

BEFORE THE PUBLIC SERVICE COMMISSION OF WYOMING

IN THE MATTER OF THE AMENDED) DOCKET NO. 30003-52-GR-11
APPLICATION OF MGTC, INC. FOR A) (RECORD NO. 12840)
GENERAL RATE INCREASE IN THE AMOUNT)
OF \$486,936 PER YEAR AND FOR APPROVAL)
OF TARIFF REVISIONS)

PRE-FILED DIRECT TESTIMONY OF

Belinda J. Kolb, Ph.D.

On Behalf of the Wyoming Office of Consumer Advocate

Testimony Filed: 09/09/2011
Hearings Begin: 10/24/2011

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

2

3 A. My name is Belinda Jean Kolb. My business address is 2515 Warren Avenue, Suite 304,
4 Cheyenne, WY, 82002. I am a Rate Analyst in the Wyoming Office of Consumer
5 Advocate (OCA). The OCA is an independent consumer advocacy agency that was
6 created by an act of the legislature in the 2003 general session.

7 **Q. WHAT IS THE FUNCTION OF THE OCA?**

8 A. Pursuant to W.S. § 37-2-401,

9 The office of consumer advocate shall represent the interests of Wyoming
10 citizens and all classes of utility customers in matters involving public
11 utilities. In the exercise of its powers the office of the consumer advocate
12 shall consider all relevant factors, including, but not limited to, the
13 provision of safe, efficient and reliable utility services at just and
14 reasonable prices.

15 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND**
16 **OCCUPATIONAL EXPERIENCE.**

17 A. I earned a Bachelor of Science degree in civil engineering from the University of
18 Wyoming in 1983. The area of concentration in my undergraduate work was structural
19 engineering. I was employed for two summers in the oil and gas industry during my
20 undergraduate studies and offered a full-time job upon graduating. However, after
21 graduating from the University of Wyoming in 1983, I accepted a one-year visiting
22 instructor position to teach undergraduate engineering sciences and mathematics at a
23 community college in Wyoming. Concluding that one year position, I spent
24 approximately the next fifteen years employed at different times in both business and
25 academia as an engineer, insurance agent, a financial analyst for a bond insurance
26 company and as a community college adjunct instructor. In 1994 I began a distance
27 education program to earn a Master of Science degree in business administration from
28 the University of Wyoming. I continued to teach part-time during the time I was a
29 graduate business student. I graduated in 1998 with an MBA and soon after began a full-
30 time career teaching business, finance and mathematics at community colleges between
31 2000 to 2009. During my full-time teaching career, starting in 2005, I once again became
32 a student embarking on graduate studies in education at the University of Wyoming. I

1 soon developed a plan to earn a Doctor of Philosophy degree in adult education and
2 instruction technology. I completed my terminal degree and graduated in May 2010. This
3 period in my career and educational journey also created the opportunity to explore a
4 variety of new career options. In June 2011, I accepted an offer to join the Office of
5 Consumer Advocate as a Rate Analyst. I viewed this position as a challenging match for
6 my interests, career experiences and educational training. In August 2011, I attended the
7 53rd Annual Regulatory Studies Program conducted by the Institute of Public Utilities at
8 Michigan State University.

9 **Q. HAVE YOU TESTIFIED BEFORE THIS COMMISSION IN PREVIOUS**
10 **PROCEEDINGS?**

11 A. No. This is a new experience for me in my role at the Office of Consumer Advocate.

12 **Q. ON WHOSE BEHALF DO YOU APPEAR HERE TODAY?**

13 A. I appear here today on behalf of the OCA. As previously stated, the OCA is an
14 independent party in this proceeding, separate and apart from the Commission or its
15 advisory staff.

16 **Q. AS A MEMBER OF THE OCA, DO YOU ADVOCATE THE INTERESTS OF**
17 **CERTAIN GROUPS OF CONSUMERS OVER OTHERS?**

18 A. No. As a member of the OCA, it is my statutory obligation to advocate the best interest
19 of all citizens in the state. Specifically, W.S. § 37-2-401 states that the OCA “shall
20 represent the interests of Wyoming citizens and all classes of utility customers in
21 matters involving public utilities.” This public interest standard requires the OCA to
22 represent the broadest possible utility consumer constituency, even though some of those
23 consumers may also be represented independently as parties in this case. The OCA is
24 responsible for balancing the positions and recommendations of the Company, and of
25 other parties, to arrive at a set of recommendations that serve the overall long term public
26 interest.

27 **Q. ARE YOU SPONSORING ANY EXHIBITS IN THIS PROCEEDING?**

1 A. Yes. I am sponsoring OCA Exhibits BJK-1 through BJK-5. I will reference each exhibit
2 later in my testimony.

3 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

4 A. My testimony in this proceeding is focused on the capital construction projects as
5 described in the Direct Testimony of Mr. Christopher Wilson dated May 2, 2011. My
6 testimony is being presented in conjunction with the Testimony of Ms. Denise Parrish.

7 **Q. HOW IS YOUR TESTIMONY IN THIS PROCEEDING ORGANIZED?**

8 A. First, I briefly identify the specific meetings and the company representatives from which
9 project information was collected. Second, I summarize the information collected directly
10 related to the capital projects, my analysis of such information and provide my
11 recommendations with regard to inclusion of each capital project in rate base. Finally I
12 provide updated information about the progress of the various capital projects and related
13 expenditures obtained from the company.

14 **Q. WHEN, WHERE AND WITH WHOM DID THE OCA CONDUCT THEIR AUDIT
15 AND SITE VISIT AND WHAT INDIVIDUALS DID THE OCA MEET WITH?**

16 A. OCA Financial Audit: Anadarko Petroleum Corporation (APC) office at 1099 18th Street,
17 Suite 1800 Denver, Colorado. OCA met with Anadarko Midstream/MGTC staff members
18 Mr. Chris Wilson and Ms. Chris Odell and Independent Consultant Mr. Michael J.
19 McFadden on July 25 and 26, 2011.

20 OCA Site Visit: MGTC, Inc. office located at 1400 E. Lincoln Gillette, Wyoming and the
21 surrounding pipeline territory where capital projects are taking place.
22 OCA visited the pipeline territory with Anadarko Midstream/MGTC staff: Mr. Chris
23 Wilson, Regional Manager, Commercial Development; Ms. Chris Odell, Regulatory
24 Accountant; Ms. Jyl Baumann, Transmission Supervisor and Mr. Mark Diede,
25 Measurement Foreman on August 16, 2011.

26 In addition, I reviewed dozens of documents in the context of my independent research
27 and gathered in response to inquiries in this proceeding. Generally, these include annual

1 reports, pipeline inspection reports, construction bids and award letters, pipeline maps
2 and related industry publications, articles and websites. Some of these documents are
3 more specifically described later in my testimony.

4 **Q. PLEASE PROVIDE A BRIEF SUMMARY OF YOUR RECOMMENDATIONS IN**
5 **THIS PROCEEDING.**

6 A. Based on the information I reviewed and analyzed, including the audit and site visit, I
7 conclude that overall the capital projects in the rate case application appear reasonable in
8 scope and scale while largely providing beneficial customer impacts. Under the
9 expectation of successful project completions during the 2011 construction season, my
10 recommendation is that the entirety of capital projects be included in rate base. In the
11 interest of customer, societal, environmental and company safety, I also recommend that
12 MGTC formalize and submit to the Wyoming Public Service Commission a master
13 pipeline improvement plan no later than March 30, 2012 which specifically provides for a
14 an aggressive three to five year timeline for replacement of all remaining above ground
15 pipeline.

16 **Q. HOW IS YOUR TESTIMONY ON THE REASONABLENESS OF THE CAPITAL**
17 **PROJECTS ORGANIZED?**

18 A. Each of the capital projects are described in order of the magnitude of the project cost. I
19 make observations regarding likely customer impacts and conclude with my
20 recommendation regarding inclusion in rate base.

21 **Q. PLEASE PROVIDE A TABULATION OF THE CAPITAL PROJECTS AND**
22 **ESTIMATED COSTS INCLUDED IN THIS RATE CASE.**

23 A.

Project Name& Brief Description	Estimated Cost (Percent of Total)	Contractor, Fabricator or Installer	Estimated project completion date
South Rozet to Rocky Point 11 miles of new 6 inch buried steel pipeline replacing 4 inch above ground pipe.	\$2,000,000 (61%)	United Construction Denver, CO	October 5, 2011

Project Name& Brief Description	Estimated Cost (Percent of Total)	Contractor, Fabricator or Installer	Estimated project completion date
City Gate 7: acquisition of 5 mile <i>Meserve</i> pipeline from Western Gas Asset Holding Company, LLC and approximately 2 miles of new 6 inch pipe.	\$608,411 (19%)	MGTC	November 1, 2011 Contracted date
Asset Separation Meters: new meters at four interconnections with MIGC enabling independent metering of MGTC assets.	\$236,000 (7%)	MGTC	1 meter installed September 2010 and three in progress
Hannum Loop Line: approximately 1.25 to 2 miles of new 6 inch steel pipeline being connected to currently idle 4 inch pipeline.	\$200,000 (6%)	United Construction	Sept. 2, 2011
Encoder-Receiver-Transmitters (ERTs) (~500) and 140 Positive Displacement (PD) Meters: new ERT's for entire system and normal replacement of PD meters.	\$95,000 (3%)	MGTC and/or contracted labor	Summer/Fall 2011
Wright Lateral Line Heater: pre-fabricated assembly.	\$50,000 (1.5%)	JW Energy & MGTC	Summer/Fall 2011
Well Draw Lateral Line Heater pre-fabricated assembly.	\$50,000 (1.5%)	JW Energy & MGTC	Summer/Fall 2011
New Maintenance Vehicle:	\$36,000 (1%)	MGTC	June /July 2011
Total Capital Projects Rate Case	\$3,275,411		
Less capital projects completed in 2010	-\$229,000		
Total Capital Projects in 2011	\$3,046,411		

1

2 **Q. PLEASE DESCRIBE THE SOUTH ROZET TO ROCKY POINT CAPITAL**
3 **PROJECT AND RELATED CUSTOMER IMPACTS.**

4 A. The South Rozet to Rocky Point new 6 inch pipeline is the largest project in the rate case
5 constituting 61% of the estimated capital expenditures in the rate case application. Please
6 refer to OCA Exhibit BJK-1 which is regional map of the project area. MGTC awarded
7 this project through a solicitation for bid process to MGTC approved contractors. The
8 project was awarded to United Construction of Denver, Colorado on July 28, 2011 with
9 an intended construction start date of August 8, 2011. The project alleviates an
10 increasingly likely safety and reliability issue by replacing the existing 11 miles of above
11 ground 4 inch pipeline. The new pipeline will be cathodically protected. As observed on
12 the August 16, 2011 site visit, a beginning portion of the path of the pipeline has been
13 cleared of all removable impediments, including trees, boulders and brush to allow

1 construction equipment to gain access at the Rocky point location which is the starting
2 point for the new installation. The contractor provided a project schedule which indicates
3 a completion date of October 5, 2011. I questioned the timeline during the site visit and
4 Mr. Wilson and Mr. Diede indicated that six weeks is still a reasonable project timeline
5 since this is essentially a string of pipeline without booster stations or other more labor
6 intensive intermediate installations along the eleven mile stretch. Currently along the
7 eleven miles of pipe thirteen 2 inch taps are a planned part of the project and the new
8 Encoder-Receiver-Transmitters (ERTs) will also be installed at each tap.

9 Mr. Diede also indicated the possibility of new customers along the pipeline route being
10 able to have taps added concurrently with the installation. Landowners and potential new
11 customers have been notified by MGTC land and right of way (ROW) staff of the project
12 and the potential to connect. Customers are responsible for obtaining their own service
13 line up to the MGTC tap. There is insufficient information at this time to further quantify
14 the time frame or certainty of any new customers connecting prior to the completion of
15 this project; however this uncertainty does not detract from the benefits of the project.

16 The new 6 inch pipeline will be buried at least 48 inches and eventually will replace the 4
17 inch pipe that was likely installed in the early 1960's. At that time it was customary to
18 simply run the blade of an earth moving machine at an angle to the ground burrowing a
19 shallow depth of one foot or less, install the pipe and then push the shallow earth over the
20 pipeline. This existing 4 inch pipe is essentially considered to be "above ground" and in
21 many instances is directly exposed and visible on the surface. Please refer to OCA
22 Exhibit BJK-2 which is two photographs taken August 16, 2011 of a small segment of the
23 current South Rozet to Rocky Point pipeline.

24 When the pipeline is complete and customers are receiving gas from the new pipeline
25 MGTC indicates that the 4 inch above ground pipeline will be removed from the surface
26 and disposed of. This project aligns with MGTC's purported longer term goal of
27 replacing all such above ground pipe in the service territory currently estimated to be
28 between 50 to 60 total miles in various segments and locations. Included in this capital
29 project, is the installation of new pigging facilities at both the Rocky Point and South
30 Rozet locations. MGTC indicates that the cost differential of replacing 4 inch pipe with

1 new 6 inch pipe is approximately \$250,000 but notes that new 4 inch pipe would not
2 provide for the increased capacity sought through this project.

3 Mr. Wilson indicates that the necessary pipe has been purchased at an attractive price
4 point enabling an estimated construction cost of \$30,000 per inch-mile. Which means that
5 one mile of 6 inch diameter pipe has a total construction cost of approximately \$180,000
6 i.e. \$30,000 per inch-mile x 6 inches x 1 mile = \$180,000. The project pipe is currently
7 stored and will be delivered directly to the job site ROW without any intermediate
8 unloading and reloading minimizing the potential for damage to the pipe. I was able to
9 find recent research about the construction cost of pipeline per inch mile for *large (30-36*
10 *inch) diameter* pipe in a recent article titled "Billions Needed to Meet Long-Term Natural
11 Gas Infrastructure Supply, Demands, published in the August 2009 edition of Pipeline
12 and Gas Journal. This article provides benchmarks of approximately 35% for material
13 costs, 8-9% for ROW including engineering, surveying, administration and
14 environmental costs. Please refer to OCA Exhibit BJK-3 taken from this article which
15 displays historical average pipeline construction costs since 1993 and projected costs for
16 2009 through 2030.

17 In nearby North Dakota, a December 2007 publication by the North Dakota Pipeline
18 Authority indicates that North Dakota was experiencing construction costs in excess of
19 \$50,000 per inch mile while the average for the nation at that time exceeded \$80,000 per
20 inch mile. This information is offered for context in consideration of the reasonableness
21 of the attractive construction costs MGTC anticipates. It is a direct benefit to Wyoming
22 customers if MGTC can realize construction costs per inch mile approximately 50% less
23 than the 2011 projected national average of about \$60,000 per inch mile.

24 According to Section 3 of the Mainline Construction Specifications the company is
25 providing the following services & materials: mainline pipe, fittings, fabricated
26 assemblies, surveying service and materials for the ROW warning signs, cathodic testing
27 stations, radiographic services and hydrostatic test report forms and calculations and pipe
28 for welder qualification. Surplus pipe material will be trucked to the Anadarko Petroleum
29 Corporation (APC) Midstream Warehouse in Gillette, Wyoming at the contractor's
30 expense. Material costs for this project are estimated at 45% of the project cost or

1 approximately \$900,000 and the remaining \$1.1 million dollars are for construction labor
2 related costs.

3 Mr. Diede further explained during the site visit that in-house engineering has designed a
4 mobile smart pig unit that can be moved to a variety of MGTC pipeline locations and
5 connected for a smart pig run. This enables MGTC to purchase only one smart pig which
6 may equate to substantial cost savings. In addition, it is planned that each time MGTC
7 upgrades a meter station, booster station or interconnection it is adding or adapting the
8 pipeline with assemblies that accept the mobile smart pig deploying unit where
9 appropriate. MGTC awarded Black Eagle of Berthoud, Colorado the contract to
10 manufacture six prefabricated pigging assemblies three of which are designed for the
11 South Rozet to Rocky Point project. The remaining three assemblies are for the Hannum
12 Loop Line project described later in my testimony. The contractor United Construction is
13 responsible for the installation of these prefabricated assemblies.

14 During the OCA site visit I observed a variety of geographically scattered customer types
15 in the project territory including residential, farm, ranch and multiple well leases. MGTC
16 is able to report that since 2006 this eleven mile segment of above ground pipe has not
17 sustained damage from outside forces. Outside force damage can be caused by both
18 human and environmental events. MGTC considers the pipeline to be increasingly
19 subjected to outside force damage since it is in an area with expanding population
20 encroachment. In addition, the pipeline segment is in an area that has experienced above
21 normal rainfall over the past two years causing water to pool around the above ground
22 pipe for days at a time which MGTC fears may exacerbate corrosion. It is obvious that
23 customers will have a substantially safer pipeline installation following the completion of
24 this project. MGTC expects the physical life of the new buried pipe to extend for several
25 decades. I agree that it is reasonable to expect properly buried pipeline to last for several
26 decades. The observation that the above ground line being replaced is likely at least 40
27 years old and has been in service under less than optimal conditions only further supports
28 the expectation that properly buried pipeline will last for many decades. It is certainly
29 reasonable to expect increased capacity and improved reliability as additional positive
30 customer impacts. I recommend that this project be included in rate base at an estimated
31 cost of \$2 million dollars.

1 **Q. PLEASE DESCRIBE THE CITY GATE 7 CAPITAL PROJECT AND RELATED**
2 **CUSTOMER IMPACTS.**

3 A. City Gate 7 is a project that involves both new pipeline installation and reclaiming or
4 repurposing an existing 5 miles of 12 inch pipeline known as the Meserve Line at the
5 formerly active Dopplebach Booster station. The new pipeline creates a connection from
6 one end of the Meserve line to a new city gate or town border station located per
7 SourceGas requirements. This project stems from a contractual obligation between
8 MGTC and SourceGas for increased capacity to the SourceGas Certificated area. Mr.
9 Wilson's testimony indicates that pursuant to MGTC's Gas Transportation Agreement
10 with SourceGas this project is to be completed by November 1, 2011. When complete
11 this project will provide increased capacity and reliability by providing a new flow path
12 to the southern region of the SourceGas Certificated area. MGTC reports that there are no
13 liquidated damages recoverable by SourceGas due to non-completion of the interconnect
14 within the agreed upon timeframe.

15 The Meserve line is currently owned by Western Gas Asset Holding Company, LLC
16 which is a subsidiary of Anadarko and as such affiliated with MGTC. During the OCA
17 Financial Audit it was stated that this asset is essentially being transferred at book value
18 to MGTC. Attachment 2.2 of MGTC responses to SourceGas second set of data requests
19 estimates the value of the line at \$273,411. Customer benefits include increased capacity,
20 improved reliability through creation of a looped redundant system and congestion relief
21 in and around the Rawhide Interconnect/Station. Mr. Diede further explained that at least
22 twice during each of the two previous heating seasons MGTC reached maximum capacity
23 flow at the Rawhide Station. I recommend that this project be included in rate base at an
24 estimated cost of \$608,411.

25 **Q. PLEASE DESCRIBE THE ASSET SEPARATION CAPITAL PROJECT AND**
26 **RELATED CUSTOMER IMPACTS.**

27 A. This project is essentially the installation of ABB Totalflow Model G4 EFM orifice
28 meters at four interconnections between MIGC and MGTC. According to Mr. Wilson's
29 direct testimony dated May 2, 2011 the four asset separation meters have already been
30 installed. MGTC responses to OCA Data Request 2.19 indicated the site of the four

1 interconnections as Rawhide (T51NR72WSec17), City Gate 6 (T49NR73WSec10),
2 Triton (T51NR72WSec6) and Wright (T44NR71WSec28). I requested clarification on
3 August 22, 2011 about the completion status of the four meter installations since in my
4 estimation there was an apparent contradiction between the MGTC's response to OCA
5 data request Set 2 regarding the completion status of this project and Mr. Wilson's
6 testimony. Mr. Wilson replied on August 25, 2011 that in September 2010 one asset
7 separation meter installation was completed and the other three installations are in
8 various stages of completion.

9 MGTC asserts that asset separation meters provide a secondary measure of MIGC and
10 MGTC gas flow volumes, a check system and enable compliance with Maximum
11 Allowable Operating Pressures (MAOP) per 49 Code of Federal Regulations (CFR) Part
12 192. I acknowledge MGTC's assertion that it is standard industry practice to have
13 separate metering at interconnections between interstate (MIGC) and local distribution
14 companies (MGTC). However, in the past MIGC and MGTC ownership structure was
15 more closely tied and apparently this precluded the need for asset separation meters. In
16 2006, Anadarko bought Western Gas Resources and ultimately became the parent of
17 MIGC and MGTC. In 2008 Anadarko formed Western Gas Partners, LLP and assigned
18 MIGC as its subsidiary. MGTC remained a subsidiary of Anadarko and now has an
19 increased degree of separation from MIGC. These various limited liability partnerships
20 and parent/subsidiary relationships are difficult to define in terms of direct customer
21 benefits. Among other things, it is the responsibility of MGTC to accurately determine
22 the volume of product delivered and accurately bill all classes of customers.

23 It is my observation at this time, that customer demands have not changed in a material
24 manner to precipitate the need for asset separation. Instead, it appears to me that the
25 series of ownership changes and the determination of the parent company to reorganize
26 itself in various manners have driven the need for asset separation. MGTC indicates they
27 anticipate no cost savings associated with asset separation meters and instead expect an
28 increased amount of labor hours for testing and maintenance at the four sites of
29 approximately 64-80 additional labor hours per year. Again, beneficial customer impacts
30 are difficult to quantify but at a minimum are identified as the secondary check system of
31 gas flows from the MIGC system to MGTC and MGTC's customers. As such, the asset

1 separation meters can be ultimately expected to provide improved billing accuracy for
2 customers and I recommend that the cost of \$236,000 for asset separation be included in
3 rate base.

4 **Q. PLEASE DESCRIBE THE HANNUM LOOP LINE CAPITAL PROJECT AND**
5 **RELATED CUSTOMER IMPACTS.**

6 A. The Hannum Loop Line project incorporates repurposing assets at the currently inactive
7 Mills Booster station. Approximately 1-2 miles of new, buried, cathodically protected 6
8 inch pipe will be connected to a currently idle 4 inch pipeline creating a secondary route
9 for gas flowing from the Rawhide Station. The idle 4 inch pipeline was purchased from
10 Belle Fourche pipeline in 1996 and remained in service as an MGTC transmission line
11 until July 23, 2008. OCA data request 2.11 queried MGTC regarding the remaining
12 useful life of the 4 inch pipeline. MGTC's response indicated that no such studies of
13 remaining physical or economic useful life have been conducted, yet they expect physical
14 life could extend for several decades. Please refer to OCA Exhibit BJK-4 which is a
15 regional map of the project area.

16 During the OCA Site visit Mr. Mark Diede indicated that the 4 inch line can be readily
17 replaced with 6 inch line to provide additional capacity as needed in the future.
18 Completion of this project provides added reliability to the SourceGas Certificated area
19 and an additional route for gas volumes to be flowed to the systems east of Gillette
20 including the towns of Moorcroft, Upton and Newcastle. This project was actually a
21 combined bid solicited with the South Rozet to Rocky Point project and as such was also
22 awarded to United Construction and includes the installation of three pigging assemblies.

23 As stated earlier in my testimony, Mr. Diede indicated that at least twice during the past
24 heating season peak demand was reached at the Rawhide Station which is the MGTC
25 source for gas flowing to South Rozet and beyond. The Hannum Loop Line will provide
26 a critical secondary route for gas flowing both south and east from the Rawhide station.
27 This project appears to be reasonable in scope and scale and includes repurposing
28 existing assets while adding reliability and capacity for all customer classes. I
29 recommend this project be included in rate base at an estimated cost of \$200,000.

1 **Q. PLEASE DESCRIBE THE ENCODER-RECIEVER-TRANSMITTER (ERT) AND**
2 **POSITIVE DISPLACMENT (PD) METER CAPITAL PROJECT AND RELATED**
3 **CUSTOMER IMPACTS.**

4 A. The ERT project alleviates considerable difficulty in meter reading due to remote and
5 sparse locations. Approximately 500 ERT's are to be installed to upgrade the entire
6 pipeline territory. There are approximately a dozen or so instances where in the past
7 meters were not located at the tap due to accessibility limitations for meter reading. The
8 ERT system will enable the relocation of all such meters to the tap site. ERT's can be
9 installed in approximately twenty minutes or less and MGTC staff or independent
10 contractors will be used for the installations. Installation of these units throughout the
11 pipeline territory will eliminate the need for MGTC personnel to physically look at a
12 particular meter to obtain a reading. Instead, MGTC personnel can drive past the
13 approximate region of the ERT and receive the transmitted usage data typically without
14 having to leave the vehicle. The ERT mounts to the holes in the outer casing of the PD
15 meter and interfaces to the meter's drive mechanism.

16 MGTC currently replaces PD meters according to a ten year life cycle. MGTC has 140
17 meters or approximately 28% currently either due or past due for replacement. Mr. Diede
18 further explained that the meters will be reconditioned when feasible and potentially
19 placed back into service. Accurate and readily serviceable meters are necessary for
20 providing timely service and accurate billing. Mr. Wilson's direct testimony indicates
21 that the labor hours per month for customer meter reading complicates MGTC's timely
22 completion of Pipeline and Hazardous Materials Safety Administration (PHMSA)
23 required maintenance tasks. Customers should benefit directly from the efficiencies
24 realized from the ERT meter reading process and from the installation of new PD meters.
25 I recommend the estimated cost of \$95,000 for approximately 500 ERTs and 140 PD
26 meters be included in rate base.

27 **Q. PLEASE DESCRIBE THE WRIGHT LATERAL AND WELL DRAW LINE**
28 **HEATER CAPITAL PROJECT AND RELATED CUSTOMER IMPACTS.**

29 A. Line Heaters are being installed at two locations: Wright Lateral and the Well Draw
30 Lateral. Last winter MGTC had more than one instance of line freezing which they have

1 attributed to a change in the composition of the gas delivered by MIGC into these
2 laterals. MGTC response to OCA data request 2.27 indicates that beginning in February
3 2011 the throughput on MIGC dropped by nearly 50% and the volume removed from the
4 system was lower BTU coal bed methane gas. The removal of this gas raised the overall
5 BTU level of the MIGC gas stream. As BTU levels increase the gas is more likely to
6 produce hydrates which increase the likelihood of freezing problems. The higher BTU
7 gas appears to be the expected composition going forward. The line heaters are being
8 fabricated by JW Energy of Casper, Wyoming. They are designed to be powered by
9 natural gas with solar ignition systems.

10 MGTC states that no loss of service to customers occurred in relationship to the gas
11 composition changes beginning in February 2011 and the subsequent line freezes. MGTC
12 indicated that the length of pipeline provided sufficient line pack to meet customer
13 demand while the line freeze-offs were resolved. Direct benefits to customers include the
14 mitigation of potential future line freezing and possible loss of service. Service quality
15 overall may also be improved as MGTC staff will no longer be dispatched to attend
16 frozen laterals in remote locations and can allocate their time to other necessary service
17 calls. I recommend these two line heater installations be included in rate base at an
18 estimated cost of \$50,000 each.

19 **Q. PLEASE DESCRIBE THE PURCHASE OF A NEW MAINTENANCE VEHICLE.**

20 A. Mr. Wilson's testimony indicates that MGTC'S current maintenance vehicle has over
21 100,000 miles of use. MGTC company policy is to replace at approximately 90,000 miles
22 and as such a vehicle purchase is planned for summer 2011. Customers benefit from
23 MGTC staff having reliable transportation to travel to various locations throughout the
24 pipeline system to provide service and maintain the system. I recommend this asset
25 purchase estimated at \$36,000 be included in rate base.

26 **Q. WHAT EVIDENCE OF COST CONTROLS DID YOU DETERMINE MGTC
27 MAY EMPLOY IN THEIR CAPITAL PROJECTS?**

28 A. More than one instance of cost savings were observed during the OCA Site Visit to the
29 pipeline territory. MGTC reports the ability to have purchased pipe at a favorable price

1 point. At the Rawhide Station, MGTC has installed a recertified meter tube. MGTC
2 meter tube assemblies are reconditioned and recertified for compliance with American
3 Petroleum Institute (API) specifications. This can result in a cost savings of as much as
4 75%. Solar panels are used to power most all the flow meters and were observed at South
5 Rozet and the Wright Lateral. Designing the previously described “mobile smart pig
6 connection assembly” also is additional evidence of cost containment practices. Cost
7 savings associated with the above described capital projects will be addressed by Ms.
8 Parrish in her testimony.

9 **Q. PLEASE PROVIDE ANY UPDATED INFORMATION OBTAINED**
10 **REGARDING THE PROGRESS OR COMPLETION STATUS OF EACH OF**
11 **THE CAPITAL PROJECTS.**

12 A. Mr. Wilson’s direct testimony indicates that each of the projects except City Gate 7 will
13 be completed during summer 2011 and in another section of his testimony Mr. Wilson
14 states that MGTC anticipates spending \$3,010,411 on capital projects in the first ten
15 months of 2011. During 2010 approximately \$229,000 of capital projects were
16 completed. In addition, MGTC confirms that they have spent approximately \$36,000 for
17 a new maintenance vehicle bringing the combined total of 2010 and 2011 capital projects
18 and purchases to \$3,275,411. Mr. Wilson indicates that for City Gate 7 the completion
19 date of November 1, 2011 is required in the Gas Transportation Agreement between
20 MGTC and SourceGas.

21 I examined the construction purchase orders dated August 17, 2011 and related bid
22 documents for the two projects awarded by MGTC to United Construction of Denver,
23 Colorado. I was unable to identify specific liquidated damages or penalties of either party
24 for delay of the project and/or failure to meet the project completion dates. The project
25 construction schedules provided to MGTC by the contractor indicate October 5, 2011 as
26 completion date for South Rozet to Rocky Point project and a project completion date of
27 September 2, 2011 for Hannum Loop Line.

28 Updated construction progress information supplied by MGTC as of August 31, 2011
29 indicates that the fabricated assemblies (i.e. pig launchers/receivers, mainline valves and
30 farm taps) have been fabricated and tested. Black Eagle of Berthoud, Colorado is the

1 fabricator. The assemblies are scheduled for delivery to the South Rozet to Rocky Point
2 and the Hannum Loop Line job sites during the week of September 5, 2011. As of July
3 31, 2011 combined expenditures for the set of projects totaled \$667,297 or approximately
4 20% of the capital improvements identified in the rate case. OCA Exhibit BJK-5
5 displays the expenditure data by project as provided by the company. MGTC reports that
6 they do not anticipate any significant cost overruns for any of the projects.

7 As of August 31, 2011 MGTC reports various components of the South Rozet to Rocky
8 Point are in stages of completion. Clearing and grading of the ROW is 63% complete,
9 stringing of the pipeline is 46% complete, bending of pipeline is 22% complete, pipeline
10 gang is 12% complete and the welding firing line is 10% complete. 138 mainline welds
11 and x-rays have been completed. The pipeline gang is responsible for aligning joints of
12 pipe and creating an initial weld called a "stringer bead". The weld firing line follows
13 behind the pipeline gang and further completes the welding process.

14 The City Gate 7 project indicates a specific completion date of November 1, 2011 for the
15 project. This project is largely being completed in-house and start of construction is still
16 pending completion of ROW negotiations still in progress as of August 31, 2011.

17 The MIGC/MGTC Asset Separation project update as of August 31, 2011 indicates that
18 all metering and associated materials have been purchased. In September 2010 the first
19 asset separation facility was completed. Necessary related construction at the Rawhide
20 interconnect is complete and MGTC is currently installing metering and instrumentation.
21 Asset separation at Wright is in progress and completion will be coordinated with the line
22 heater installation by MGTC personnel. The last asset separation facility will be
23 completed prior to December 31, 2011.

24 As of August 31, 2011, a ROW from one landowner is still pending for the Hannum
25 Loop Line project and construction will commence upon securing the remaining ROW.
26 As such, the project schedule dated July 28, 2011 by United Construction which indicates
27 a project completion date of approximately September 2, 2011 is no longer realistic.

28 MGTC reports that as of August 31, 2011 they are in the process of installing and
29 programming the ERT units. Set-up and testing of the computer system and data

1 collection units is complete along with training of MGTC personnel who will use the new
2 technology. The Majority of the ERTs are expected to be installed by the end of
3 September 2011.

4 According to the construction update from MGTC, as of August 31, 2011, the fabrication
5 of the two line heaters by JW Energy of Casper Wyoming are essentially complete and
6 fuel meters are being added to the line heaters during the week of September 5, 2011.
7 Line heaters are to be delivered to Well Draw and Wright laterals in late September or
8 early October 2011 pending the availability of MGTC personnel to complete installation.

9 On September 8, 2011 MGTC confirmed in an email message to the OCA that they
10 recently purchased a new maintenance vehicle in the amount of \$36,000.

11 **Q. DOES MGTC HAVE A MASTER PLAN FOR PIPELINE IMPROVEMENTS**
12 **AND MAINTENANCE?**

13 A. OCA requested a copy of any such “pipeline master plan” in Set 1 of their data requests.
14 MGTC responded that a master plan does not exist. Instead, Ms. Jyl Baumann indicated
15 that a pipeline spreadsheet is maintained to track various maintenance tasks and develop
16 subsequent internal requests for spending authority to make improvements to the pipeline
17 system. MGTC states that each year they assess the condition of its facilities to determine
18 necessary capital improvements to ensure continued safe operation, accommodation of
19 capacity expansion and/or routine maintenance. It should also be noted that any such type
20 of company information or plans for long term improvement of pipeline assets were also
21 requested in writing by Mr. Dave Piroutek in October 2008 in relation specifically to
22 approximately 60 miles of above ground pipeline and the Facility Investigation
23 conducted June 24-30, 2008. I was able to determine that MGTC responded in writing on
24 November 24, 2008, with regard to five enumerated possible violations of 49 CFR § 192,
25 two of which mentioned plans in 2009 to replace specific segments of existing above
26 ground pipe. Those references appear to be the extent of company information that was
27 submitted in this regard. In other words, there was not a complete plan for replacement of
28 the entire 60 miles of pipeline under concern. Instead, MGTC stated in the November 24,
29 2008 correspondence, that they “continue to be committed to prioritizing the upgrade of
30 its above ground pipe in high activity and populated areas.”

1 OCA has strong concerns regarding the remaining MGTC pipeline that is above ground.
2 MGTC acknowledges past instances of pipeline damage from outside forces from events
3 such as grass fire-fighting activities, lawnmower hits, snowmobile traffic and bullets fired
4 by hunters. In this regard, I recommend that MGTC create and submit to the PSC by
5 March 30, 2012, an achievable and measureable three to five year master plan for
6 eliminating all remaining above ground pipeline that is integrated with an overall plan for
7 maintaining the integrity of all the system facilities. The initial plan should at a minimum
8 prioritize projects according to urgency, short term projects to be completed in
9 construction seasons 2012 and 2013 and longer term projects in construction seasons
10 2014 through 2016. The plan should be implemented, updated on an annual basis and
11 submitted to the PSC with the intended end result of eliminating all remaining above
12 ground pipe in five years or less. From a safety and reliability perspective it is difficult to
13 identify any plausible rationale for deferring this goal beyond five years. It seems
14 apparent that MGTC may be subjecting a variety of customer classes, society and
15 company employees to a safety risk through the existence of this above ground pipe in
16 their system. Finally, I contend that that such a plan would be extremely beneficial and
17 helpful in tracking the continuity of improvements from year to year under the
18 expectation of more frequent subsequent rate cases than has been experienced in the past
19 twenty years.

20 **Q. IN THE ABSENCE OF A MASTER PLAN FOR PIPELINE IMPROVEMENTS**
21 **DOES MGTC HAVE A LONG TERM OBJECTIVE FOR REPLACING ABOVE**
22 **GROUND PIPELINE?**

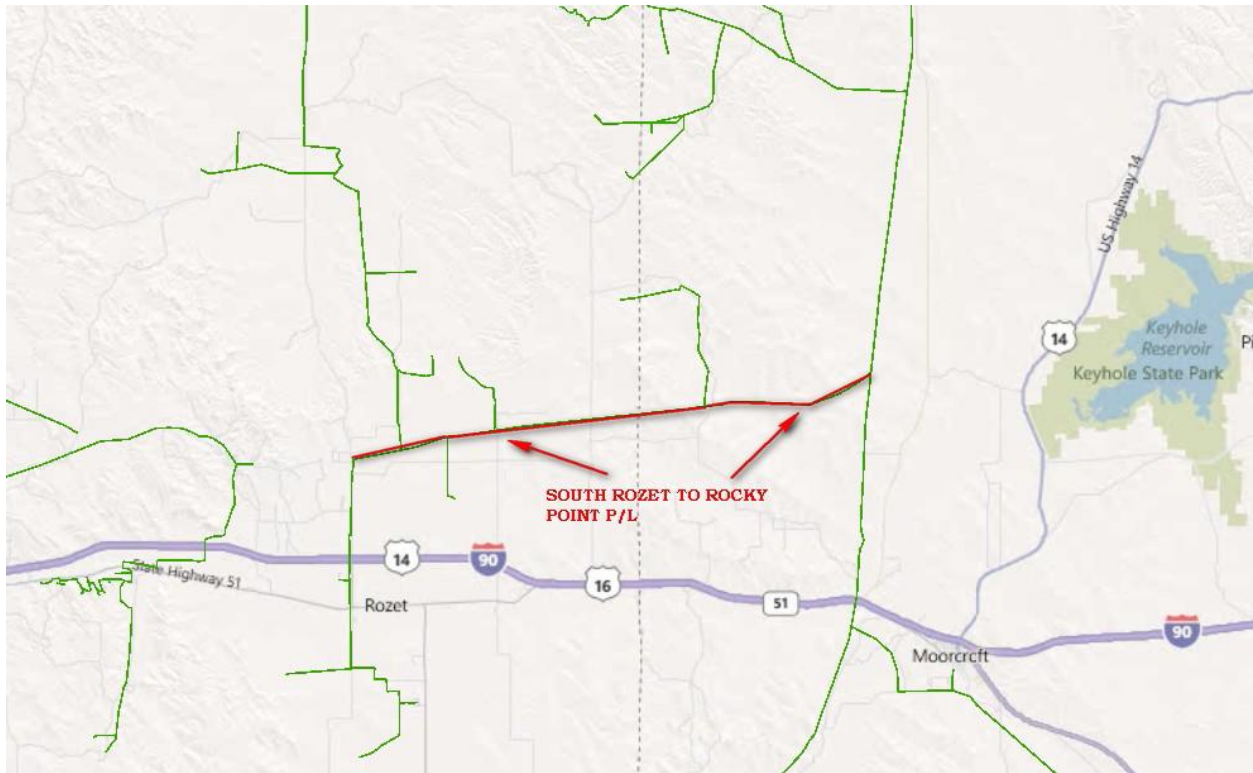
23 A. MGTC, in more than one venue, has asserted that it has a long term objective of replacing
24 all of its remaining above ground pipeline segments with below ground facilities. During
25 the OCA Site Visit, I asked about the nature of what may limit or cause MGTC to defer
26 replacing the approximately 60 miles that need to be buried. Wyoming weather,
27 availability of qualified contractors and/or MGTC personnel were identified as typical
28 construction constraints. In addition, MGTC cites that most approved capital projects are
29 first driven by capacity expansion or safety needs. MGTC believes about 5 miles of new
30 pipe installation has been typical for any one construction season. By that measure,
31 MGTC is currently completing three times a typical level of pipe installation during

1 2011. For capital projects, MGTC utilizes a procedure referred to as the Authorization for
2 Expenditure or “AFE”. This is a request for authority to spend money to complete
3 various capital improvement projects. MGTC projects are tracked by their AFE number
4 as evidenced in the company annual reports. OCA recommends that MGTC maintain this
5 2011 more aggressive level of construction which would enable the replacement of all
6 remaining above ground pipeline segments in five years or less. Again, in the interest of
7 safety for all stakeholders, I recommend that MGTC immediately heighten their
8 accountability to their previously stated long term objective of replacing above ground
9 pipeline by adopting and implementing the provisions of a well crafted five year master
10 plan. Furthermore a master pipeline plan may enable MGTC to mitigate the identified
11 construction challenge of securing acceptable bids from available qualified contractors
12 for any specified construction season.

13 **Q. DOES THAT CONCLUDE YOUR TESTIMONY IN THIS PROCEEDING?**

14 **A.** Yes, it does. Thank you.

South Rozet to Rocky Point: location of new 11.1 miles of buried 6 inch pipeline, estimated cost of \$2 million dollars.



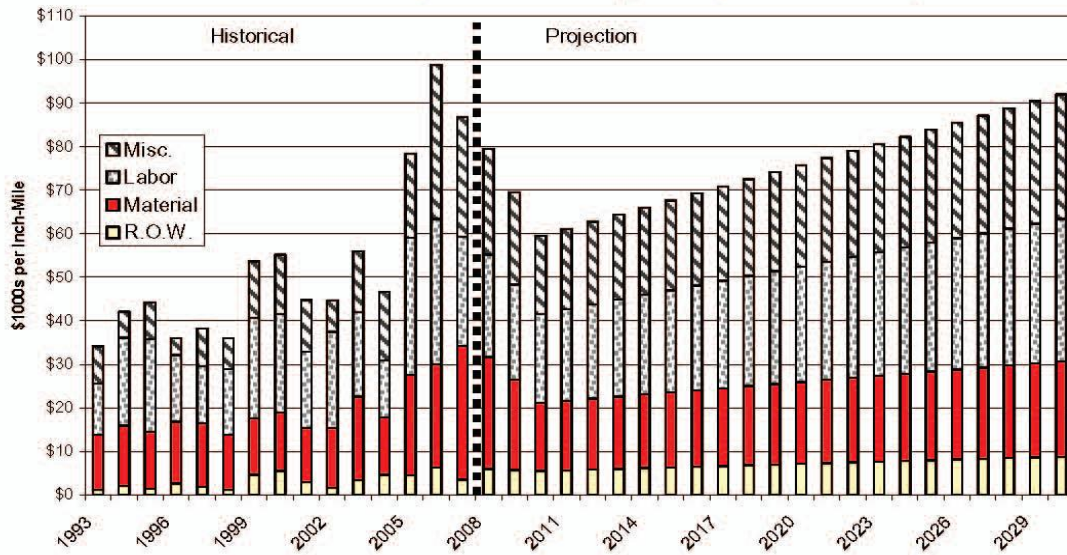
South Rozet to Rocky Point segments of current above ground 4 inch pipeline observed and photographed during OCA site visit.



Source: http://www.pipelineandgasjournal.com/sites/pipelineandgasjournal.com/files/INGAA_p48_fig24_0.png
 [8/23/2011 4:17:16 PM].

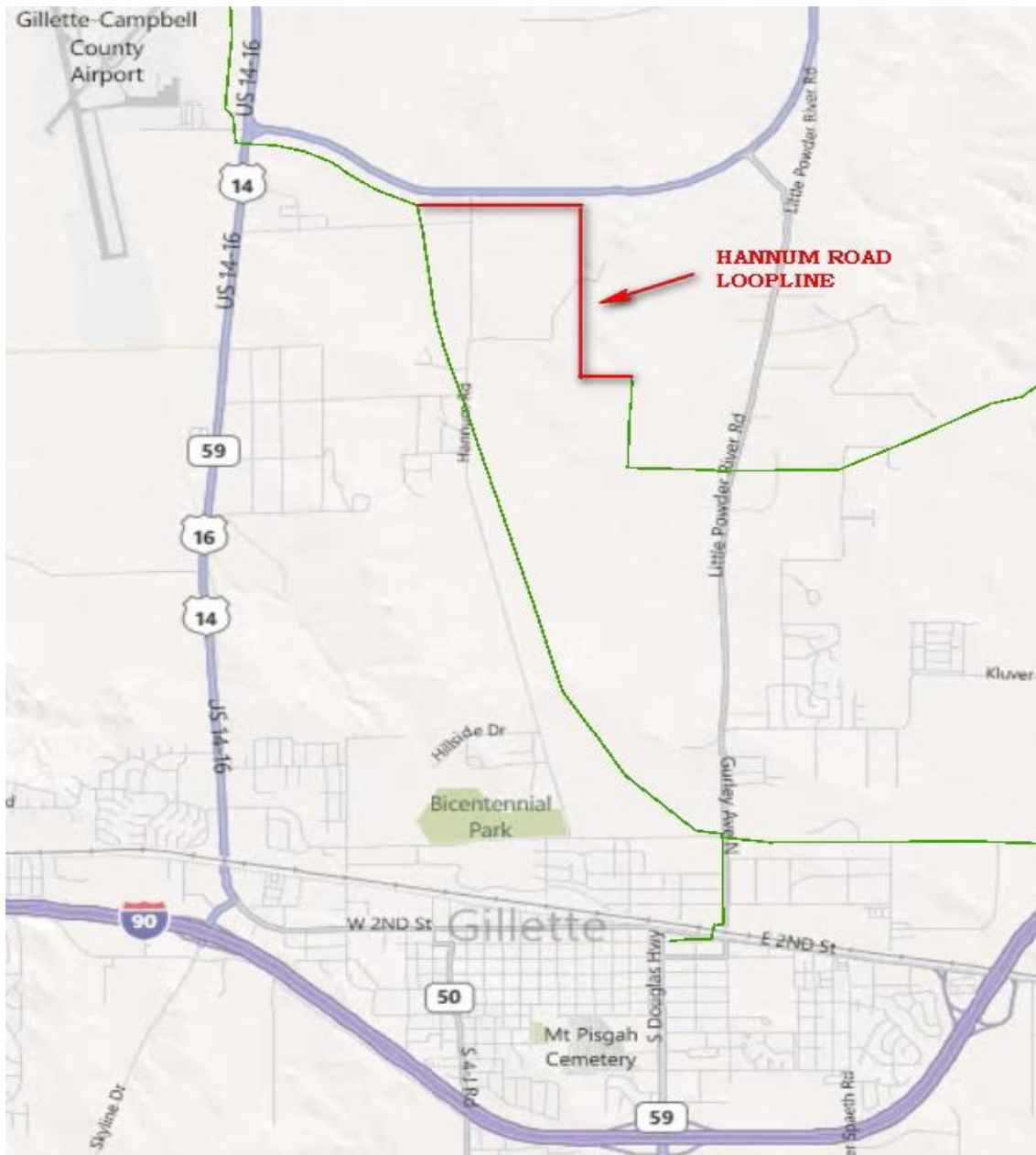
Tubb, R. (2009), Billions Needed to Meet Long-Term Natural Gas Infrastructure Supply, Demands, *Pipeline and Gas Journal*.

Figure 24
Natural Gas Pipeline Costs (\$1000 per inch-mile)



Average of large-diameter gas pipelines 30 to 36 inches. FERC data compiled by Oil & Gas Journal 2010 to 2030 projections by cost component is based on trends from 1993 to 2004. Miscellaneous includes includes surveys, engineering, supervision, interest, administration, overheads, contingencies, allowances for funds used during construction (AFUDC) and FERC fees.

Hannum Loop Line: location of new 1-2 miles of buried 6 inch pipeline, estimated cost of \$200,000.



MGTC's expenditures for the rate case capital projects as of July 31, 2011. Data provided by the company.

Project Description	FY10 Total Year	FY11 Jan - July 31	Amount Spent Inception-to- July 31, 2011	Estimated Project Cost	Percent Expended
S.Rozet to Rocky Point, replace 11 miles of above ground pipeline	71,505	303,495	375,000	2,000,000	19%
City Gate #7 Installation	0	0	0	608,411	0%
MIGC/MGTC Asset Separation	157,422	12,375	169,797	236,000	72%
Hannum Loop Line Installation	0	50,000	50,000	200,000	25%
Installation of ERT System and PD meters	0	28,000	28,000	95,000	29%
Line Heaters for Well Draw & Wright Laterals	0	8,500	8,500	100,000	9%
New Maintenance Vehicle	0	36,000	36,000	36,000	100%
Total MGTC Ongoing Projects	\$ 228,927	\$ 438,370	\$ 667,297	\$ 3,275,411	20%

BEFORE THE PUBLIC SERVICE COMMISSION OF WYOMING

IN THE MATTER OF THE AMENDED) DOCKET NO. 30003-52-GR-11
APPLICATION OF MGTC, INC. FOR A) (RECORD NO. 12840)
GENERAL RATE INCREASE IN THE AMOUNT)
OF \$486,936 PER YEAR AND FOR APPROVAL)
OF TARIFF REVISIONS)

AFFIDAVIT, OATH AND VERIFICATION

Belinda J. Kolb, Ph.D. (Affiant) being of lawful age and being first duly sworn, hereby deposes and says that:

Affiant is a Rate Analyst with the Wyoming Office of Consumer Advocate which is a party intervener in this matter pursuant to its Notice of Intervention filed on June 8, 2011.

Affiant prepared and caused to be filed the foregoing testimony. Affiant has, by all necessary action, been duly authorized to file this testimony and make this Oath and Verification.

Affiant hereby verifies that, based on Affiant’s knowledge, all statements and information contained within the testimony and all of its attached schedules are true and complete and constitute the recommendations of the Affiant in her official capacity as Rate Analyst with the Wyoming Office of Consumer Advocate.

Further Affiant Sayth Not.

Dated this 9th day of September, 2011.

Belinda J. Kolb, Ph.D., Rate Analyst
Wyoming Office of Consumer Advocate
2515 Warren Avenue, Suite 304
Cheyenne, WY 82002
(307) 777-5705

STATE OF WYOMING)
COUNTY OF LARAMIE)

The foregoing was acknowledged before me by Belinda J. Kolb, Ph.D. on this 9th day of September, 2011. Witness my hand and official seal.

Notary Public

My Commission Expires: