
12 concept in the original Case No. U-10547 and it remains cost prohibitive today. In
13 simple terms, it would require processing plants to be built all across the Antrim
14 trend of northern Michigan. There is not enough money or political capital that
15 could be spent to build the facilities, let alone address all of the attendant issues that
16 would be raised by the producers, or the citizens of Michigan. This, in my opinion,
17 is precisely why the Commission authorized MGAT to blend gas streams in its
18 pipeline systems.

19

20 **Q. What are the potential impacts under alternative number 2 above?**

21 **A.** This scenario would result in the shut-in of all production that exceeded 2% CO₂
22 content at the RMS. Due to the level of CO₂ content in the current gas streams at the

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1 RMS, this would effectively eliminate nearly all Antrim production from being
2 transported or produced.

3

4 **Q. Why do you think that this is an alternative?**

5 **A.** The Commission has clearly stated in a letter from Michael J. Kidd (Exhibit TFP-2)
6 that it anticipated that MGAT would curtail gas rather than delivering it with CO₂
7 levels above 2%.

8

9 **Q. What are the potential impacts under alternative number 3 above?**

10 **A.** Under this scenario, MGAT would have the authority specifically granted in Case
11 No. U-10547 Commission order to set the required level of CO₂ treating to keep the
12 maximum amount of production flowing at all times. This leaves the operational
13 balancing decisions to MGAT, which in turn allows MGAT to keep production
14 flowing through attainment of the required specifications. These decisions must be
15 made by the transporter, because the transporter, and only the transporter, is
16 contractually bound to make deliveries to the delivery points. It is only the
17 transporter (pipeline operator) that has the ability to know the operational conditions
18 and constraints of its transportation system. Volumes and directions of gas flow can
19 change hourly, depending on the weather, operational constraints, and a myriad of
20 other factors including CO₂ levels, O₂ levels, plant upsets, and production facility
21 maintenance and upsets. Only MGAT, like all other common carrier pipeline
22 owners and operators, has the ability to monitor and manage all of these conditions
23 and constraints on a daily basis.

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1

2 **Q. Are you familiar with the Act 9 industry practice in Michigan with respect to**
3 **tariffs?**

4 A. Yes.

5 **Q. Do any other intrastate pipelines regulated under Act 9 file tariffs with the**
6 **MPSC?**

7 A. No. No other Act 9 pipeline files tariffs. A simple review of the MPSC website
8 confirms this.

9

10 **Q. What are the outcomes that you expect or wish for relative to this case?**

11 A. The desired outcome in this case would be an order from the Commission that
12 reinforces the Commission's order in Case No. U-10547 authorizing MGAT to
13 contractually set CO₂ levels that assure compliance with gas quality standards for all
14 companies receiving deliveries from the AEP and dismisses the complaint in its
15 entirety.

16

17 **Response to Complainants Testimony**

18 **Q. Is MGAT trying to "shift the burden to shippers who want to transport gas on**
19 **the AEP but not pay MichCon for treating" as stated on Page 6, lines 17-18 of**
20 **Mr. Fogle's testimony?**

21 A. No. All along, shippers have always had the obligation to deliver gas meeting
22 pipeline CO₂ requirements (just like dehydration and compression) before a pipeline
23 will accept gas for transportation. It is the shippers' ultimate responsibility to

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1 remove CO₂ from their gas. MGAT is requiring that shippers, who do not choose to
2 treat under an ASATT agreement, receive treating services of the same level
3 provided to those treated at the same facility under an ASATT agreement, or 0.75%
4 CO₂. If CMS is unable or unwilling to provide the service at the same price it
5 charges MGAT for the same service, it is not MGAT that is being discriminatory or
6 shifting the burden to the producers. It appears that CMS is attempting to generate
7 additional revenue to treat the producer's gas from 2% to 0.75% at its treating plant.

8

9 **Q. Is Mr. Fogle's characterization of the service provided under Terra and**
10 **Quicksilver's ASATTs as stated on Page 6, line 20-22 accurate?**

11 A. No. Under the ASATT agreements, the shipper contracted with MGAT to meet the
12 shipper's responsibility to treat their gas to a level providing 2% or less at the
13 delivery point . MGAT contracted with CMS to provide treating services to a level
14 of 0.75% CO₂ in order to provide the delivery point specifications. Additionally, his
15 reference to the "same" service from CMS is erroneous, as MGAT receives treating
16 service to a level of 0.75% from CMS, not a minimum of 2%. CMS is offering to
17 perform a lesser service for the same amount charged by MGAT.

18

19 **Q. Do you agree with Mr. Fogle's statement in his testimony on Page 7, lines 1-7**
20 **indicating "Terra and Quicksilver are being required to provide additional**
21 **blending volumes for the downstream producers, for the benefit of MichCon?"**

22 A. No, MGAT is attempting to keep the minimal facilities installed as part of the AEP
23 as originally envisioned by the MPSC in the order in case U-10547. What

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1 Quicksilver and Terra desire would lead to additional facilities being installed and
2 paid for by all the producers, to benefit all of the producers overall. This is what the
3 MPSC wanted to avoid by allowing the blending to occur on the system. Suggesting
4 that the MPSC order actually requires MGAT to construct the additional facilities is
5 plainly outside the language of the order, when simply requiring a contract for
6 treating to a similar level MGAT receives for the shippers on the system (0.75%
7 CO₂) has and would eliminate the need for the construction of additional facilities.

8

9 **Q. Do you agree with the characterization of regarding the standards for CO₂**
10 **content as described on Page 7, line 11 through Page 8, line 5?**

11 **A.** No. While MGAT now specifies the treating level required, it is still the same level
12 provided to gas brought to the CMS plant under any ASATT agreement. Producers
13 that opt for treating services other than those provided via an ASATT are only being
14 requested to meet the same specification at the outlet of the same treating plant. This
15 is still within the standard of 2% or less at the delivery points, but defines that the
16 treating must be performed to the same level. Mr. Lyle describes the history behind
17 the ASATT and ASAT agreements further in his testimony.

18

19 **Q. Does Mr. Shumway's description of your conversation with him on Page 11,**
20 **lines 4-6 properly characterize the discussion?**

21 **A.** No. While it was phrased that this was a "new" policy at the time of the discussion,
22 it is truly a reversion to having all the gas treated the same at the CMS plant, whether
23 under an ASATT, which provides treating services, or an ASAT agreement and a

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1 third party treating agreement with CMS. It is not discriminatory to require treating
2 to the same level provided to the production treated under ASATT agreements for
3 ASAT shippers. Perhaps the result of this complaint case will be to invalidate all the
4 CMS agreements providing treating only to a minimum of 2% CO₂ and bring them
5 all in line with the agreement between CMS and MGAT providing treating to 0.75%.
6 As Mr. Lyle clarifies in his testimony, the ASATTs do not explicitly state treating to
7 a level of 0.75%, but that is the level of treating received for production delivered to
8 CMS. The ASATTs explicitly state that the gas will be delivered at 2% or less at the
9 delivery points.

10

11 **Q. Does this complete your prefiled direct testimony?**

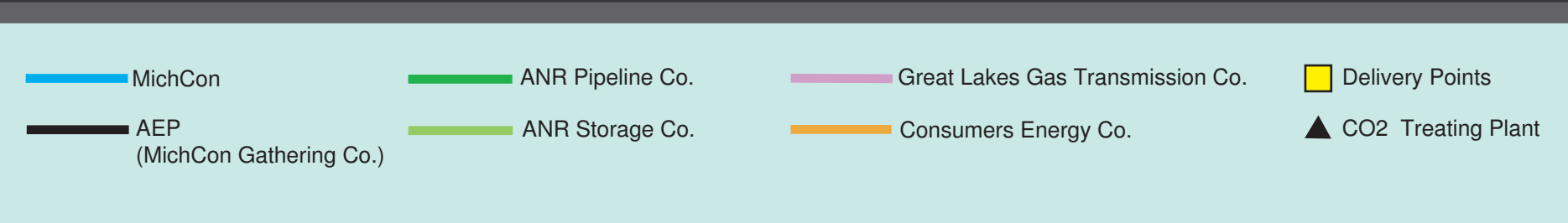
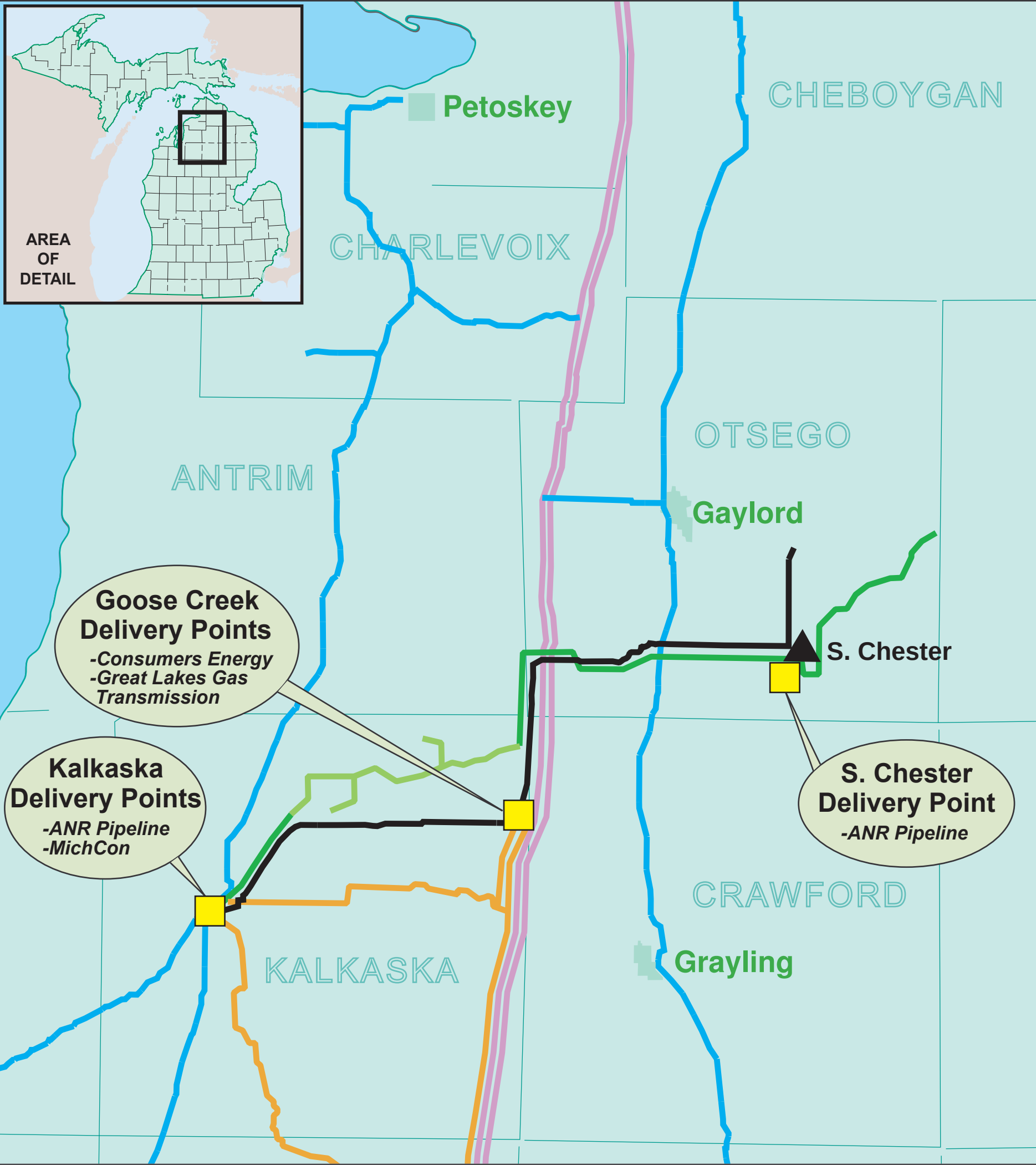
12 **A.** Yes, it does.

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Case No. U-14821

EXHIBITS
OF
TODD F. PERSELLS





State of Michigan
John Engler, Governor

Department of Consumer & Industry Services
Kathleen M. Wilbur, Director

Case No. U-14821
Witness: T.F. Persells
Exhibit No: MGAT-2 (TFP-2)
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Public Service Commission

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Commissioners

John G. Strand
John C. Shea
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May 3, 1999

Mr. Dennis Lambert
Michigan Consolidated Gas Company
500 Griswold Street
Detroit, MI 48226

RE: Case No. U-10547

Dear Mr. Lambert:

Thank you for the recent presentation MichCon gave to the Commission Staff regarding the current CO₂ situation in northern Michigan. It is clear that improvements have been made in reducing the amount of time CO₂ levels exceeded the 2% threshold but the progress I thought the industry was making to acquire needed additional CO₂ removal capacity as a result of the meetings last fall and winter appear to be fading. This will only prolong the problem of periodically delivering high CO₂ levels at the Antrim Dry Header take-away points unless workable and timely curtailment actions are taken.

Staff has been informed that when MichCon reports CO₂ levels below the 2% threshold on an average daily basis, some take-away points record CO₂ levels above 2% within the 24 hour period. The Staff remains concerned that MichCon continues to deliver natural gas containing CO₂ levels above 2% at various take-away points from the Antrim Dry Header. While MichCon is currently reporting weekly with average daily CO₂ levels, you have acknowledged that CO₂ levels at Goose Creek and Kalkaska have exceeded the CO₂ threshold when interruptions are experienced at CO₂ treating plants, even though your weekly report may show average daily levels below 2%.

The Commission Order in Case No. U-10547 dated March 29, 1995 at page 41 states:

"The Commission finds that MichCon should monitor the CO₂ content of the gas in the Antrim Dry Header. Immediately upon becoming aware that the 2% threshold has been exceeded, MichCon shall notify the Commission in writing of the situation. The notice shall explain the reason for and the duration of the problem and shall provide details regarding the steps being taken to remedy the situation. Further, the notice shall indicate the location and volumes of gas being shut-in, and the destination and volumes of gas deliveries being curtailed."

Staff believes a major problem is not having sufficient CO₂ removal capacity. A reasonable and expected design should have a reserve margin in a manner similar to a well

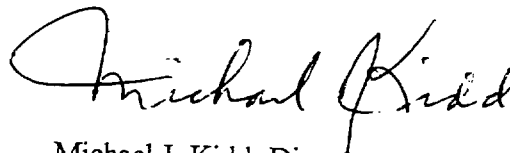
Page 2

designed electric system which provides for plant maintenance without disrupting your primary service. The purpose of the Commission approving the Antrim Dry Header pipeline system was to provide MichCon with the ability to deliver natural gas produced in the Antrim formation to the four take-away points identified in the application. However, the Commission conditioned that approval by limiting the CO₂ levels to 2% or less at those take-away points. The last sentence of the above quoted material regarding identifying volumes of gas curtailed would indicate that the Commission anticipated MichCon curtailing gas instead of delivering gas with CO₂ levels above 2%.

MichCon has not been submitting notices required in the order. MichCon should comply with the above referenced requirement by filing all notices with the Commission immediately upon becoming aware that any take-away point exceeds the 2% CO₂ threshold at any time.

If you have any questions regarding this request, please contact me at (517) 334-7164.

Sincerely,

A handwritten signature in black ink that reads "Michael J. Kidd". The signature is fluid and cursive, with the first name "Michael" and last name "Kidd" clearly legible.

Michael J. Kidd, Director
Gas Division

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

* * * * *

In the matter of the complaint of Quicksilver, Inc.)
and Terra Energy, LTD. against MichCon Gathering)
Company and Michigan Consolidated Gas Company)
for violation of Section 10 of PA 9 by altering the)
terms and conditions of service.)
_____)

Case No. U-14821

PROOF OF SERVICE

STATE OF MICHIGAN)
)ss
COUNTY OF WAYNE)

JENNIFER EVANS, being duly sworn, deposes and says that on the 19th day of July, 2006, a copy of MICHCON GATHERING COMPANY'S AND MICHIGAN CONSOLIDATED GAS COMPANY'S CORRECTED TESTIMONY OF TODD F. PERSELLS, in the above-referenced case was served upon the persons on the attached service list via e-mail.

Jennifer Evans Digitally signed by Jennifer Evans
DN: cn=Jennifer Evans, c=US, o=DECo/MichCon,
ou=Regulatory Department, email=evansj2@deenergy.com
Date: 2006.07.19 11:31:57 -0400

JENNIFER EVANS

Subscribed and sworn to before me
on this 19th day of July, 2006.

Kimberly A. Digitally signed by Kimberly A. Krasnodemski
DN: cn=Kimberly A. Krasnodemski, c=US,
o=Detroit Edison and MichCon, ou=Regulatory
Affairs, email=krasnodemski@dteenergy.com
Date: 2006.07.19 11:35:56 -0400
Krasnodemski

Notary Public