

## **GATHERING, TRANSPORTATION AND STORAGE**

### **Gathering and Processing Issues**

A substantial portion of the supplies utilized by the customers of Questar Gas each year is received pursuant to the Wexpro Agreement, as discussed in the previous section, "Cost-of Service Gas." In many situations, gathering and/or processing services are required for these supplies to enter into the interstate pipeline system where they can be delivered to Questar Gas' city gates. Questar Gas is party to a number of gathering and processing agreements which facilitate these services. None of these agreements were negotiated or amended during the previous year. Many of these agreements have contractual escalation clauses requiring routine annual adjustments to gathering and processing rates which take place periodically throughout the year.

The preponderance of supplies received pursuant to the Wexpro agreement are gathered under the System-Wide Gathering Agreement between Questar Gas and QEP Field Services (QEPFS). QEPFS was formerly Questar Gas Management Company, an affiliate of Questar Gas. Effective June 30, 2010, Questar Corporation spun off QEP Resources. QEPFS is currently a subsidiary of QEP Resources and is no longer affiliated with Questar Gas.

The System-Wide Gathering Agreement, effective September 1, 1993, incorporates a cost-of-service methodology to determine the reservation and usage rates for gathering services. Each year, new rates are calculated based on the previous calendar year costs-of-service allocable to Questar Gas and the previous calendar year gas throughput. Costs are allocated based on throughput during the five winter heating season months of November through March. New rates are effective each year from September 1 through August 31. As specified in the agreement, sixty percent of the annual cost of service is allocated to the reservation charge and forty percent is allocated to the usage charge.

New rates under the System-Wide Gathering Agreement were determined during the summer of 2010 to be effective on September 1.<sup>1</sup> The new monthly reservation charge increased from \$955,513 to \$1,060,315, approximately 11 percent. The associated commodity charge went up over 14 percent from \$0.1816 Dth to \$0.20764 per Dth. Part of the increase in the commodity charge is due to a decline in the billing determinant of approximately 3 percent.

Cost data for the gathering and processing functions is included each year by Questar Gas in the SENDOUT modeling process. The SENDOUT model uses a logical gas supply network to define the relationships between modeling variables. Those logical relationships for the gathering, processing and transportation functions as utilized by the model this year are illustrated in Exhibit 7.1.

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<sup>1</sup> Billing data for the System-Wide Gathering Agreement is provided on a monthly basis to the Utah Division of Public Utilities in the 191 Account Packet. Copies of the System-Wide Gathering Agreement have been provided as requested to regulatory agencies along with cost-of-service detail.

## Transportation Issues

### *Questar Pipeline Gas Quality*

On August 6, 2007, the Federal Energy Regulatory Commission (FERC) issued an order accepting tariff sheets proposed by Questar Pipeline to modify its gas quality provisions.<sup>2</sup> These gas quality provisions established cricondentherm-hydrocarbon-dew-point<sup>3</sup> (CHDP) zones with CHDP limits for each zone effective January 1, 2008.<sup>4</sup> These zones and their limits are shown in Exhibit 7.2. Questar Gas believes that the implementation of these CHDP zones and limits has worked well over the last three years as no major gas quality issues have arisen. These CHDP provisions appear to be one effective means to equitably address gas quality matters.

The most prevalent measure of fuel gas interchangeability in the U.S. is the Wobbe Index.<sup>5</sup> Natural gas appliances are rated to operate safely and efficiently within a specific Wobbe Index range. Questar Gas used a consulting firm to establish the Wobbe operating ranges for its service areas. For example, Exhibit 7.3 shows the upper and lower Wobbe operating limits for the Utah Wasatch Front (North) region for various levels of heating value and specific gravity. This exhibit also shows the daily averages for 2010 of various sources of natural gas on Questar Pipeline's system flowing to customers in this region. Likewise, Exhibit 7.4 shows the same information for the Wyoming region. These Wobbe values have generally been declining during the last few years. The recent construction of natural-gas-liquids processing plants near natural gas fields flowing supplies to Questar Pipeline has contributed to that decline. There are a number of other tools that distribution companies can use to manage gas interchangeability including the injection of inert gases (or air) in the gas stream, injection of propane, and the blending of supplies from various sources. Although there are limits as to how much blending can take place on Questar Pipeline's system, it is a reticulated system, characterized by a diversity of receipt and delivery points and a number of looped-line segments, which more readily lends itself to gas-quality-blending solutions than a straight line A-B pipeline.

On March 9, 2011, Questar Pipeline personnel presented, in a public Utah IRP meeting, a "Gas Quality Update for Questar Gas and Pipeline," where more comprehensive information was presented on this topic.

It is difficult to predict the interchangeability of future gas streams received by Questar Gas. The Company may need to arrange for additional processing or blending in

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<sup>2</sup> Questar Pipeline Company, Docket No. RP07-457-000, FERC Gas Tariff Filing, May 18, 2007.

<sup>3</sup> The cricondentherm hydrocarbon dew point is the maximum temperature at which hydrocarbon components in the gas stream start to condense.

<sup>4</sup> Federal Energy Regulatory Commission, Questar Pipeline Company, Docket No. RP07-457-000, "Order Accepting Tariff Sheets," Issued August 6, 2007.

<sup>5</sup> The Wobbe Index number consists of the higher heating value of a fuel gas divided by the square root of the specific gravity (relative to air) of the fuel gas. Fuel gases with the same index number generate the same heat output over time from a burner given constant pressure and orifice size.

the event it is required to ensure that the gas received from the transmission systems of either Questar Pipeline or KRGТ are compatible with the needs of Questar Gas' customers. Questar Gas will evaluate this on an ongoing basis as it bears the burden of processing pipeline-quality gas to meet its specific requirements.

#### *Questar Pipeline Main Line 104 Extension Project*

On October 6, 1999, Questar Gas signed a firm transportation service agreement with Questar Pipeline for 50,000 Dth/day of year-round capacity extending from the outlet of the Price CO<sub>2</sub> plant to the Wasatch Front on Questar Pipeline's ML 104. The primary term of service for this contract was ten years from the in-service date of these facilities (November of 2001).

Given the upcoming expiration of the primary term of this contract, and, given Questar Pipeline's proposed Main Line (ML) 104 Extension Project, Questar Gas entered into discussions with Questar Pipeline concerning its southern system capacity. The proposed ML 104 Extension Project consists of an extension of the existing ML 104 eastward by constructing 23.5 miles of 24-inch diameter pipeline. This line will parallel Questar Pipeline's ML 40 from the Green River block valve to the Fidlar Compressor Station allowing for greater access to natural gas supplies in the Uinta Basin.

On October 27, 2009, Questar Gas amended its ML 104 contract, subject to completion of the ML 104 Extension Project, by extending the primary term of the agreement to November 1, 2021. The amendment also moved the primary receipt point farther east on the Southern System to Clay Basin and reduced the maximum daily quantity to 30,000 Dth per day. The reservation and usage charges for this capacity to Questar Gas' city gates remains the maximum system-wide tariff rates for Questar Pipeline. The current reservation charge is \$5.28804 per Dth per month and the current usage charge is \$0.00457 per Dth (including ACA).<sup>6</sup>

On November 10, 2010, Questar Pipeline filed a FERC application requesting a certificate of public convenience and necessity authorizing the ML 104 Extension. A final order was received on May 2, 2011, facilitating the commencement of construction in June of 2011. The in-service date of the ML 104 Extension Project is scheduled for November 1, 2011.

#### *Kern River Gas Transmission Company Rate Case*

New developments have taken place this past year in the ongoing KRGТ rate case. By way of brief background, Questar Gas is a shipper on KRGТ's system holding 50,000 Dth/d of seasonal capacity and 3,000 Dth/d of year-round capacity made available from KRGТ's 2003 Expansion Project. Questar Gas also holds 1,885 Dth per day of year-round ten-year capacity from KRGТ's 2010 Expansion Project. By FERC order, the

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<sup>6</sup> ACA refers to the Annual Charge Adjustment assessed and collected by the Federal Energy Regulatory Commission.

rates paid for the 2010 Expansion Project are the maximum recourse rates for the 2003 Expansion Project.

KRGТ's rate case was filed with the FERC on April 30, 2004. The Presiding Administrative Law Judge issued an initial decision on March 2, 2006, addressing many cost-of-service and rate-design issues.<sup>7</sup>

On October 19, 2006, the FERC issued Opinion No. 486.<sup>8</sup> Requests for rehearing of Opinion No. 486 were addressed in Opinion No. 486-A, issued on April 18, 2008, resolving most issues, with the notable exception of return on equity (ROE).<sup>9</sup>

On January 15, 2009, the FERC issued Opinion No. 486-B.<sup>10</sup> This Opinion articulated, for the first time, the new FERC policy of including master limited partnerships in the rate-of-return proxy group, making this a landmark opinion. Opinion 486-B also established an ROE of 11.55 percent and ordered KRGТ to file a compliance filing incorporating ROE in its rates within 45 days. Several parties filed for rehearing of Opinion No. 486-B. On December 17, 2009, the FERC issued Opinion No. 486-C denying requests for rehearing of Opinion No. 486-B and accepting subsequently filed tariff sheets, subject to certain conditions, for KRGТ's Period One Rates.<sup>11</sup> Period One for each shipper consists of the term of that shipper's initial contract (which for Questar Gas is 15 years from May 1, 2003). Tariff sheets for Period Two rates were rejected by the FERC and Opinion No. 486-C directed the appointment of a settlement judge to facilitate a settlement process on certain Period Two issues. Furthermore, it was ordered that in the event settlement could not be achieved, a trial-type evidentiary hearing would be held to resolve the remaining issues.

Questar Gas and a number of other shippers participated in the settlement process. On April 8, 2010, the Settlement Judge issued a status report to the FERC recommending that settlement proceedings be terminated due to an impasse over a fundamental issue even though the parties had worked diligently to resolve their differences.<sup>12</sup> In the interim, two parties including KRGТ filed for rehearing of FERC Opinion No. 486-C.

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<sup>7</sup> Federal Energy Regulatory Commission, Kern River Gas Transportation Company, Docket No. RP04-274-000, Initial Decision, March 2, 2006.

<sup>8</sup> Federal Energy Regulatory Commission, Kern River Gas Transportation Company, Docket No. RP04-274-000, Opinion No. 486, Opinion and Order on Initial Decision, October 19, 2006.

<sup>9</sup> Federal Energy Regulatory Commission, Kern River Gas Transportation Company, Docket No. RP04-274, Opinion No. 486-A, Order on Rehearing Establishing Paper Hearing Procedures, April 18, 2008.

<sup>10</sup> Federal Energy Regulatory Commission, Kern River Gas Transportation Company, Docket No. RP04-274-000, Opinion No. 486-B, Order on Rehearing, Proposed Settlement and Paper Hearing, January 15, 2009.

<sup>11</sup> Federal Energy Regulatory Commission, Kern River Gas Transportation Company, Docket No. RP04-274-000, Opinion No. 486-C, Order on Rehearing and Compliance and Establishing Settlement Judge Procedures and a Hearing, December 17, 2009.

<sup>12</sup> Federal Energy Regulatory Commission, Status Report to the Commission and the Chief Administrative Law Judge Recommending Termination of Settlement Proceedings, Docket Nos. RP04-274-015, RP04-274-016, RP04-274-017, RP04-274-018, RP04-274-019, RP04-274-008, Issued: April 8, 2010.

On November 18, 2010, the FERC issued Opinion No. 486-D.<sup>13</sup> This order denied all requests for rehearing with respect to Opinion No. 486-C's rulings on KRGT's Period One rates. Opinion No. 486-D also clarified that the hearing for Period Two rates was being done under NGA Section 5 and would be conducted well before the end of the earliest expiring Period One rates (which for Original System 10-Year Shippers is September 30, 2011). Remaining Period Two issues to be resolved include: eligibility requirements for obtaining Period Two rates, how the Period Two levelized rates should be calculated, the minimum required length of Period Two contracts, and the length of the Period Two levelization period.

On January 14, 2011, KRGT filed a petition with the United States Court of Appeals for the District of Columbia Circuit to review FERC Opinions Nos. 486, 486-A, 486-C and 486-D. On February 7, 2011, Questar Gas filed a motion in that proceeding for leave to intervene as did a number of other shippers. On February 24, 2011, the case was dismissed by the Court.<sup>14</sup>

On April 14, 2011, a FERC Presiding Administrative Law Judge issued an Initial Decision articulating his findings on the remaining Period Two issues.<sup>15</sup> Among his findings are: 1) the illustrative rates filed by KRGT have been appropriately adjusted to return the excess recovery of depreciation from Period One, 2) the return on equity for Period Two rates should remain at 11.55 percent, 3) a 100 percent load factor should be used for cost allocation and rate design, 4) 10-year and 15-year terms are appropriate for levelization and contract purposes, 5) eligibility for Period Two rates is contingent on paying the maximum rate for the full Period One Term (including seasonal service), intent to contract must be given not less than 12 months before the end of a shippers Period One term, and a KRF-1 service agreement for a term of 10 or 15 years must be executed, 6) shippers eligible for Period Two rates cannot contract for a quantity greater than their respective Period One maximum daily quantity, 7) Period Two capacity opted out of shall not be available for other Period Two Shippers at the step-down rates, and 8) KRGT shall not, in this rate case, include in its regulatory assets, new compressor engine and general plant costs incurred after the 2004 test period.

Questar Gas has been actively involved in KRGT's rate case proceedings from the beginning. It is anticipated that a final order resolving the remaining issues in this enduring case will be issued sometime before September 30, 2011.

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<sup>13</sup> Federal Energy Regulatory Commission, Kern River Gas Transportation Company, Docket Nos. RP04-274-020, RP04-274-017, RP04-274-018, RP04-274-019, RP04-274-016, RP04-274-009, RP04-274-021, RP04-274-022, Opinion No. 486-D, Order on Rehearing and Compliance, Issued November 18, 2010.

<sup>14</sup> United States Court of Appeals for the District of Columbia Circuit, Kern River Gas Transmission Company, v. Federal Energy Regulatory Commission, "Order," Case No. 11-1010, Filed On: February 24, 2011.

<sup>15</sup> Federal Energy Regulatory Commission, Kern River Gas Transmission Company, Initial Decision, Issued: April 14, 2011, Docket No. RP04-274-023.

## *Ruby Pipeline Project*

On January 27, 2009, Ruby Pipeline, L.L.C. (Ruby) filed with the FERC, an application, under Section 7(c) of the Natural Gas Act, to obtain a certificate of convenience and public necessity facilitating the construction and operation of an interstate pipeline system.<sup>16</sup> The Ruby system extends from Opal, Wyoming to Malin, Oregon. The decline in natural gas imports from Canada and anticipated long-term growth in the Pacific Northwest and California have provided impetus for the project. The project is comprised of approximately 680 miles of 42-inch diameter natural gas pipeline, four compressor stations and measurement facilities. The design capacity of the project is approximately 1.5 billion cubic feet per day. The most recently estimated capital cost is \$3.55 billion.

The route of the Ruby pipeline passes through northern Utah where Questar Gas has natural gas distribution facilities (see Exhibit 7.5). The pipeline crosses the southern end of Cache Valley (south of Logan, Utah) as it extends west in a route past Brigham City, Utah in Box Elder County. Because of the proximity to the facilities of Questar Gas, the Company considered an interconnection with Ruby just north of Brigham City, Utah near Mile Post 109 on the Ruby system (see Exhibits 7.6 and 7.7). Although analysis showed that a new Ruby gate station was not needed immediately, putting in a tap valve during the pipeline construction process would secure future benefits at a much lower cost. Those future benefits include reliability of service and supply diversity. A future gate station at this location is one option supporting the Company's plans to construct a north/south trunk line in the area.

Since the filing of Ruby's certificate application, a number of milestones have been reached. On January 8, 2010, the Final Environmental Impact Statement was issued by the FERC and cooperating agencies. On April 5, 2010, the FERC issued a certificate, subject to certain conditions, authorizing the Ruby Pipeline to be constructed, operated and maintained.<sup>17</sup> Construction commenced on July 31, 2010.

On April 1, 2011, Ruby filed a petition with the FERC seeking amended authorization to allow it to revise its initial transportation rates as a consequence of an increase in the estimated cost of facilities. Due to an increase of approximately \$590 million in project costs, the monthly reservation rate filed for firm long-term transportation service was \$34.5826 per Dth and the commodity rate was \$0.0100 per Dth. The previously filed monthly reservation rate and commodity rate were \$30.9980 per Dth and \$0.0105 per Dth respectively.<sup>18</sup>

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<sup>16</sup> Federal Energy Regulatory Commission, "Application of Ruby Pipeline, L.L.C. for a Certificate of Public Convenience and Necessity," Docket No. CP09-54-000, January 27, 2009.

<sup>17</sup> Federal Energy Regulatory Commission, Ruby Pipeline, L.L.C., Docket No. CP09-54-000, "Order Issuing Certificate and Granting in Part and Denying in Part Requests for Rehearing and Clarification," Issued: April 5, 2010.

<sup>18</sup> Federal Energy Regulatory Commission, "Second Petition of Ruby Pipeline, L.L.C. in Docket No. CP09-54 to Amend Order, Filed: April 1, 2011.

As of May 1, 2011, 89 percent of the pipeline had been strung, and 85 percent had been lowered in and backfilled. The project is behind schedule as the anticipated in-service date has slipped from March 2011 to July of 2011. The construction delays are attributed to permitting delays and a particularly muddy winter. In addition, regulations pertaining to the sage grouse mating season prevent construction from taking place within active lek buffers from March 1, to May 15, of 2011.

#### *No Notice Transportation Service*

Questar Gas contracts with Questar Pipeline to receive no notice transportation (NNT) service. NNT service allows Questar Gas to receive gas volumes needed, even if those volumes are more or less than the volumes Questar Gas originally nominated according to Questar Pipeline's nomination requirements. NNT service provides flexibility that allows Questar Gas to receive volumes of gas to meet demand caused, for example, by unexpected changes in temperatures.<sup>19</sup> Temperatures within Questar Gas' service area can be the coldest in the nation. Temperature swings along the Wasatch Front can be large, sudden and difficult to predict. The daily, and even hourly gas demand resulting from changes in temperatures can be substantial. NNT service provides Questar Gas the ability to provide service within this ever-changing environment. NNT service allows Questar Gas to reserve transportation and storage capacity on Questar Pipeline the day prior to actual gas flow. Questar Gas uses this NNT reserved capacity to facilitate withdrawals and injections of gas utilizing Clay Basin and the aquifers in order to meet Questar Gas customers' changing load (see subsequent Storage Issues section). NNT service also allows Questar Gas the ability to use that capacity within the nominations cycles on Questar Pipeline.

As long as Questar Gas makes the gas supplies available, Questar Gas can make deliveries that exceed nominations in order to meet the actual demand requirements, and to avoid the nomination restrictions that would otherwise limit Questar Gas' ability to match its nominations to its needs with NNT service. NNT service also allows Questar Gas to take more or less gas than it nominates, if circumstances warrant, without incurring overrun penalties, imbalances or associated shortages.

### **Storage Issues**

Questar Gas contracts with Questar Pipeline for storage services at four underground gas storage fields to respond to seasonal winter and peak demands. The fields are Leroy, Coalville, Chalk Creek, and Clay Basin. Leroy, Coalville, and Chalk Creek are aquifer storage facilities fully subscribed by Questar Gas that are utilized primarily for short term peaking. Clay Basin, utilized by both Questar Gas and other open access storage customers, is a depleted dry gas reservoir used for both seasonal base load and peaking purposes. Questar Gas' key capacity parameters for these facilities are outlined in the following table:

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<sup>19</sup> For a more detailed discussion of the need for no notice transportation service, see Questar Gas Company Integrated Resource Plan for Plan Year: May 1, 2008 to April 30, 2009, submitted May 1, 2008, pages 7-2 to 7-4 and Exhibits 7.2, 7.3 and 7.4.

Facility	Maximum Inventory (MDth)	Maximum Injection Rate (MDth/D)	Maximum Withdrawal Rate (MDth/D)	Minimum Withdrawal Rate, MRD (MDth/D)	Sustained 3-Day Peak Withdrawal (MDth/D)
Clay Basin	13,419	75+	203	112	n/a
Leroy	886	7 to 33	84	n/a	79
Coalville	720	7 to 21	63	n/a	53
Chalk Creek	321	6 to 11	37	n/a	26

### *Leroy and Coalville Storage*

As was first outlined in the May 1, 2000 IRP, the operation of the Leroy and Coalville storage facilities has been modified from procedures followed historically to provide more flexibility and enhance storage efficiency. Since 2000, following the end of the withdrawal season, the inventories in these facilities have maintained a working gas capacity of approximately 50–75% of maximum through the summer months. Previous practice was to completely draw down the facilities each year at the end of the withdrawal season. The advantages of this revised mode of operation are as follows:

- Wells are not “watered out” at the end of the withdrawal cycle, improving well efficiency when refill injections are initiated in the fall.
- Injection compression fuel gas requirements are reduced (only 50% of the working capacity needs to be injected in the fall to fill the reservoir).
- A shorter, more predictable, and easily managed withdrawal/depletion schedule results at the end of the heating season.
- A shorter injection season for reservoir refill is required in the fall.
- The flexibility exists to inject significant volumes if required while the reservoirs are at 50% inventory.

In general, current operating practices at both the Coalville and Leroy facilities are as follows:

- Refill injections into the reservoirs commence in early September from an initial inventory of approximately 50% of maximum working inventory. Injections continue until an inventory of approximately 70% of maximum is reached by early October. Injections follow a specific well configuration and volume profile to minimize the potential for “fingering” and resulting gas loss.
- In early October, scheduled aquifer injections are halted to allow for the testing program conducted at the Clay Basin storage facility. The testing requires one day of injection at a controlled rate followed by a 7-day no flow period for pressure stabilization. Depending upon system demand and the gas supply situation during the no flow period, the 70% inventory at Leroy and Coalville affords the flexibility to either inject or withdraw to meet system balancing requirements.

- Following the Clay Basin test, controlled refill injections again commence in Coalville and Leroy with maximum inventory being reached by early November.
- Both Coalville and Leroy are utilized to meet peak load requirements through the heating season. During periods of lower winter demand, the reservoirs are refilled to maximum inventory when possible.
- During March, when the need for peaking withdrawals has passed, the reservoirs are partially drawn down (for use) to inventories ranging from 50–75% in preparation for Clay Basin testing conducted during April. The April Clay Basin test consists of a one week withdrawal period followed by 2 days of controlled withdrawal. Following the withdrawal period, Clay Basin is shut in for 14 days for pressure stabilization. Maintaining Coalville and Leroy at the indicated inventory range during this period provides the flexibility to either inject or withdraw based upon system balancing needs.
- At the end of the spring Clay Basin test, Leroy and Coalville are then drawn down to inventory levels of approximately 50–75% and then maintained at that level until refill commences in the fall (unless it is necessary to periodically conduct a complete inventory analysis).

This mode of operation has enhanced the value of the peaking storage service to Questar Gas while not significantly impacting gas losses.

#### *Chalk Creek Storage*

Due to the nature of the Chalk Creek storage formation, cycling and partial inventory maintenance during the summer is not practiced at this facility in order to minimize gas losses. Operation at Chalk Creek is as follows:

- Injections from zero working gas inventory commence in early November following a controlled well and injection profile.
- Maximum inventory is reached by mid-December.
- From December through early March, Chalk Creek is typically held in reserve unless very high demand periods are experienced.
- In early March, the reservoir is blown down in a controlled manner to zero working gas inventory and is then shut in until refill injections commence in the fall.

Emphasis is placed upon following the above operating procedures to minimize gas losses and ensure efficient storage facility operation.

#### *Clay Basin Storage*

The costs, contractual terms and operating parameters for each of the four storage facilities subscribed to by Questar Gas are modeled in SENDOUT. A forecast of the

Clay Basin storage inventory (available at the beginning of the first gas-supply year) is also included in the SENDOUT modeling process each year. This year, it is expected that the June 1, 2011 inventory will be approximately 1.5 Bcf.

The tariff provisions governing Clay Basin assure that customers will receive a minimum withdrawal amount (Minimum Required Deliverability or MRD). To the extent that shippers have inventory in excess of that necessary for their last day of withdrawals, additional deliverability is available for allocation according to predetermined formulas (see the previous table).

### *Clay Basin Gas Quality*

During 2007, when Questar Pipeline was resolving CHDP issues on its transmission system, it also remedied CHDP issues at its Clay Basin storage facility. On August 23, 2007, Questar Pipeline filed, with the FERC, revisions to its tariff, Questar Pipeline also filed the “Stipulation and Agreement” negotiated with all of the Clay Basin storage customers. Included with the filing was the “Joint Petition of Questar Pipeline and Firm Customers for Approval of Stipulation and Agreement and Request for Expeditious Action.”<sup>20</sup> The FERC accepted the revised tariff sheets on November 7, 2007, to be effective on January 1, 2008 and also approved the Stipulation and Petition.<sup>21</sup> As a result of these FERC actions, the Kastler Processing Plant was refunctionalized as a Clay Basin storage asset (previously it was a transmission asset) and additional processing facilities were installed, thus ensuring a total delivery capability of 320,000 Dth per day to either Northwest Pipeline or Questar Pipeline. This project was completed in December of 2008 at a cost of approximately \$12 million. The costs associated with conditioning storage gas, including the installation and operation of these new facilities are expected to be recovered from the sale of natural gas liquids over a 20 year time period. The refunctionalization of the Kastler Plant and the installation of new processing facilities have effectively resolved the liquids issues at Clay Basin.

### *Magnum Gas Storage*

The Magnum Gas Storage Project (Magnum) involves the construction and operation of a high deliverability, multi-cycle salt cavern storage facility, and a connecting header pipeline. The proposed project would consist of an underground storage facility consisting of four caverns with a combined working gas storage capacity of 42 Bcf. The storage caverns would be approximately one mile north of the town of Delta, Utah. Magnum anticipates that the project would be capable of injecting up to 0.3 Bcf per day and withdrawing up to 0.5 Bcf per day. The Magnum facilities would be able to cycle inventory from nine to twelve times each year. The storage facility would

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<sup>20</sup> Questar Pipeline Company, Docket No. RP07-606-000, FERC Gas Tariff Filing, August 22, 2007; and Questar Pipeline Company, Docket No. RP07-606-001, Amended FERC Gas Tariff Filing, August 30, 2007.

<sup>21</sup> Federal Energy Regulatory Commission, Questar Pipeline Company, Docket Nos. RP07-606-000 and RP07-606-001, Letter Order Accepting Tariff Sheets dated November 7, 2007, “Reference: Stipulation, Petition, and Revised Tariff Sheets.”

be interconnected with the interstate transmission systems of KRGT and Questar Pipeline near the town of Goshen, Utah with a 61.6-mile, 36-inch diameter header pipeline. The header pipeline and the first cavern are expected to be in service by July of 2014. The second cavern is expected to be completed one month later. The planned completion dates for the third and fourth caverns are June 2021 and December 2027. A map of Magnum's proposed facilities is shown in Exhibit 7.8.

On June 10, 2009, Magnum announced the start of a non-binding open season for its Magnum Gas Storage Project with expressions of interest in storage-related services associated with the project to be made by July 31, 2009. Questar Gas responded to the open season and subsequently has engaged in discussions with Magnum representatives.

Magnum filed its application with the FERC, on November 17, 2009, requesting, pursuant to Section 7(c) of the Natural Gas Act, a certificate of public convenience and necessity.<sup>22</sup> On March 17, 2011, the FERC issued an order conditionally granting the requested certificate and the request for market-based authority. The Commission denied Magnum's request for a limited-jurisdiction certificate and blanket construction certificate for the water supply and brine management facilities.<sup>23</sup>

On March 23, 2011, Magnum responded to the March 17, 2011, order by accepting the certificate of public convenience and necessity. Magnum also indicated to the FERC that Magnum would construct and operate all of the project's jurisdictional facilities including the water supply and brine management facilities.<sup>24</sup>

Magnum has indicated that its non-binding open season resulted in twenty-six conforming responses and two non-conforming responses for a total storage capacity exceeding 42 Bcf. Magnum engaged in the negotiation of precedent agreements with a number of the parties submitting open season responses.<sup>25</sup> On May 26, 2011, Magnum received approval from the FERC to commence drilling the monitoring wells associated with the project.

#### *Ryckman Creek Gas Storage*

The Ryckman Creek Gas Storage Project (Ryckman) is owned by Peregrine Midstream Partners LLC. The storage project involves the utilization of a partially depleted oil field located approximately 25 miles southwest of the Opal Hub in southwestern Wyoming (see Exhibit 7.9). Working gas capacity for the first phase of the

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<sup>22</sup>Federal Energy Regulatory Commission, Magnum Gas Storage, LLC, Docket No. CP-10-22, “Abbreviated Application for Certificate of Public Convenience and Necessity Authorizing Construction and Operation of Natural Gas Storage Facility, For Limited Jurisdiction Certificate Authorizing Construction and Operation of Cavern Leaching Facility, For Blanket Certificates and for Approval of Market-Based Rates Under Section 7 of the Natural Gas Act,” November 17, 2009.

<sup>23</sup>Federal Energy Regulatory Commission, Magnum Gas Storage, LLC, Magnum Solutions, LLC, Docket No. CP-10-22, “Order Granting and Denying Certificates,” March 17, 2011.

<sup>24</sup> Federal Energy Regulatory Commission, Magnum Gas Storage, LLC, “Acceptance of Certificate of Public Convenience and Necessity,” Docket No. CP-10-22, March 23, 2011.

<sup>25</sup> Federal Energy Regulatory Commission, Magnum Gas Storage, LLC, Magnum Solutions, LLC, Docket No. CP-10-22, “Order Granting and Denying Certificates,” March 17, 2011, pp. 4, 5.

project is expected to be 19 Bcf. Associated injection rates would be up to 265 MMcfd and withdrawal rates of up to 360 MMcfd. It is expected that the working gas inventory could be cycled from one to four times per year. Ryckman has purchased the existing Canyon Creek Compression facilities which will be incorporated into the project. Takeaway capacity from the facility will exist on KRGT, Questar Pipeline and Overthrust Pipeline. If sufficient need exists, interconnections will be made with Northwest Pipeline and Ruby Pipeline. The phase one in-service date is planned for April 2012.

Ryckman held a non-binding open season from October 6, 2010 to November 1, 2010. Questar Gas was not invited to bid for capacity in the open season, but the Company subsequently contacted Ryckman and is currently engaged in discussions. On November 8, 2010, Ryckman filed with the FERC, its application for a certificate of public convenience and necessity to develop, construct, own, operate, and maintain this facility.<sup>26</sup> Ryckman requested that the FERC approve the application by April 15, 2011, with all authorizations to proceed with the project. Ryckman also requested authorization to charge market based rates.

On April 22, 2011, an environmental assessment of the Ryckman project was issued by the staff of the FERC. It is anticipated that a final decision on Ryckman's request for federal authorization will be made by July 21, 2011.

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<sup>26</sup> Federal Energy Regulatory Commission, Ryckman Creek Resources, LLC, CP-11-24, "Abbreviated Application of Ryckman Creek Resources, LLC for a Certificate of Public Convenience and Necessity Authorizing Construction and Operation of an Interstate Natural Gas Storage Facility, Blanket Certificates and Approval of Market-Based Rates Under Section 7 of the Natural Gas Act," November 8, 2010.