McAtee, Selena (Kern River)

From: McAtee, Selena (Kern River)
Sent: Friday, December 02, 2016 11:27 AM
To: Tolman, Billie (Kern River)
Subject: Kern River Filing in Docket No. RP-17-248-000
Attachments: Kern River Alternate Period Two Rate Proposal.pdf

The attached Stipulation and Agreement of Settlement pertaining to Alternate Period Two was filed with the Federal Energy Regulatory Commission.

Selena McAtee

Kern River Gas Transmission Company
A Berkshire Hathaway Energy Company
Sr. Administrative Assistant, Marketing & Customer Services
2755 E. Cottonwood Pkwy, Ste 300
Salt Lake City, UT 84121
801-937-6081

Vice President, Regulatory and Government Affairs
1111 South 103rd Street
Omaha NE 68124
Phone: 402-398-7278
Fax: 402-398-7426
Laura.Demman@nngco.com

December 1, 2016

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

RE: Kern River Gas Transmission Company
Docket No. RP17-___
Alternate Period Two Rate Settlement

Dear Ms. Bose:

Pursuant to Rules 207(a)(5) and 602 of the Federal Energy Regulatory Commission's ("Commission" or "FERC") Rules of Practice and Procedure ("Rules"),[1] Kern River Gas Transmission Company ("Kern River") hereby submits for filing with, and approval by, the Commission, the enclosed Stipulation and Agreement of Settlement ("Stipulation"). The Stipulation is the result of negotiations between Kern River and its shippers and provides an option for Eligible Shippers[2] to pay lower Alternate Period Two[3] transportation rates that are more competitive relative to the projected market value of the shippers' capacity, thereby providing such shippers greater benefit from Period Two[4] service.

In order to allow Eligible Shippers to comply with the terms and time constraints contained in Kern River's FERC Gas Tariff ("Tariff"[5]) related to their elections for Period Two service, Kern River respectfully requests Commission approval of the Stipulation by January 30, 2017. Accordingly, Kern River respectfully requests a shortened comment period as follows: comments on the Stipulation may be filed not later

[1] 18 C.F.R. § 385.207(a)(5) and 18 C.F.R. § 385.602.
[2] Eligible Shipper, as such term is defined in Stipulation Article II(G).
[3] Alternate Period Two, as such term is defined in Stipulation Article II(B).
[4] Period Two, as such term is defined in Stipulation Article II(N).
[5] Tariff, as such term is defined in Stipulation Article II(W).

than ten (10) days after the date of this filing, and reply comments may be filed not later than seventeen (17) days after the date of this filing. Accordingly, comments are due not later than December 12, 2016, and reply comments are due not later than December 19, 2016. Kern River is authorized to state that this request for a shortened comment period is unopposed.

In accordance with Rule 602(c), this submission includes:

- This transmittal letter, including an explanatory statement[6] and Exhibit 1 – a depreciation study supporting the proposed book depreciation rates.
- The Stipulation, including appendices to the Stipulation, as follows:
  - Appendix A – a list of Settling Parties;
  - Appendix B – a schedule depicting Period Two and proposed Alternate Period Two rates;
  - Appendix C – *pro forma* tariff sheets marked to show proposed changes;
  - Appendix D – proposed book depreciation rates; and
  - Appendix E – a list of currently-effective Period Two transportation service agreements that contain non-conforming provisions previously accepted by the Commission.

Immediately after issuance of the final Commission order approving the Stipulation, Kern River will file actual tariff sheets consistent with the *pro forma* tariff sheets attached as Appendix C to the Stipulation.

Background

In January of 1990, the Commission issued a certificate to Kern River to permit it to construct its Original System ("Original Certificate"[7]) under the optional expedited certificate regulations adopted in Order No. 436. The Commission approved initial rates based on, among other items, a levelized cost of service. The Commission also authorized Kern River to charge separate levelized rates for three different periods: (1) the term of the firm shippers' initial contracts ("Period One"[8]); (2) the period from the expiration of those contracts to the end of Kern River's assumed depreciable life ("Period Two"[9]); and (3) the period thereafter ("Period Three"[10]).

[6] This Transmittal Letter is intended to be a summary of the Stipulation. If there are any inconsistencies between this Transmittal Letter and the Stipulation, the Stipulation shall control. All capitalized terms used in this Transmittal Letter shall have the meaning subscribed to such terms in the Stipulation.
[7] Original Certificate, as such term is defined in Stipulation Article II(K).
[8] Period One, as such term is defined in Stipulation Article II(M).
[9] *See* fn. 4, *infra*.
[10] Period Three, as such term is defined in Stipulation Article II(Q).

In May 2000, Kern River proposed to lower its rates by refinancing its debt and providing for longer debt recovery periods, extending the terms of firm contracts and extending the depreciable life of its facilities for book purposes. The Commission accepted a settlement containing this proposal ("2000 ET Settlement").[11] Pursuant to the 2000 ET Settlement, a shipper could keep its original 15-year contract term expiring in 2007, or extend its contract term and pay its existing debt service obligations over a longer period of time, thereby reducing its current rates. If a shipper extended its contract term to 2011, it would receive a ten-year Extended Term ("ET") rate (October 1, 2001 – September 30, 2011). If a shipper extended its contract term to 2016, it would receive a 15-year ET rate (October 1, 2001 – September 30, 2016).[12] Under the 2000 ET Settlement, Kern River's rates were designed consistent with the principles in the Original Certificate. Subsequently, all of the shippers elected to lengthen their contracts by either 5 or 10 years since this produced significantly lower rates. Therefore, after this election, only two customer groups existed: 10-year ET Original System shippers and 15-year ET Original System shippers. The 2000 ET Settlement also provided that Kern River's original 25-year depreciation life for book purposes would be extended by 15 years from 2017 to September 30, 2032, and that the depreciation rate for the remaining book life of the pipeline of 31 years beginning October 1, 2002, would be 2% per year.

Subsequent to the 2000 ET Settlement, Kern River expanded its mainline system in 2002, 2003 and 2010, and shippers had the option to contract for 10 or 15 year terms at levelized Period One rates.

Kern River's current Period One and Period Two rates for the Original System, 2002 Expansion and 2003 Expansion shippers were established in its last rate case in Docket No. RP04-274.[13] Among other things, the Commission approved a remaining economic life of 35 years and a corresponding book depreciation rate for Kern River's transmission plant of 1.95%.[14] The Commission also determined that Eligible Shippers could elect a Period Two contract term of 10 or 15 years.[15] The currently effective rates for the 2010 Expansion shippers were established in the certificate order.[16]

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[11] 92 FERC ¶ 61,061 (2000), order on reh'g, 94 FERC ¶ 61,115 (2001). Under the 2000 ET Settlement, there was no reallocation of revenue responsibility among the shippers, and the cost of service (other than financing and depreciation components) remained unchanged. 92 FERC at 61,156.
[12] 92 FERC ¶ 61,061, at 61,156.
[13] *See Kern River Gas Transmission Company*, 117 FERC ¶ 61,077 (2006), and subsequent orders (Opinion Nos. 486 through 486-G).
[14] Opinion No. 486, 117 FERC ¶ 61,077 at P 408.
[15] Opinion No. 486-E, 136 FERC ¶ 61,045 at P 60 (2011).
[16] *Kern River Gas Transmission Company*, 127 FERC ¶ 61,223 (2009), order on reh'g, 128 FERC ¶ 61,024 (2010).

Summary of Stipulation

Kern River has been engaged in discussions with its long-term firm shippers to solicit input and seek support for a rate proposal that would provide an option for Eligible Shippers to pay lower Alternate Period Two transportation rates that are more competitive relative to the projected market value of their capacity, thereby providing such shippers greater benefit from Period Two service. This Stipulation offers Eligible Shippers an option to elect to be an Alternate Period Two Shipper[17] by choosing a reduced Period Two transportation rate based on an extended Period Two term of 25 years. An Eligible Shipper may elect service at the Alternate Period Two rate by electing an initial contract term ("Period 2A"[18]) of 10 years or 15 years. At the conclusion of Period 2A, such Alternate Period Two Shipper shall be eligible to elect service at the same rate for a subsequent term ("Period 2B"[19]), which shall be the 15 years or 10 years remaining in the 25-year Period Two for such Alternate Period Two Shipper. After receiving service for Period 2B, such Alternate Period Two Shipper shall be eligible to elect service for Period Three.

The Stipulation provides that any Eligible Shipper that prefers to retain its rights under the current terms and conditions for Period Two service under the Tariff, *i.e.*, existing Period Two rate and existing Period Two term (10 years or 15 years), may do so. Other than as set forth therein, the Stipulation will not have any effect on Period One rates for any Shipper Group[20] and will not impact the rates, the beginning dates or any of the other terms and conditions of service for Period Two.

The reduced rates available to an Eligible Shipper as an Alternate Period Two Shipper are based on a regulatory depreciation levelization period of twenty-five (25) years for each Shipper Group. Other than the extended levelization periods, the Alternate Period Two rates are designed in accordance with the Original Certificate and the ending balances, rate base, cost of service and billing determinants established in the last Kern River rate case in Docket No. RP04-274, as accepted by the Commission in the August 2011 Compliance Filing.[21] Commensurate with the extension of the regulatory depreciation levelization period is an extension of the book depreciable life of Kern River's transmission facilities to December 31, 2056. This approximately 40-year book depreciable life is supported by the detailed depreciation study submitted herewith in Exhibit 1 to this transmittal letter. The proposed book depreciation rates supported by the depreciation study are set forth in the Stipulation Appendix D.

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[17] Alternate Period Two Shipper, as such term is defined in Stipulation Article II(C).
[18] Period 2A and Period 2B, as such term is defined in Stipulation Article II(L).
[19] *Id.*
[20] Shipper Groups, as such term is defined in Stipulation Article II(V).
[21] August 2011 Compliance Filing, as such term is defined in Stipulation Article II(E).

After extensive discussions and a system-wide meeting, Kern River and the Settling Parties[22] collaboratively drafted this Stipulation to memorialize their comprehensive agreement regarding the Alternate Period Two rate proposal. Kern River and the Settling Parties submit that this Stipulation represents a fair and reasonable resolution of issues related to reducing Period Two transportation rates that is in the public interest.

The Stipulation provides substantial rate reduction benefits, 100% of Eligible Shippers support or do not oppose the Stipulation, and the Stipulation should be approved by the Commission.

The Stipulation provides an option for Eligible Shippers to elect significantly reduced Alternate Period Two rates that will benefit such shippers and their customers. Such option allows Eligible Shippers to pay lower Alternate Period Two transportation rates that are more competitive relative to the projected market value of their capacity, thereby providing such shippers greater benefit from Period Two service. Significantly, Eligible Shippers representing 100% of the capacity eligible for Period Two support or do not oppose the Stipulation. The Stipulation implements this beneficial rate effect by following the Commission's policy of encouraging settlements.[23] Any modification or condition placed on the Stipulation could jeopardize the extremely delicate negotiated balance of interests reached through negotiations. The Stipulation is carefully crafted and represents a practical, business-oriented solution to very complex issues involving Period Two rates. Failure to approve the Stipulation as filed could upset this integrated and carefully balanced agreement. The Commission should therefore approve the Stipulation without modification or condition.

Explanatory Statement

Pursuant to Rule 602(c) of the Commission's Rules, Kern River submits this Explanatory Statement regarding the Stipulation.

Article I is the introduction.

Article II sets forth definitions of various terms used in the Stipulation.

Article III states that an Eligible Shipper that elects Alternate Period Two will be eligible for the Alternate Period Two rates, and that the Stipulation will not have any effect on Period One rates for any Shipper Group and, other than as set forth therein, will not impact the rates, the beginning dates or any of the other terms and conditions of service for Period Two.

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[22] Settling Parties, as such term is defined in Stipulation Article II(T).
[23] *Columbia Gas Transmission, LLC*, 142 FERC ¶ 61,062 (2013).

Article IV provides the procedures to elect Alternate Period Two by current Period One shippers, current contractually bound Period Two shippers electing Alternate Period Two rates prior to beginning Period Two, and current Period Two shippers electing Alternate Period Two rates during Period Two. Article IV also explains that any Eligible Shipper that does not elect Alternate Period Two rates retains its existing rights for Period Two and Period Three (to the extent it elects Period Three service). In addition, Article IV provides for a restated contract for a current Period Two shipper that elects Alternate Period Two, which shall include any non-conforming provisions previously accepted by the Commission in its current contract. At the conclusion of Period 2A, an Alternate Period Two Shipper shall be eligible for Period 2B, which shall be the 15 years or 10 years remaining in Period Two for such shipper; and, after Period 2B, such shipper shall be eligible for Period Three.

Article V states that Alternate Period Two rates will commence in accordance with Tariff Section 30.4, and a refund without interest will be provided for Alternate Period Two Shippers for whom Period Two service already has commenced.

Article VI provides that, other than the extended levelization periods, the Alternate Period Two rates are designed in accordance with the Original Certificate and the ending balances, rate base, cost of service and billing determinants established in the last Kern River rate case in Docket No. RP04-274, as accepted by the Commission in the August 2011 Compliance Filing. In addition, Article VI provides that, absent a rate case commenced pursuant to section 4 or section 5 of the Natural Gas Act, billing determinants and cost allocation for each Shipper Group shall remain unchanged for purposes of designing rates.

Article VII states that, beginning with the first day of the calendar month following a Final Order,[24] Kern River will implement the book depreciation rates set forth in Appendix D, which will extend the book depreciable life of its transmission plant facilities to an approximate 40-year book depreciable life from the date of this Stipulation. Kern River will record regulatory depreciation based on a 25-year Period Two levelization period for all capacity, including capacity not recontracted for Period Two, but excluding capacity associated with shippers that elect to retain the current 10-year or 15-year Period Two regulatory depreciation levelization periods, which will continue to be recorded at the 10-year or 15-year Period Two regulatory depreciation levelization periods.

Article VIII provides that the Stipulation shall not affect the rate for interruptible or authorized overrun transportation, or the maximum rate for short-term or long-term firm transportation, and states that the maximum rate for capacity release is the applicable recourse rate. Such article also explains the Rolled-In Rate Credit[25] and that Kern River shall, pursuant to certain conditions, insulate any Period Two Eligible Shipper that is a

[24] Final Order, as such term is defined in Stipulation Article II(I).
[25] Rolled-In Rate Credit, as such term is defined in Stipulation Article II(R).

Rolled-In Shipper,[26] and that does not elect Alternate Period Two for any and all rolled-in capacity, from the incremental change attributable to the Rolled-In Rate Credit caused solely by the election of Alternate Period Two by other Rolled-In Shippers.

Article IX sets forth the parties' retention of rights under sections 4 and 5 of the Natural Gas Act.

Article X provides that the Commission should decide the merits of any contested settlement issues and not sever any Contesting Party.[27]

Article XI states that the provisions of the Stipulation are not severable.

Article XII states that the Stipulation includes proposed tariff records and that immediately after issuance of a Final Order, Kern River will file to implement the tariff records in Appendix C.

Article XIII states that the Stipulation will become effective upon Commission approval without modification or condition unacceptable to Kern River by a final Commission order. The provision allows Kern River to withdraw the Stipulation in the event the Commission modifies or conditions the Stipulation in a manner unacceptable to Kern River or if the Commission does not impose the benefits and obligations on any Contesting Party.

Article XIV includes provisions related to: (A) the non-precedential nature of the Stipulation; (B) the fact that the Stipulation is privileged and of no effect until approved; (C) the understanding that the Stipulation does not create a settled practice; (D) the standard of review for changes to the Stipulation; (E) actions that shall not be taken by Kern River or any Settling Party; (F) resolution of any conflicts between this Explanatory Statement and the Stipulation or a pro forma tariff provision; and (G) successors and assigns of a Settling Party.

Article XV requests approval of the Stipulation as filed.

Service

Kern River served an electronic copy of this filing upon its customers and interested state regulatory commissions.

[26] Rolled-In Shippers, as such term is defined in Stipulation Article II(S).
[27] Contesting Party, as such term is defined in Stipulation Article II(F).

Waiver

Kern River respectfully requests that the Commission grant any and all waivers of its Regulations that it deems necessary to allow the Stipulation to be fully implemented consistent with its terms. As noted above, Kern River respectfully requests that the Commission issue an order approving the Stipulation, including the revised depreciation rates, by January 30, 2017.

Marked Version

In accordance with Section 154.201 of the Commission's Regulations, as explained above, Kern River has submitted Appendix C to the Stipulation containing a marked version of the pro forma Tariff changes highlighting new additions and showing deletions by strikeout.

Data Processing Requirements

Kern River is submitting this filing through FERC's electronic filing process in a FERC-approved format.

Communication

It is requested that all correspondence and communications concerning this filing be served upon each of the following:

Laura Demman
Vice President, Regulatory and Government Affairs
Kern River Gas Transmission Company
1111 South 103rd Street
Omaha, NE 68124-1000
(402) 398-7278
laura.demman@nngco.com

J. Gregory Porter
Vice President, General Counsel &
Chief Compliance Officer
Darla S. Zink
Senior Counsel
Kern River Gas Transmission
Company
1111 South 103rd Street
Omaha, NE 68124-1000
(402) 398-7248
greg.porter@nngco.com
darla.zink@nngco.com

Thomas Knight
Steve Stojic
Jennifer L. Brough
Locke Lord LLP
701 8th Street, N.W., Suite 700
Washington, D.C. 20001
(202) 220-6922
tknight@lockelord.com
steve.stojic@lockelord.com
jbrough@lockelord.com

Respectfully submitted,

/s/ Laura Demman

Laura Demman
Vice President, Regulatory and Government Affairs

Attachments

EXHIBIT 1

Depreciation Study

KERN RIVER GAS TRANSMISSION COMPANY

DEPRECIATION STUDY

Prepared by:

Jonathan A. Lesser, PhD

October 11, 2016

CONTINENTAL ECONOMICS

6 Real Place, Sandia Park, NM 87047 • Main: 505.286.8833 • DC Office: 202.446.2062

www.continentalecon.com

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I. INTRODUCTION AND SUMMARY

This study presents updated depreciation rates for Kern River Gas Transmission Company's ("Kern River") natural gas pipeline transmission accounts. The study results are based on: (i) a review of the ages and actual retirement history of transmission system investments made by Kern River; (ii) typical "survivor curves" used by the Federal Energy Regulatory Commission ("FERC" or "the Commission"); and (iii) the estimated economic life of the Kern River system, based on future natural gas supplies and recent Commission precedent in setting economic lifetimes for natural gas pipelines.

Table 1 provides a summary of the current and proposed depreciation rates for Kern River's transmission system for the original system and subsequent expansion projects.

Table 1: Existing and Proposed Transmission System Depreciation Rates

System Component	Current Depreciation Rate	Proposed Depreciation Rate
APEX	3.00%	**2.34%**
Big Horn	6.67%	**0.52%**
Expansion 2002	1.95%	**2.48%**
Expansion 2003	3.00%	**1.80%**
Expansion 2010	3.00%	**2.25%**
High Desert	4.76%	**1.16%**
Original System (Vintage)	1.95%	**1.15%**
Mountain Pass	3.00%	**2.32%**

The proposed depreciation rates are based on an assumed 40-year remaining economic life from today (i.e., through 2056) for the Kern River system. The Commission had previously adopted a 35-year economic life for the pipeline.[1]

The 40-year remaining economic life is based on increases in natural gas supplies that have traditionally been accessed and transported on the Kern River system within the Rocky Mountain Area, as that area is defined by the Potential Gas Committee ("PGC"). The PGC's 2014 report, which was released in early 2015, shows continued increases in potential natural gas resources in this area. Specifically, for the entire Rocky Mountain Area, the PGC increased its estimate of total natural gas resources by 9.6 Trillion Cubic Feet ("TCF") over the 2012 report.

[1] *Kern River Gas Transmission Company*, Opinion No. 486, 117 FERC ¶ 61, 077 (2006), P 443.

In recognition of the significant increases in natural gas reserves and potential supplies from non-traditional sources such as shale gas and coalbed methane, FERC has recognized that its traditional approach to determining the economic life for pipelines based on steady declines in future natural gas resources is outdated. Recognizing the increasing estimates for potential gas supplies, FERC recently has approved longer economic lifetimes for pipelines. For example, in its 2013 order in *El Paso Natural Gas Company*,[2] the Commission approved an economic life of 40 years for that pipeline, whereas previously it had typically set economic lifetimes for on-shore pipelines at 35 years.

II. CALCULATION OF DEPRECIATION RATES

As discussed in my textbook, *Fundamentals of Energy Regulation*, depreciation costs are collected "[t]o account for the effects of wear and tear on capital equipment or to account for equipment that otherwise reaches the end of its economic lifetime."[3] In the context of rate regulation, the purpose of depreciation is to provide a firm the opportunity to recover its capital investment based on the useful life of that investment.

The most critical methodological issues are those that determine the time period over which to depreciate a regulated firm's assets. That time period is based on three factors: (1) "average service life," (2) "average remaining life," and (3) "economic life."

Average service life ("ASL") refers to the expected lifetime of plant and equipment when it is newly installed. For example, if a pipeline company installs pipe (mains) in the ground with an average service life of 60 years, some of that equipment will wear out in less than 60 years, and some will wear out after 60 years. On average, however, the equipment will wear out – meaning it will be physically incapable of providing service – after 60 years. ASL is most useful for equipment that is new, because new equipment will not have been subjected to actual physical conditions that can influence survival rates.

Average remaining life ("ARL") refers to the expected remaining lifetime of existing plant and equipment that has achieved a certain age. ARL reflects past experience and can thus better reflect actual physical and operating conditions. This experience is one reason why ARL values are typically used in establishing depreciation rates, rather than ASL values.

The difference between ASL and ARL is similar to the difference between life expectancy at birth and life expectancy at a given age. For example, suppose a fifty-year-old man is estimating the amount of money he will need for retirement. Although knowing that his life expectancy at birth 50 years ago was (for example) 68 years may be interesting, a far more relevant statistic is

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2 *El Paso Natural Gas Company*, Opinion No. 528, 145 FERC ¶ 61,040 (2013) ("*El Paso*").

3 Jonathan Lesser and Leonardo Giacchino, *Fundamentals of Energy Regulation*, 2d ed. (Reston, VA: Public Utilities Reports, Inc., 2013) ("Lesser and Giacchino"), p. 120.

the remaining life expectancy for all fifty-year-old men (e.g., 28 years). Information that better characterizes the remaining life expectancy for men in similar physical condition will be even more useful. Thus, if the fifty-year-old man is a non-smoker, his remaining life expectancy may be (say) 30 years, whereas the life expectancy of a fifty-year-old smoker may only be 20 years. In the same way, average remaining life is typically a more useful concept for depreciation purposes.

Economic life refers to the point where continued operation of an asset is no longer expected to be economically profitable. Economic profitability differs from *accounting profitability*. The latter is based on revenues exceeding costs. For example, if the expected operation and maintenance costs of an electric generating plant exceed the expected revenues from the electricity that plant will produce and sell, then the plant is not profitable in an accounting sense.

A basic economic result is that, in the short run, it is rational to continue operating a plant as long as revenues exceed variable (marginal) costs. But doing so presumes that conditions will improve over time. In the long-run, revenues must also be sufficient to recover fixed costs and earn a return commensurate with other assets having similar risks. This longer-term requirement is economic profitability. An asset that is no longer expected to return economic profits has reached the end of its economic life.

In the case of natural gas pipelines, the Commission's economic life determinations have historically focused on the physical availability of future natural gas supplies for transportation from traditional supply basins. Without physical supplies of natural gas that can be transported, pipelines would be out of business. For example, a network of offshore gathering pipelines near a production field will no longer be economically useful once production from that field is exhausted.[4]

The impact of projected reductions in available future natural gas supplies was first addressed by the DC Court of Appeals in its well-known *Memphis* decision.[5] By the late 1960s, projections of the near-term exhaustion of domestic natural gas reserves were in full flower. Subsequently, the 1973 OPEC oil embargo reaffirmed the "scarcity" of US fossil fuel supplies, culminating in comprehensive energy legislation in 1978 to address natural gas shortages. As the Court stated in its decision:

> Exhaustion of natural resources is not a newly articulated component of the depreciation formula; rather, it has been a part of the depreciation formula since the [Federal Power] Commission first promulgated its Uniform System of

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[4] "Exhausted" is a relative concept and refers to whether it is profitable to extract remaining natural gas. It is highly unlikely that every last molecule of natural gas will ever be extracted.

[5] *See, e.g., Memphis Light, Gas and Water Div. v. Federal Power Comm'n*, 504 F.2d 225 (DC Circuit, 1974) ("*Memphis*").

> Accounts in 1940. The Commission admits that in the past, reserves have been accorded little significance in individual cases. We think that the failure of the gas reserve component to play a larger role was merely the result of the then reassuringly large gas supply rather than an immutable indicium of its nugatory value as part of the depreciation formula.[6]

Since the *Memphis* decision, the Commission has incorporated forecasts of future natural gas reserves and available market supplies in determining allowed depreciation rates for natural gas pipelines. Although supplies of all fossil fuel resources are ultimately limited, technological innovations have made the exploitation of vast shale gas (and other "tight gas") reserves, as well as coalbed methane, have become economically viable and transformed the U.S. into the "Saudi Arabia" of natural gas. Thus, "exhaustion" of natural gas resources has become far less of an issue in setting depreciation rates.

A. Calculation of Annual Depreciation Rates

Annual depreciation rates are calculated by dividing the net undepreciated value of an asset by the ARL or ASL, depending on whether an original-life or remaining-life depreciation approach is used. For example, consider the straight-line remaining life approach, which is probably the most common treatment of depreciation costs for regulated firms. Under this approach, the annual depreciation rate, D%, is calculated using equation (1):

$$D\% = \frac{100\% - (BR/O) - (NS/O)}{ARL} \qquad (1)$$

where:

O = original cost

BR = book reserve (the depreciation amount previously accounted for)

NS = net salvage cost (gross removal cost less salvage value)

ARL = average remaining life

In other words, the depreciation rate equals the net undepreciated cost, accounting for net salvage costs, divided by the expected years of remaining life. If book reserve (BR) and net salvage cost (NS) are held constant, then, as average remaining life decreases, the depreciation rate will increase at an increasing rate.

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[6] 504 F.2d 225 (1974). The Court also cited United Gas Pipeline's 1970 estimate of less than nine years' natural gas reserves remaining contributing to its request for a higher depreciation rate, the appeal of which the DC court addressed in its decision.

B. Survivor Curves and Average Remaining Life

To estimate ARL, depreciation studies typically rely on what are called "actuarial methods," which are based on past recorded experience of different types of assets to predict their remaining lives. The fundamental premise of actuarial methods is that the past is an accurate predictor of the future. A secondary premise is that the experience of a large number of assets will tend to average out random individual deviations.

Calculation of ARL values for different classes of assets is based on "survivor curves," which illustrate the percentage of a given class of assets surviving over time. This is shown in Figure 1.

Figure 1: Representative Survivor Curve

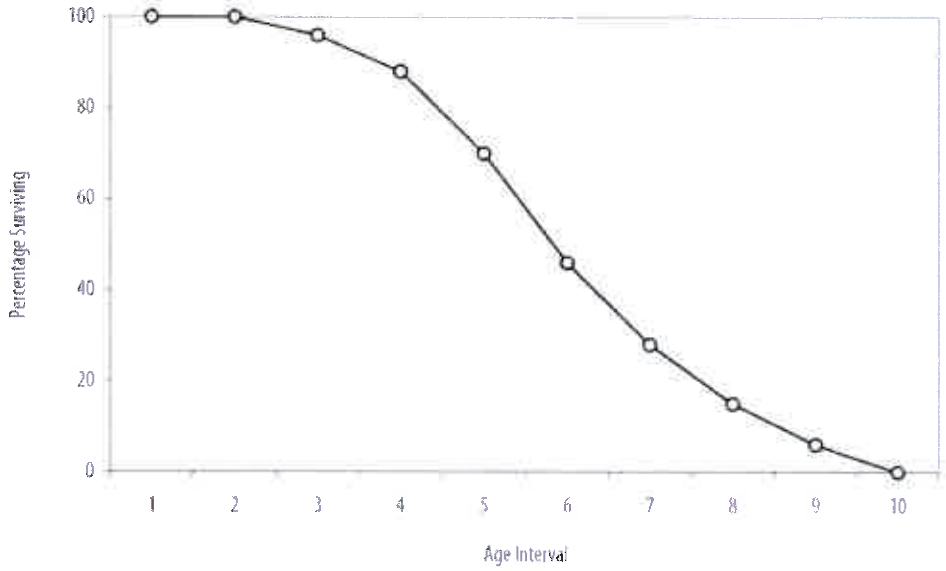

Figure 1 shows the percentage of a hypothetical class of assets that remains over time. Thus, the assets are assumed to be installed at time $t = 0$. All of the assets installed at time $t = 0$ (100%) continue to operate ("survive") after two years. By the third year, a small percentage of the assets have failed. The percentage surviving decreases until, at time $t = 10$, none of the assets installed continue to operate. As its name implies, ASL represents the average, or expected, number of years before an asset retires. It turns out this value equals the area under the entire survivor curve.[7] ARL for an asset equals the area under the survivor curve beginning at the

[7] In mathematical terms, if the survivor curve can be written as $S(t)$, then ASL is expected value of $S(t)$, which equals: $\int_0^\infty tS(t)\,dt$.

asset's age. For example, if the age of the asset is five years, then the ARL of the asset equals the area under the survivor curve from time $t = 5$ onwards.[8]

1. Estimation of Survivor Curves

There are several methods used to estimate survivor curves, depending on the availability of so-called "aged" data, that is, data that accounts for different vintages of equipment. (In general, each year represents a single vintage of equipment.)

The preferred methodological approach is called the *Annual Rate* method. This method tracks additions and retirements of equipment over time by vintage. In this way, the surviving equipment at the start of each interval (typically, a calendar year), called "exposures," and retirements of each vintage of equipment that takes place during each year are tracked jointly. With sufficient data, survivor curves can be estimated empirically.

For example, a pipeline may have invested in new transmission mains (classified under FERC's Uniform System of Accounts under Account 367) each year, beginning in 1990. Each year's investments constitute a different vintage. The sum of these annual investments equals the total "exposure" of brand new plant that is subject to retirement.

Similarly, in various years the pipeline may have retired some quantities of plant of different vintages. For example, in 2005, the pipeline may have retired some of the equipment installed in 1990, 1995, and 1998. Thus, in 2005, the aged data would reflect retirements of 15-year old equipment, 10-year old equipment, and 7-year old equipment.

Using the Annual Rate method, one determines the total exposures and retirements for each age of plant. Total exposures equal the sum of all plant of a given age that has not been retired. Total retirements equal the sum of all plant retired at a given age. Thus, one would calculate the total amount of retirement of one-year old equipment since 1990, two-year old equipment, and so forth. With data for each age interval, we can graph a survivor curve, which reflects the percentage of equipment of each age that has not been retired. Typically, the result is a chart of what is called a "stub" survivor curve, so-called because not all of the plant will have been retired. An example is shown in Figure 2,

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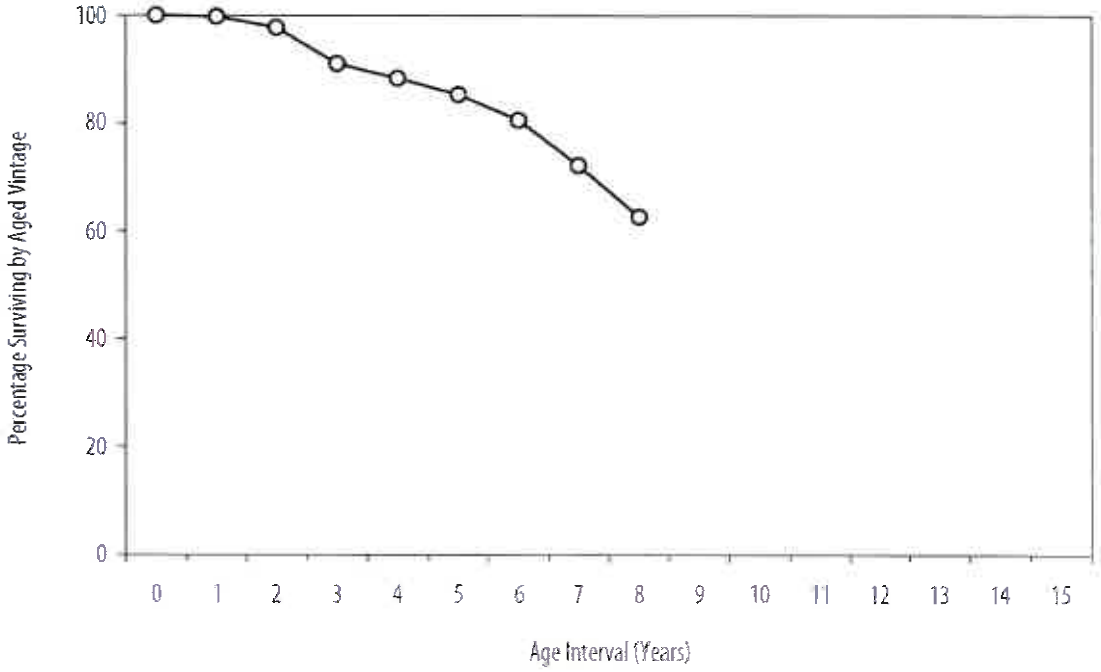
[8] In mathematical terms, the ARL of an asset that is currently T years old is: $\int_T^\infty tS(t)\,dt$.

Figure 2: Stub Survivor Curve



With sufficient data, a stub survivor curve can be fitted to an established survivor curve with a well-defined shape. This allows ASL and ARL values to be calculated. However, before an established survivor curve is used, it is important to determine whether future retirements are likely to follow the observed pattern of historic retirements.

The most commonly used survivor curves for depreciation analysis are the so-called Iowa curves, which were developed in the early part of the last century. These curves were developed by researchers at Iowa State University using data collected for 53 different types of industrial equipment, from lamps to locomotives.[9] Subsequently, the 53 types of properties were fitted to 18 different types of general survivor curves. The 18 curves were based on three general properties related to whether the greatest rate of retirements was (1) likely to occur prior to the property reaching its average age (called "L" curves because they are asymmetrical to the left of the average), (2) occur after the property reached its average age (called "R" curves because they are asymmetrical to the right of the mean), or (3) at the time the property reaches its average age (called "S" curves because they are symmetrical about the average retirement age). There are six different types of "L" curves, seven types of "S" curves, and five types of "R" curves. For example, an "R2-65" (also written as "65-R2") Iowa Curve means that it is asymmetrical to the right of the mean 65-year ASL. The "2" designation refers to the shape within the class of asymmetrical curves.

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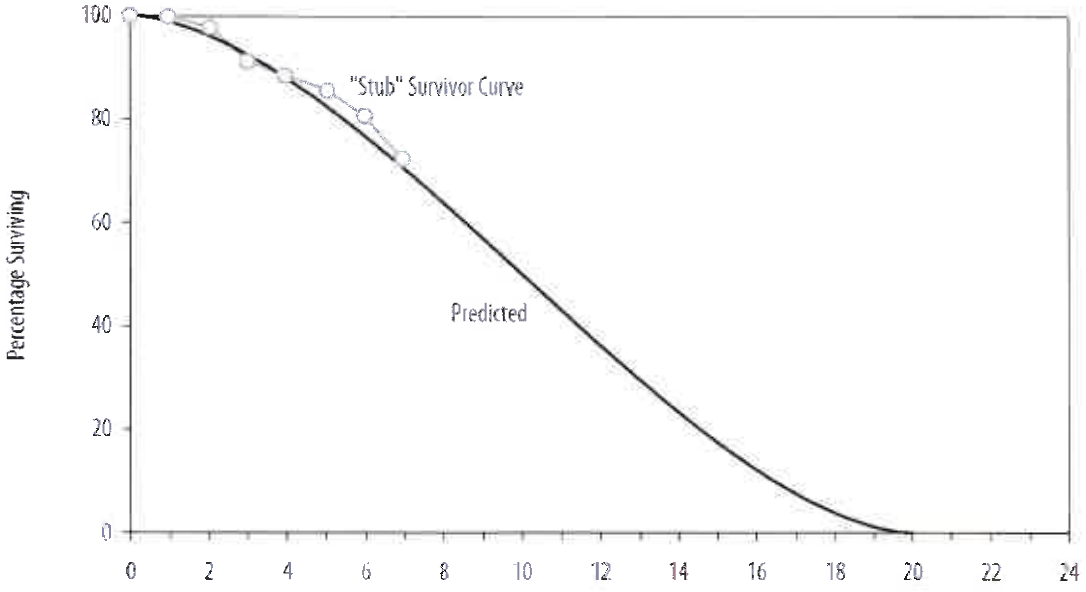
[9] R. Winfrey, "Statistical Analysis of Industrial Property Retirements," Bulletin 125, Engineering Research Institute, Iowa State University, 1935. (Revised, 1967, by H. Cowles.)

The goal is to select the best-fitting Iowa curve, generally by using a "least-squares" approach to fit the stub survivor curve data to the survival percentages predicted by specific Iowa curves. This is shown in Figure 3.

Figure 3: Fitting a "Stub" Survivor Curve



Two distinct considerations must be made in cases where there are no aged data available. First, if there is insufficient retirement data, then no statistical curve-fitting procedures can be used. In these cases, or in cases in which future retirements are not expected to follow the observed historical pattern, a survivor curve must be determined based on the retirement experience at other companies, industry studies, survivor curves commonly accepted by regulators (e.g., FERC), specific conditions for the equipment being studied, and the potential for future retirement patterns changing because of changing industry regulations.

The second consideration occurs when there are sufficient retirement data, but those data are not "aged." In other words, if a company maintains records identifying specific quantities of plant being retired each year, but the age of the plant retired is unknown, then a common alternative is to use what is called the Simulated Plant Record ("SPR") method.

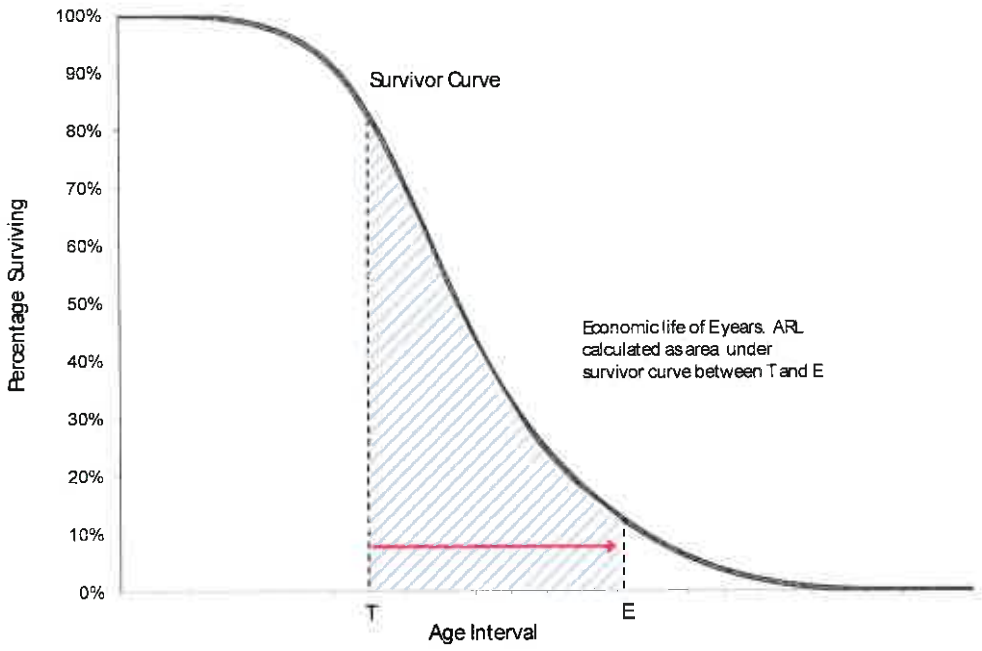
In essence, the SPR method works backwards from the approach used to estimate survivor curves with aged data. It starts with a known survivor curve and derives a pattern of aged retirements associated with that curve. For example, using a given survivor curve, such as the R2-65 curve discussed previously, along with known plant additions over time, one could estimate what the annual retirements would be for that particular curve. The pattern of

retirements that most closely matches the observed retirements would be the best fitting survivor curve using the SPR method.

C. The Role of Economic Life

Economic life reduces *both* ASL and ARL. By reducing a new asset's ASL or an existing asset's ARL, depreciation rates calculated using equation (1) will increase.[10] In effect, economic life can truncate a survivor curve if the economic life is less than the ultimate life of the asset. For example, as shown in Figure 4, if an asset with a current age of T years has an economic life of E years, then that asset's ARL is reduced. Similarly, a new asset's ASL will also decrease. (Recall that ASL and ARL are determined by calculating the area under the survivor curve, as shown previously in Figure 1.) The shorter the economic life, the shorter the ARL of the different plant and equipment accounts will be, and the greater the calculated depreciation rates will be.

Figure 4: Truncation of a Survivor Curve to Reflect Economic Life



III. ECONOMIC LIFE OF THE KERN RIVER SYSTEM

My analysis of the economic life of the Kern River system began with a review of proven natural gas reserves, as published by the U.S. Energy Information Administration (EIA) and the most

[10] Mathematically, if the survivor curve is truncated after E years to reflect the expected end of an asset of age T years' economic life, then ARL = $\int_T^E tS(t)\,dt \le \int_T^\infty tS(t)\,dt$.

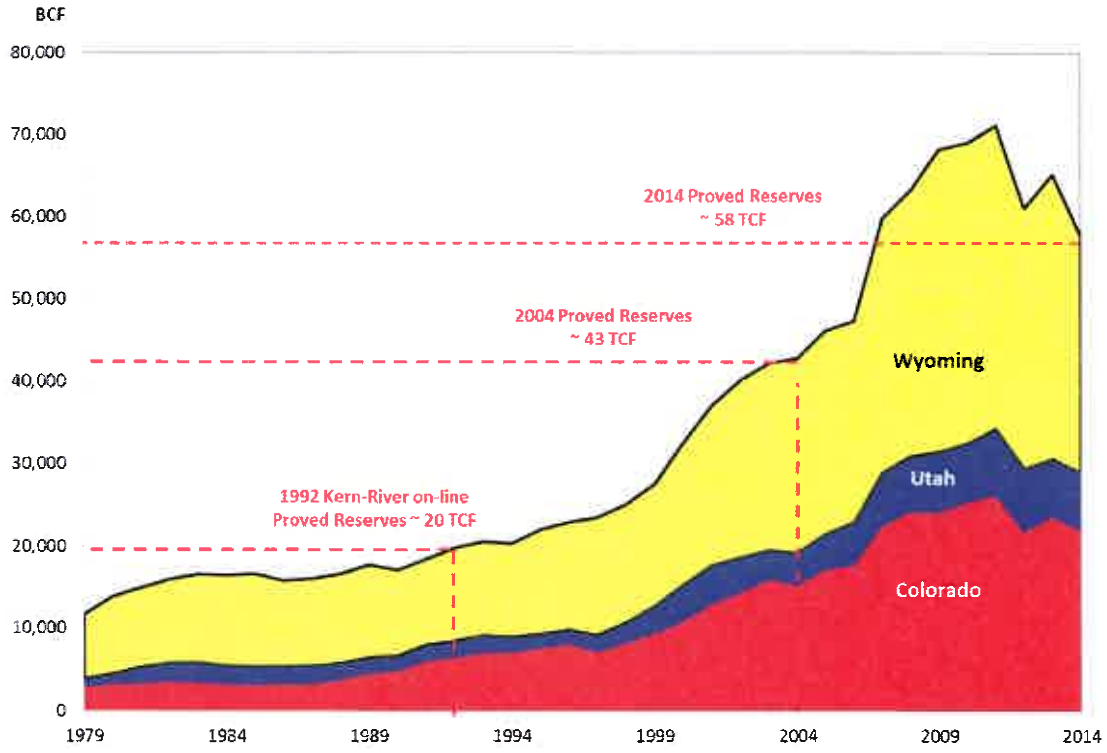
recent (2015) Potential Gas Committee (PGC) report of potential natural gas supplies in the U.S.[11]

A. Proved Natural Gas Reserves

The direct Kern River supply area lies within the three-state region of Colorado, Utah, and Wyoming. When the pipeline came on-line in 1992, estimated proved reserves in the region were about 20 trillion cubic feet (TCF), as shown in Figure 5. At the time of Kern River's last major rate case in 2004, EIA had more than doubled its estimate of proved reserves to about 43 TCF. By the end of 2014 (the last year for which EIA has published data), proved reserves had increased by another 35%, to about 58 TCF.

Figure 5 does show that proved reserves have decreased since 2011, when EIA estimated them at just over 71 TCF. Despite this decrease, however, proved reserves are still almost 200% larger than when Kern River began operations.

Figure 5: Proved Natural Gas Reserves: Colorado, Utah, and Wyoming



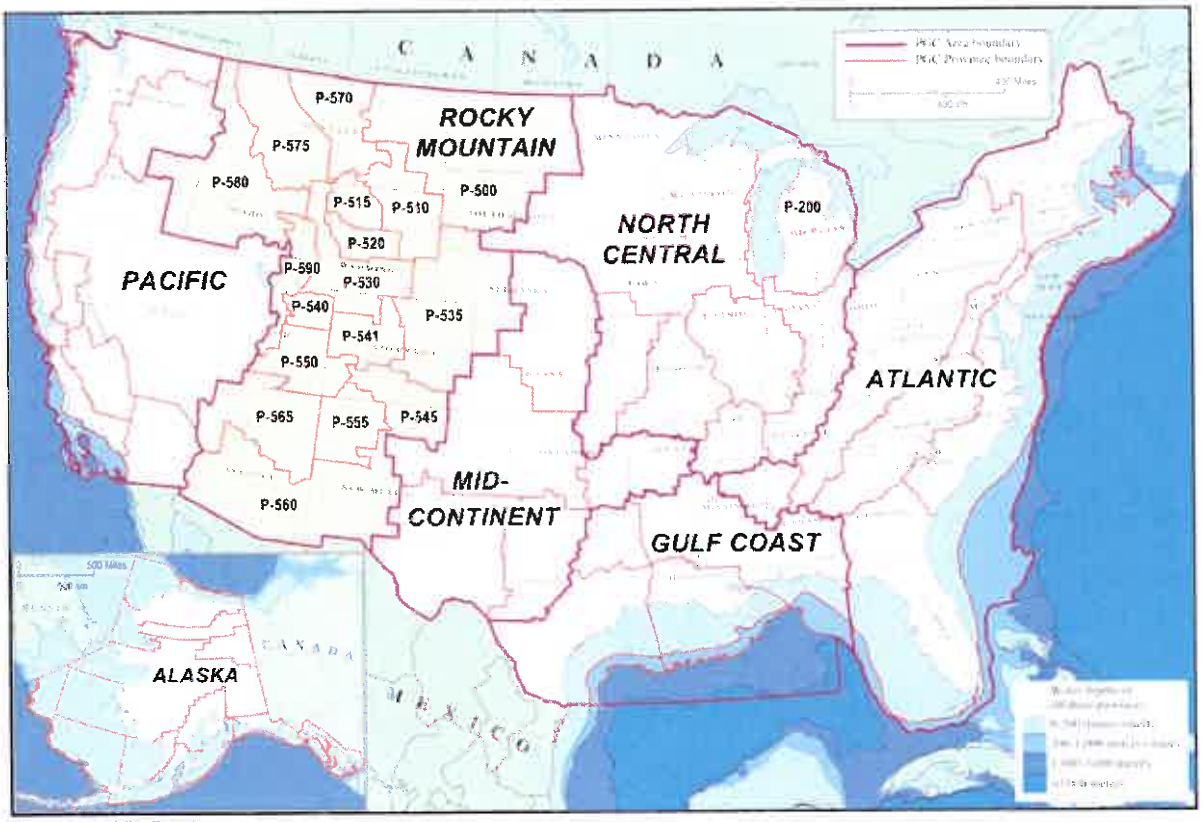
Source: US EIA, November 2015

[11] Potential Gas Committee, "Potential Supply of Natural Gas in the United States, Report of the Potential Gas Committee, December 31, 2014," April 2015 ("PGC 2014 Report").

B. Potential Natural Gas Resources

To analyze potential natural gas resources, including conventional, tight and shale gas, and coalbed methane, I reviewed the PGC 2014 Report. Specifically, I focused on those supply basins in the Rocky Mountain Area that were relied on by Kern River and Commission Staff in the 2004 rate case.[12] The Rocky Mountain Area and its supply basins are shown in Figure 6.

Figure 6: Rocky Mountain Area



Source: Potential Gas Committee

As the Commission stated in Opinion No. 486, Kern River's natural gas supply analysis relied on eight basins.[13] These were:

1. P-510: Powder River Basin;
2. P-515: Big Horn Basin;
3. P-520: Wind River Basin;
4. P-530: Greater Green River Basin;

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12 *Kern River Gas Transmission Company*, Opinion No. 486, 117 FERC ¶ 61, 077 (2006), P 428.

13 *Id.* P 414, footnote 577. At the time of the Commission's order, The PGC defined P-540 as incorporating both the Uinta and Piceance basins. More recently, the PGC has defined a separate basin, P-541, for Piceance, and included within that basin the Eagle and Park basins.

5. P-535: Denver Basin;
6. P-540: Uinta Basin;
7. P-541: Piceance, Eagle, and Park Basins;
8. P-590: the Wyoming-Utah-Idaho Thrust Belt (also called the Overthrust Belt).

Commission Staff included these same supply basins, but also included a ninth: P-550, Paradox Basin.[14] I have therefore based my discussions of these nine supply basins.

The potential gas supplies for these nine basins are shown in Table 2. The PGC assesses probable, possible, and speculative supplies. According to the PGC, "probable" resources "are associated with known fields and are the most assured of potential supplies."[15] "Possible" resources "are postulated to exist outside known fields, but they are associated with a productive formation in a productive province."[16] Finally, "speculative" resources "are expected to be found in formations or geological provinces that have not yet proven productive."[17] All of these supplies are deemed technically recoverable, that is, they are supplies that could be *physically* recovered using existing technology. However, as the PGC notes, whether such resources are economically recoverable "is necessarily company-specific in nature and may depend on many, often complex and interrelated factors ..."[18]

Table 2 reports the "Most Likely" values for "Probable," "Potential," "Speculative" and Total resources. As this table shows, total Probable resources, including coalbed methane resources, are 119.1 TCF. The overall "most likely" total of all categories of resources is 281.9 TCF. Adding in EIA's approximately 58 TCF of proved reserves, the overall range of natural gas supplies is between 176.9 TCF and 339.7 TCF.

Mean (average) values are even higher.[19] For the Rocky Mountain Area as a whole, the PGC 2014 Report estimates an overall Most Likely value of 334.1 TCF. The overall Mean value is 430.9 TCF.[20]

The PGC 2014 Report also provides details as to how its resource estimates for the different Rocky Mountain Area basins have changed since 2004.[21] While some of the estimates are

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[14] *Id.* P 428.

[15] PGC 2014 Report, p. 94.

[16] *Id.*

[17] *Id.*

[18] PGC 2014 Report, p. 1.

[19] In statistical terms, the "most likely" value is the mode of a probability distribution. The mean is the expected value of the probability distribution. The fact that the PGC 2014 Report publishes mean values that are higher than most likely ones indicates the probability distributions are skewed towards higher values of resource potential.

[20] PGC 2014 Report, p. 53.

essentially unchanged, such as for the Uinta and Wind River Basins, others show significant increases. For example, the PGC 2014 Report's estimates for the Denver Basin (P-535) have increased by over 200% since 2004 report. The estimates for the Green River Basin (P-530) have increased 130% since 2004. The estimates for the Power River Basin (P-510) have increased by about 6%. For the Rocky Mountain Area as a whole, the PGC 2014 Report's estimates are over 9 TCF greater than its 2012 Report.[22]

Table 2: Summary of Rocky Mountain Area Supplies

Supply Basin	Most Likely Estimates (BCF)			
	Probable	Possible	Speculative	Total
Conventional and Shale Gas (all depths)				
P-510 Powder River Basin	1,565	2,350	1,690	5,605
P-515 Big Horn Basin	830	1,135	3,990	5,955
P-520 Wind River Basin	4,990	9,580	170	14,740
P-530 Green River Basin	19,480	9,870	28,290	58,270
P-535 Denver Basin	3,800	3,630	790	8,220
P-540 Uinta Basin	44,300	35,550	31,130	110,980
P-541 Piceance, Eagle, Park Basins	38,110	15,755	6,670	51,235
P-550 Paradox Basin	575	1,150	2,300	4,025
P-590 Wyoming-Utah-Idaho Overthrust Belt	800	1,000	2,550	4,350
Subtotal - Conventional and Shale Gas	***114,450***	***80,020***	***77,580***	***263,380***
Coalbed Methane				
P-510 Powder River Coal Region	4,630	13,880		18,510
P-515 Big Horn Coal Region	–	25	800	825
P-520 Wind River Coal Region	–	50	2,400	2,450
P-530 Green River Coal Region; Hanna-Carbon Coal Fields	–	375	8,265	8,640
P-535 Denver Basin Coal Region	–	–	300	300
P-540 Uinta Basin;	130	4,115	1,280	5,525
P-550 Henry Mountains Coal Region, Southwestern Utah Coal Region	–	–	2,745	2,745
P-541 Uinta Coal Region (Unita, Piceance Basins, North and Middle Park Coalfields				
Subtotal - Coalbed Methane	***4,760***	***18,445***	***15,790***	***38,995***
Total Potential Resources	**119,080**	**93,900**	**77,580**	**281,890**
Proved Reserves (2014)	**57,779**	**57,779**	**57,779**	**57,779**
Totals Including Proved Reserves	**176,859**	**151,679**	**135,359**	**339,669**
Maximum Gross Withdrawal (2010)	**4,541**			**4,541**
Implied R/P Ratios (Years of Production)	**38.9**			**74.8**

Notes:
Source: PGC 2014 Report; US EIA.
Most Likely totals differ from sum of Probable, Possible, and Speculative because of statistical sampling.

[21] *Id.* p. 54, Figure 30.

[22] *Id.* p. 54, Table 14 (excludes coalbed methane).

C. Resource Estimates and Economic Life

The resource estimates provide the background for determining a reasonable estimate of the remaining economic life of the Kern River system.[23] One, albeit simple, way to evaluate economic life based on available natural gas supplies is through reserve-to-production ("R/P") ratios. The R/P ratio provides an estimate of the number of years that withdrawals of a given quantity of natural gas can continue, given current estimates of reserves.

To compute an R/P ratio, I set reserves equal to total potential natural gas supplies in the nine supply basins, plus proved reserves for the three-state area.[24] I divided that total by the maximum amount of historic gross withdrawals in the three states, about 4.5 TCF, which occurred in 2010. (Since 2010, gross withdrawals in the three states have decreased overall. In 2015, gross withdrawals were just over 4.0 TCF. The reduction in gross withdrawals likely reflects the general decline in natural gas prices. That is one reason why R/P ratios typically vary over time.

As shown in Table 2, the calculated R/P ratios vary between 38.9 years when only "probable" resources are considered, up to 74.8 years when "possible" and "speculative" resources are added in. Given this range of R/P ratios, along with the Commission's selection of a 40-year economic life in *El Paso*, a 40-year remaining economic life from today (i.e., through the year 2056) for Kern River is reasonable.[25]

IV. DETERMINATION OF DEPRECIATION RATES FOR THE KERN RIVER SYSTEM

Having determined a 40-year remaining economic life for the Kern River system, I next computed separate depreciation rates for each transmission plant account for the original pipeline and all of the subsequent expansions. This involved two main steps: (i) determining the appropriate Iowa-type survivor curve for each transmission account; and (ii) using the selected

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[23] This report does not address issues such as Hubbert curve fits, etc., because such simplistic empirical methods ignore basic economic principles, such as how expectations of future prices drive exploration and development activity. Similarly, this report does not address "effectiveness of exploration" approaches that have been presented in certain FERC dockets in the past. Again, those approaches have been thoroughly discredited and rejected by the Commission.

[24] EIA does not break down proved reserves by supply area.

[25] A 40-year economic life is also consistent with several recent FERC decisions for oil pipelines. For example, in its October 6, 2015, letter order for *Enbridge Energy Company*, DO15-17-000, the Commission accepted that company's depreciation rates for its Flanagan South pipeline that transports crude oil from in Western Canada and the US Bakken, which were based on a 40-year economic life. In its May 20, 2016 letter order for *NuStar Logistics L.P.*, the Commission accepted that company's depreciation rates, which were based on a 50-year economic life based on crude oil production from the Permian Basin, Granite Walsh and Eagle Ford Shale regions. In several other recent oil pipeline cases, the Commission has accepted lower economic lifetimes.

survivor curve, along with data on gross book values, average ages, and depreciation reserves for each account to determine annual depreciation rates using equation (1).

A. Selection of Survivor Curves

I began my determination of appropriate survivor curves for Kern River's transmission system accounts by examining plant additions and retirements for each account, because Kern River has plant addition and retirement data by vintage.[26] Thus, my first task was to determine whether there were sufficient data to estimate survivor curves empirically.

According to Kern River staff, the original system and the various expansions use similar equipment. For example, transmission pipe used to construct the original system is not dissimilar from the pipe used in the expansions. This is important because it means the same survivor curves are applicable to the individual transmission accounts in the original system and expansions. Thus, I applied the selected survivor curve for Account 367 – Mains to the original system and all of the subsequent system expansions.[27] This approach—applying the same survivor curves to the original system and all of the subsequent expansions—was also used by Commission Staff in Docket No. RP04-274-000, and accepted by the Commission in Opinion No. 486. Because the expansions Kern River has developed since that time also use the same equipment, it is appropriate to use the same survivor curves for those expansions as well.

After reviewing the data, I determined there were sufficient retirement data to estimate survivor curves empirically for the following accounts:

- 367.00 Mains
- 368.00 Compressor Station Equipment
- 369.00 Measuring & Regulating Station Equipment
- 370.00 Communication Equipment

For each of these accounts, I performed a least-squares analysis to determine which Iowa survivor curve provided the best fit, using the retirement patterns for Kern-River's Vintage (pre-2002) system.[28]

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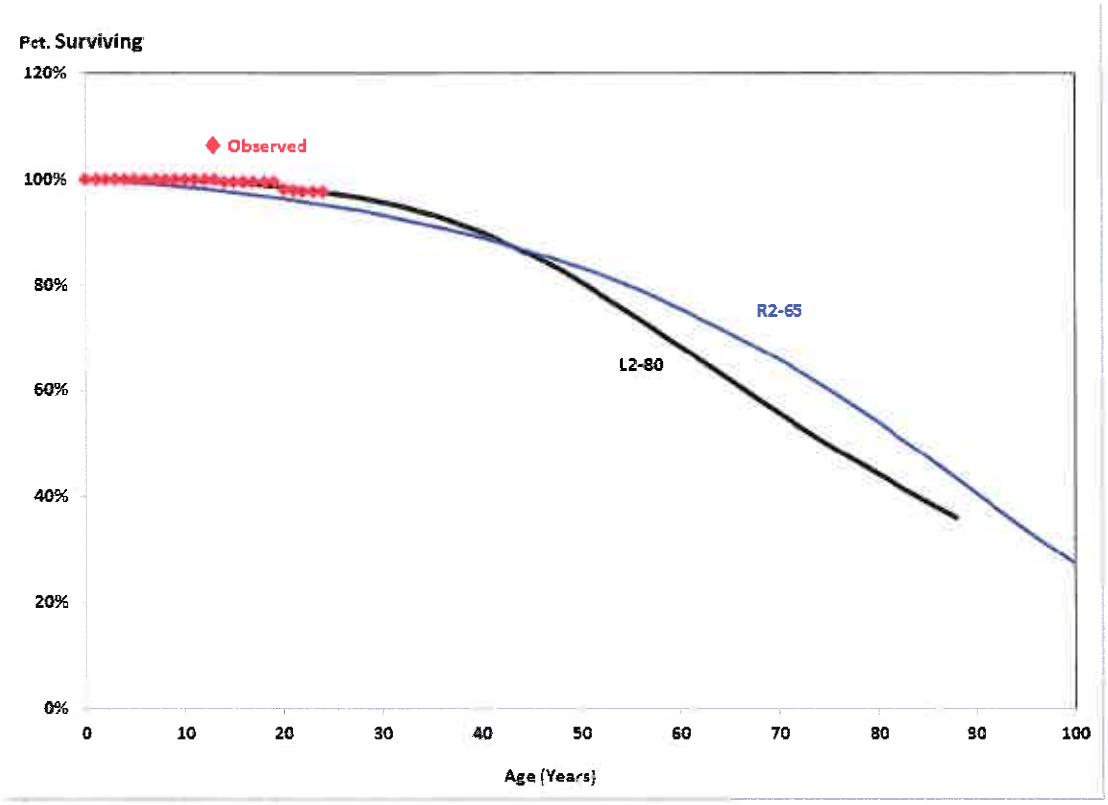
[26] My analysis excludes Account 368.2, Compressor Engines. In Opinion No. 486, the Commission approved treating compressor engines separately from other transmission system assets. The current depreciation rate for compressor engines is 9.92%. Kern River did not request that I perform any analysis to update this depreciation rate.

[27] *See* Direct testimony of FERC Staff witness, Kevin Pewterbaugh, Docket No. RP04-274-000, August 26, 2005 ("Pewterbaugh 2005 Direct"), Exhibit S-8, Schedule 22.

[28] I also tested the sensitivity of the best-fitting survivor curves using available retirement data from subsequent expansions, but found no change in the choice of curves.

For example, Figure 7 illustrates the actual retirements for Account 367 vs. the R2-65 Iowa curve, which was selected by Commission Staff in RP04-274-000 because it is a typical survivor curve used for transmission mains, and the L2-80 Iowa curve I determined empirically. As Figure 7 shows, the pattern of actual retirements for transmission mains on Kern River's original system does not correspond to the Commission's typically-selected R2-65 curve, because the R2-65 curve shows a pattern of greater retirements for the first 45 years or so. Instead, using least-squares analysis I determined an L2-80 survivor curve provides a much better fit over the original system's 24-year history.[29]

Figure 7: Actual Retirements for Acct. 367 vs. R2-65, L2-80 Iowa Curves



I performed similar analyses for the other three accounts for which sufficient retirement data existed on the original system to estimate survivor curves empirically. For the remaining transmission system accounts—(i) 366.1– Compressor Station Structures, (ii) 366-2 – Measuring & Regulating Structures, (iii) 366.2 – Other Structures, and (iv) 371 – Other Equipment—I relied

[29] I have eliminated the rightmost portions of the Iowa curves to better show the differences in the retirement patterns.

on the survivor curves that were selected by Commission Staff and accepted by the Commission in Opinion No. 486.[30]

The resulting survivor curves are shown in Table 3.

Table 3: Selected Survivor Curves – Kern River Transmission Accounts

Transmission Account		Iowa-Type Survivor Curve
365.20	Rights of Way	L2-80
366.10	Structures - Compressor Stations*	R4-40
366.20	Structures - Measuring & Regulating *	R4-40
366.30	Structures - Other Structures*	R4-40
367.00	Mains	L2-80
368.00	Compressor Station Equipment	R2-46
369.00	Measuring & Regulating Station Equipment	R2-44
370.00	Communication Equipment	L3-16
371.00	Miscellaneous Equipment*	R4-20

* - survivor curve previously adopted in Opinion No. 486.

I applied these same selected survivor curves to each of the individual expansion projects.

B. Calculation of Depreciation Rates for Kern River's Original System and Expansion Projects

The process with which I estimated the actual depreciation rates for each transmission account was as follows:

1. Determine the average age for each transmission account on the Original System and the expansions, based on a weighted average of the original (unretired) costs for each vintage of equipment.

2. Use these calculated average ages, the selected survivor curve, and the assumed 40-year economic lifetime of the Kern River system to calculate ARL values for each transmission account.

3. Apply equation (1) using the original book values and depreciation reserves for each transmission account to calculate the resulting depreciation rates.[31]

[30] Pewterbaugh 2005 Direct, Exhibit S-8, Schedule 21.

The results of my calculations are summarized in Table 4.

[31] These results are based on my assumption of zero negative salvage for these calculations. Thus, in equation (1), the term (NS/O) = 0.

Table 4: Computed Depreciation Rates – Kern River System

DEPRECIATION RATES AND AVERAGE REMAINING LIVES BASED ON 40-YEAR TRUNCATION

@ 6/30/2016

	System/Account	Gross Plant	Depreciation Reserve	Net Plant	Average Age of Account	Average Remaining Life	Selected Survivor Curve	Annual Depreciation Expense	Computed Depreciation Rate
		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
	APEX								
365.20	Rights of Way	$ 10,066,982	$ 1,136,047	$ 8,930,935	5.00	38.36	L2-80	$ 232,819	2.31%
366.10	Structures - Compressor Stations	$ 71,263	$ 7,922	$ 63,341	3.67	34.74	R4-40	$ 1,823	2.56%
366.30	Structures - Other Structures	$ 201,780	$ 29,682	$ 172,098	5.00	33.83	R4-40	$ 5,087	2.52%
367.00	Mains	$ 183,474,747	$ 26,989,110	$ 156,485,637	5.00	38.36	L2-80	$ 4,079,396	2.22%
368.00	Compressor Station Equipment	$ 112,103,894	$ 16,489,211	$ 95,614,684	5.00	34.00	R2-46	$ 2,812,197	2.51%
369.00	Measuring & Regulating Station Equipment	$ 142,011	$ 17,065	$ 124,947	4.00	33.77	R2-44	$ 3,700	2.61%
370.00	Communication Equipment	$ 458,510	$ 15,703	$ 442,807	0.81	15.19	L3-16	$ 29,151	6.36%
Total Transmission Plant - APEX		**$ 306,519,188**	**$ 44,684,739**	**$ 261,834,449**		**36.7**		**$ 7,164,173**	**2.34%**
	BIG HORN								
365.20	Rights of Way	$ 71,950	$ 64,637	$ 7,313	14.00	36.86	L2-80	$ 198	0.28%
366.10	Structures - Compressor Stations	$ 2,380	$ 205	$ 2,175	1.00	36.24	R4-40	$ 60	2.52%
366.20	Structures - Measuring & Regulating	$ 359,868	$ 301,122	$ 58,746	13.31	26.75	R4-40	$ 2,196	0.61%
366.30	Structures - Other Structures	$ 146,838	$ 128,790	$ 18,048	13.98	26.12	R4-40	$ 691	0.47%
367.00	Mains	$ 2,283,236	$ 1,998,422	$ 284,815	13.95	36.87	L2-80	$ 7,725	0.34%
369.00	Measuring & Regulating Station Equipment	$ 686,190	$ 593,219	$ 92,971	13.77	29.55	R2-44	$ 3,146	0.46%
370.00	Communication Equipment	$ 114,670	$ 87,508	$ 27,162	13.66	5.20	L3-16	$ 5,223	4.56%
Total Transmission Plant - BIG HORN		**$ 3,665,133**	**$ 3,173,903**	**$ 491,230**		**33.1**		**$ 19,240**	**0.52%**
	2002 EXPANSION								
365.20	Rights of Way	$ 11,889	$ 5,017	$ 6,873	15.00	36.66	L2-80	$ 187	1.58%
366.10	Structures - Compressor Stations	$ 7,783,190	$ 2,252,863	$ 5,530,327	13.96	26.14	R4-40	$ 211,566	2.72%
366.20	Structures - Measuring & Regulating	$ 29,015	$ 8,268	$ 20,747	14.00	26.10	R4-40	$ 795	2.74%
367.00	Mains	$ 571,953	$ 171,019	$ 400,934	14.01	36.86	L2-80	$ 10,877	1.90%
368.00	Compressor Station Equipment	$ 43,778,250	$ 12,989,084	$ 30,789,166	14.20	30.36	R2-46	$ 1,014,136	2.32%
369.00	Measuring & Regulating Station Equipment	$ 546,304	$ 162,080	$ 384,223	14.33	29.27	R2-44	$ 13,127	2.40%
370.00	Communication Equipment	$ 770,724	$ 134,088	$ 636,635	8.12	8.33	L3-16	$ 76,427	9.92%
Total Transmission Plant - 2002 EXPANSION		**$ 53,491,325**	**$ 15,722,420**	**$ 37,768,905**		**29.5**		**$ 1,327,115**	**2.48%**

Table 4 (cont.)

DEPRECIATION RATES AND AVERAGE REMAINING LIVES BASED ON 40-YEAR TRUNCATION

@ 6/30/2016

	System/Account	Gross Plant	Depreciation Reserve	Net Plant	Average Age of Account	Average Remaining Life	Selected Survivor Curve	Annual Depreciation Expense	Computed Depreciation Rate
		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
	2003 EXPANSION								
365.20	Rights of Way	$ 22,157,922	$ 8,124,716	$ 14,033,207	12.99	37.06	L2-80	$ 378,662	1.71%
366.10	Structures - Compressor Stations	$ 25,468,071	$ 9,299,567	$ 16,168,504	12.83	27.20	R4-40	$ 594,430	2.33%
366.20	Structures - Measuring & Regulating	$ 1,231,721	$ 449,290	$ 782,432	12.81	27.20	R4-40	$ 28,766	2.34%
366.30	Structures - Other Structures	$ 1,057,763	$ 352,641	$ 705,122	11.62	28.33	R4-40	$ 24,890	2.35%
367.00	Mains	$ 913,430,084	$ 334,831,971	$ 578,598,113	12.88	37.08	L2-80	$ 15,604,048	1.71%
368.00	Compressor Station Equipment	$ 166,662,309	$ 60,272,282	$ 106,390,026	12.69	31.06	R2-46	$ 3,425,307	2.06%
369.00	Measuring & Regulating Station Equipment	$ 9,542,955	$ 3,484,609	$ 6,058,347	12.83	30.03	R2-44	$ 201,743	2.11%
370.00	Communication Equipment	$ 3,073,832	$ 744,447	$ 2,329,385	8.34	8.15	L3-16	$ 285,814	9.30%
	Total Transmission Plant - 2003 EXPANSION	**$ 1,142,624,657**	**$ 417,559,523**	**$ 725,065,134**		**35.80**		**$ 20,543,660**	**1.80%**
	2010 EXPANSION								
365.20	Rights of Way	$ 913,865	$ 127,133	$ 786,732	6.03	38.21	L2-80	$ 20,590	2.25%
366.10	Structures - Compressor Stations	$ 5,700,631	$ 1,167,317	$ 4,533,314	7.00	32.33	R4-40	$ 140,220	2.46%
366.30	Structures - Other Structures	$ 807,721	$ 165,397	$ 642,324	7.00	32.33	R4-40	$ 19,868	2.46%
367.00	Mains	$ 30,460,970	$ 5,649,767	$ 24,811,203	6.30	38.17	L2-80	$ 650,018	2.13%
368.00	Compressor Station Equipment	$ 15,604,453	$ 3,156,851	$ 12,447,602	6.91	33.34	R2-46	$ 373,353	2.39%
369.00	Measuring & Regulating Station Equipment	$ 1,122,088	$ 229,936	$ 892,152	7.01	32.62	R2-44	$ 27,350	2.44%
	Total Transmission Plant - 2010 EXPANSION	**$ 54,609,729**	**$ 10,496,401**	**$ 44,113,328**		**35.98**		**$ 1,231,399**	**2.25%**
	HIGH DESERT								
365.20	Rights of Way	$ 1,854,422	$ 1,212,982	$ 641,440	14.00	36.86	L2-80	$ 17,402	0.94%
366.20	Structures - Measuring & Regulating	$ 510,104	$ 326,585	$ 183,519	13.93	26.17	R4-40	$ 7,013	1.37%
366.30	Structures - Other Structures	$ 75,800	$ 48,627	$ 27,174	13.95	26.15	R4-40	$ 1,039	1.37%
367.00	Mains	$ 21,787,756	$ 13,789,154	$ 7,998,602	13.76	36.91	L2-80	$ 216,706	0.99%
369.00	Measuring & Regulating Station Equipment	$ 5,645,266	$ 3,059,528	$ 2,585,739	11.76	30.54	R2-44	$ 84,667	1.50%
370.00	Communication Equipment	$ 289,088	$ 153,303	$ 135,785	11.46	6.12	L3-16	$ 22,187	7.67%
	Total Transmission Plant - HIGH DESERT	**$ 30,162,437**	**$ 18,590,178**	**$ 11,572,258**		**35.21**		**$ 349,014**	**1.16%**

Table 4 (cont.)

DEPRECIATION RATES AND AVERAGE REMAINING LIVES BASED ON 40-YEAR TRUNCATION

@ 6/30/2016

	System/Account	Gross Plant	Depreciation Reserve	Net Plant	Average Age of Account	Average Remaining Life	Selected Survivor Curve	Annual Depreciation Expense	Computed Depreciation Rate
		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
	ORIGINAL SYSTEM								
365.20	Rights of Way	$ 36,978,983	$ 22,455,293	$ 14,523,691	23.88	34.64	L2-80	$ 419,275	1.13%
366.10	Structures - Compressor Stations	$ 8,117,217	$ 3,478,650	$ 4,638,567	15.19	24.98	R4-40	$ 185,691	2.29%
366.20	Structures - Measuring & Regulating	$ 4,317,896	$ 1,916,325	$ 2,401,570	16.10	24.12	R4-40	$ 99,568	2.31%
366.30	Structures - Other Structures	$ 6,543,963	$ 2,763,271	$ 3,780,692	15.38	24.80	R4-40	$ 152,447	2.33%
367.00	Mains	$ 878,637,100	$ 578,018,149	$ 300,618,950	22.44	34.99	L2-80	$ 8,591,568	0.98%
368.00	Compressor Station Equipment	$ 96,084,279	$ 50,850,768	$ 45,233,511	19.64	27.65	R2-46	$ 1,635,932	1.70%
369.00	Measuring & Regulating Station Equipment	$ 37,136,592	$ 19,437,599	$ 17,698,992	18.31	27.11	R2-44	$ 652,858	1.76%
370.00	Communication Equipment	$ 5,143,446	$ 1,766,285	$ 3,377,161	12.25	5.77	L3-16	$ 585,297	11.38%
371.00	Miscellaneous Equipment	$ 36,239	$ 14,159	$ 22,081	16.49	5.03	R4-20	$ 4,390	12.11%
	Total Transmission Plant - ORIGINAL SYSTEM	**$ 1,072,995,715**	**$ 680,700,499**	**$ 392,295,216**		**33.73**		**$ 12,327,025**	**1.15%**
	MOUNTAIN PASS								
367.00	Mains	$ 18,552,781	$ 2,143,571	$ 16,409,210	4.00	38.50	L2-80	$ 426,213	2.30%
369.00	Measuring & Regulating Station Equipment	$ 1,497,468	$ 173,016	$ 1,324,452	4.00	33.77	R2-44	$ 39,220	2.62%
	Total Transmission Plant - MOUNTAIN PASS	**$ 20,050,249**	**$ 2,316,587**	**$ 17,733,662**		**38.15**		**$ 465,433**	**2.32%**

NOTES

[1] Source: K-R Data
[2] Source: K-R Data
[3] Equals: [1] - [2].
[4] Based on weighted average plant by vintage. Age as of 6/30/2016, based on half-year convention.
[5] Calculated based on selected survivor curve [6], and [5].
[6] Least-squares analysis. Accts 366.1, 366.2, 366.3, rely on FERC Staff typical curves; ROW assumed same as Mains
[7] Equals: [3] / [5].
[8] Equals [7] / [1].

Table 4 also shows the overall ARL values for the original system and the individual expansion projects. Although, in general, newer expansions have longer ARL values, as would be expected, Table 4 shows that the 2002 Expansion, 29.5 years, is less than the ARL for the Original System, which has an ARL of 33.5 years. The reason for this apparent discrepancy is that the 2002 Expansion consisted primarily of new Compression Station Equipment (Account 368), but very little of much longer-lived Mains (Account 367), whereas Mains account for almost 90% of the original system gross book value. All of the other expansion projects, however, repeat similar patterns as the original system, in which the majority of the gross book value is Mains.

V. CONCLUSIONS

Table 5 provides a summary of the existing and proposed overall transmission depreciation rates for the original system and each expansion project, along with the change in each.

Table 5: Proposed Changes in Depreciation Rates

System Component	Current Depreciation Rate	Proposed Depreciation Rate	Change
APEX	3.00%	2.34%	-0.66%
Big Horn	6.67%	0.52%	-6.15%
Expansion 2002	1.95%	2.48%	0.53%
Expansion 2003	3.00%	1.80%	-1.20%
Expansion 2010	3.00%	2.25%	-0.75%
High Desert	4.76%	1.16%	-3.60%
Original System (Vintage)	1.95%	1.15%	-0.80%
Mountain Pass	3.00%	2.32%	-0.68%

As the table shows, the proposed overall depreciation rates for the Original System and most of the expansion projects are lower than the current depreciation rates. The only exception is for the 2002 Expansion.

As part of a settlement, the 2002 Expansion's depreciation rate was set to 1.95%, the same as the depreciation rate adopted for the Original System in the 2004 rate case. Initially, however, the Original System's overall depreciation rate was set to 4%.[32] Consequently, the 2002 Expansion was, effectively, under-depreciated relative to the Original System. This is why the recommended depreciation rate has increased.

[32] *Kern River Gas Transmission Company*, 50 FERC ¶ 61,069 (1990).

About the Author

Dr. Jonathan Lesser is the President of Continental Economics, Inc., and has over 30 years of experience working for regulated utilities, governments, and as an economic consultant. He has analyzed numerous economic policy and regulatory issues affecting the energy industry, including environmental policy, cost-benefit analysis, industry market structure, market power and market manipulation, the cost of capital, depreciation, cost allocation and rate design, investment under uncertainty, risk management, incentive regulation, and economic impact analysis.

Dr. Lesser has prepared expert testimony and reports in cases before utility commissions in numerous U.S. states; before the Federal Energy Regulatory Commission; before international regulators in Latin America and the Caribbean; and in state and federal courts in commercial litigation cases. He has also testified before the U.S. Congress, and legislative committees in numerous states on energy policy and market issues. Dr. Lesser has also served as an independent arbiter in disputes involving regulatory treatment of utilities and valuation of energy generation assets.

Dr. Lesser is the coauthor of three textbooks: *Environmental Economics and Policy*, *Fundamentals of Energy Regulation*, and *Principles of Utility Corporate Finance*, as well as many academic and trade press articles. He has taught undergraduate and graduate courses in economics and business. He recently finished serving a three-year term as one of the Energy Bar Association "Deans" overseeing education programs on regulatory and ratemaking concepts for new attorneys.

A copy of Dr. Lesser's curriculum vitae can be downloaded from the Continental Economics website: http://www.continentalecon.com/CE%20Jonathan%20Lesser_Commercial_September2016.pdf

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Kern River Gas Transmission Company) Docket No. RP17-_____-000

STIPULATION AND AGREEMENT OF SETTLEMENT

Pursuant to Rules 207(a)(5) and 602 of the Federal Energy Regulatory Commission's ("FERC" or "Commission") Rules of Practice and Procedure,[1] Kern River Gas Transmission Company ("Kern River") hereby submits this Stipulation and Agreement of Settlement ("Stipulation") for approval by the Commission. This Stipulation has substantial support, as evidenced by the fact that all Kern River shippers support or do not oppose the terms and conditions of this Stipulation.

ARTICLE I

INTRODUCTION

Kern River has been engaged in discussions with its long-term firm shippers to solicit input and seek support for a rate proposal that would provide an option for Eligible Shippers[2] to pay lower Period Two[3] transportation rates that are more competitive relative to the projected market value of their capacity, thereby providing such shippers greater benefit from Period Two service. By this Stipulation, Kern River is offering Eligible Shippers an option to elect to be an Alternate Period Two Shipper[4] by choosing a reduced Period Two transportation rate based on an extended Period Two term of 25 years. The

[1] 18 C.F.R. §§ 385.207(a)(5) and 602 (2016).
[2] Eligible Shipper, as such term is defined in Article II(G).
[3] Period Two, as such term is defined in Article II(N).
[4] Alternate Period Two Shipper, as such term is defined in Article II(C).

proposal provides any Eligible Shipper that prefers to retain its current terms and conditions for Period Two service, i.e., rate and term (10 years or 15 years), may do so.

The reduced rates available to Eligible Shippers as an Alternate Period Two Shipper are based on a regulatory depreciation levelization period of twenty-five (25) years for each Shipper Group.[5] Commensurate with the extension of the regulatory depreciation levelization period is an extension of the book depreciable life of Kern River's transmission facilities to December 31, 2056. The proposed extended book depreciation rates are attached hereto in Appendix D.

After extensive discussions and a system-wide meeting, Kern River and the Settling Parties[6] collaboratively drafted this Stipulation to memorialize their comprehensive agreement regarding the Alternate Period Two rate proposal. Kern River and the Settling Parties submit that this Stipulation represents a fair and reasonable resolution of issues related to reducing Period Two transportation rates that is in the public interest.

ARTICLE II

DEFINITIONS

A. Affiliate. Affiliate shall mean any person or entity controlling, controlled by or under common control with any Eligible Shipper.

B. Alternate Period Two. Alternate Period Two shall mean a 25-year term comprised of Period 2A and Period 2B.

[5] Shipper Groups, as such term is defined in Article II(V).
[6] Settling Parties, as such term is defined in Article II(T).

C. Alternate Period Two Shipper. An Alternate Period Two Shipper shall be an Eligible Shipper that makes an election pursuant to Article IV to be bound by the terms and conditions of this Stipulation, including, but not limited to, the alternative rate applicable to such shipper's Shipper Group for the 25-year term of Alternate Period Two.

D. Alternate Period Two TSA. Alternate Period Two TSA shall have the meaning set forth in Article IV(E) and in Section 30.1(c) of the Tariff.

E. August 2011 Compliance Filing. The August 2011 Compliance Filing shall mean the compliance filing dated August 5, 2011, as accepted by the Commission,[7] establishing the eligibility requirements for service at Period Two rates and providing statements, schedules and work papers supporting the Period Two rates in effect prior to this Stipulation.

F. Contesting Party or Contesting Parties. A Contesting Party or Contesting Parties shall mean any one or more parties that contest or seek to modify any provision hereof or file any pleading at the Commission in opposition, in whole or part, to this Stipulation.

G. Eligible Shipper. Eligible Shipper shall have the meaning set forth in Section 30.1(d) of the Tariff.

H. FERC or the Commission. FERC or the Commission shall mean the Federal Energy Regulatory Commission.

I. Final Order. A Final Order shall have the meaning set forth in Article XIII(A).

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[7] *Kern River Gas Transmission Co.*, 136 FERC ¶ 61,141 (2011); *Kern River Gas Transmission Co.*, 136 FERC ¶ 61,241 (2011).

J. New Rate Effective Date. New Rate Effective Date shall have the meaning set forth in Article V.

K. Original Certificate. The Original Certificate shall mean FERC's order approving Kern River's optional certificate in *Kern River Gas Transmission*, 50 FERC ¶ 61,069 (1990).

L. Period 2A and Period 2B. For an Alternate Period Two Shipper, Period 2A shall be the first 10-year or 15-year period, and Period 2B shall be the remaining 15-year or 10-year period, as applicable, for a total Alternate Period Two term of 25 years. Only Period 2A Shippers are eligible for Period 2B.

M. Period One. Period One shall have the meaning set forth in Section 30.1(g) of the Tariff.

N. Period Two. Period Two shall have the meaning set forth in Section 30.1(h) of the Tariff. For avoidance of doubt, the term "Period Two" for an Alternate Period Two Shipper shall be 25 years notwithstanding a Shipper's right to elect not to continue with Period 2B service.

O. Period Two Insulated Rates. Period Two Insulated Rates shall mean the rate charged to Period Two Shippers who elect, pursuant to Article VIII(D), to be insulated from the incremental change attributable to the Rolled-In Rate Credit caused solely by the election of Alternate Period Two by other Rolled-In Shippers.

P. Period Two TSA. Period Two TSA shall have the meaning set forth in Section 30.1(j) of the Tariff.

Q. Period Three. Period Three shall have the meaning set forth in Section 30.1(k) of the Tariff.

R. Rolled-In Rate Credit. Rolled-In Rate Credit shall mean the rate credit based upon the revenues Kern River receives from 2002 Expansion service in excess of the 2002 Expansion cost of service that Kern River applies to the transportation rates for all Rolled-In Shippers.

S. Rolled-In Shippers. Rolled-In Shippers shall mean Original System 10-year Shippers, Original System 15-year Shippers, 2002 Expansion 10-year Shippers and 2002 Expansion 15-year Shippers.

T. Settling Party or Settling Parties. A Settling Party or Settling Parties shall mean any one or more legal entities that is not a Contesting Party. The defined term "Settling Party" shall not include Kern River. As of the date of filing of this Stipulation, known Settling Parties are listed on Appendix A.

U. Shipper. Shipper shall have the meaning set forth in Section 1.30 of the General Terms and Conditions of the Tariff.

V. Shipper Groups. The term Shipper Groups shall mean all the long-term firm transportation shipper groups on Kern River's pipeline. Any individual Shipper Group shall be referred to by its specific name.

W. Tariff. Tariff shall mean Kern River's FERC Gas Tariff, as revised from time to time.

ARTICLE III

APPLICABILITY

A. Alternate Period Two Rate. An Eligible Shipper that elects Alternate Period Two pursuant to this Stipulation will be eligible for the applicable Alternate Period Two rate set forth in Appendix B.[8]

B. No Effect on Period One Rates. Nothing in this Stipulation shall have any effect on Period One rates for any Shipper Group.

C. Alternate Period Two Term. The term of Alternate Period Two for any Alternate Period Two Shipper shall be 25 years, notwithstanding an Alternate Period Two Shipper's right not to elect Period 2B.

D. No Change to Period Two Rates, Beginning Dates, or Terms and Conditions of Service. Other than as expressly set forth herein, implementation of this Stipulation will not impact the existing rates, the beginning dates of Period Two or any of the other terms and conditions of service for Period Two, and it is expressly understood that such rates and terms and conditions of service may only be changed through a filing made pursuant to section 4 or 5 of the Natural Gas Act.

ARTICLE IV

CONDITIONS FOR AND ELECTION OF ALTERNATE PERIOD TWO

A. Current Period One Shippers Electing Alternate Period Two. Any Shipper that becomes a Period Two Eligible Shipper on or after the date of a Final Order may choose

[8] Subject to recomputation of the Rolled-In Rate Credit for those shippers electing Alternate Period Two. *See, e.g.*, Article VIII(D).

Alternate Period Two pursuant to this Stipulation by following the procedures set forth in Tariff Section 30 by making an Alternate Period Two election on or before the Period Two election date set forth in Tariff Section 30.[9]

B. Current Contractually Bound Period Two Shippers Electing Alternate Period Two Rates Prior to Beginning Period Two. Any Period Two Eligible Shipper that has submitted a binding request for Period Two prior to the date Kern River files this Stipulation, but for whom Period Two has not yet begun, may choose Alternate Period Two pursuant to this Stipulation by making an Alternate Period Two Shipper election no later than fifteen (15) calendar days after the date on which an order approving this Stipulation becomes a Final Order;[10] provided, however, any such current Period Two Shipper (i) remains bound by its duly submitted binding request for the Period Two term, as set forth in its executed Period Two TSA; and (ii) makes an election and executes an Alternate Period Two TSA pursuant to Article IV(E), which will be modified solely to reflect the Alternate Period Two election.

C. Current Period Two Shippers Electing Alternate Period Two Rates During Period Two. Any Period Two Eligible Shipper that has submitted a binding request for Period Two prior to the date Kern River files this Stipulation, and for whom Period Two has already begun as of the date of a Final Order, may choose Alternate Period Two pursuant to this Stipulation by making an Alternate Period Two Shipper election no later than fifteen (15) calendar days after the date on which an order approving this Stipulation becomes a Final Order; provided, however, any such current Period Two Shipper: (i)

[9] For the Los Angeles Department of Water and Power, thirty (30) calendar days after approval by its governing body, assuming the approval is granted.

[10] For the Los Angeles Department of Water and Power, thirty (30) calendar days after approval by its governing body, assuming the approval is granted.

remains bound by its duly submitted binding request for the Period Two term, as set forth in its executed Period Two TSA; and (ii) makes an election and executes an Alternate Period Two TSA pursuant to Article IV(E), which will be modified solely to reflect the Alternate Period Two election.

D. Shippers *Not* Electing Alternate Period Two. Any Period Two or Eligible Shipper that does not make an Alternate Period Two election pursuant to this Article IV, notwithstanding its eligibility to do so, retains its existing rights for Period Two and Period Three (to the extent such an Eligible Shipper elects Period Three service) and remains bound by the terms and conditions applicable to its executed Period Two TSA.

E. Restated Contract Required for Current Period Two Shippers that Elect Alternate Period Two. Within thirty (30) calendar days of Kern River's receipt of an Alternate Period Two election by a current Period Two Shipper with an executed Period Two TSA, Kern River shall tender a restated Period Two TSA reflecting service as an Alternate Period Two Shipper (an "Alternate Period Two TSA"), including, if applicable, any non-conforming provisions contained in such Shipper's currently effective Period Two TSA. Other than changes required by this Stipulation, the Alternate Period Two TSA shall have no other material changes to such underlying Period Two TSA. Such Alternate Period Two Shipper shall return such Alternate Period Two TSA to Kern River within ten (10) calendar days of receipt, or such Alternate Period Two Shipper shall forfeit its right to elect Alternate Period Two.[11]

[11] The Los Angeles Department of Water and Power shall return its Alternate Period Two TSA to Kern River within 30 days after approval by its governing body, assuming approval is granted.

F. Non-Conforming Provisions. Commission approval of this Stipulation constitutes approval of the non-conforming provisions required to implement this Stipulation that are made part of Alternate Period Two TSAs for Alternate Period Two. Any Alternate Period Two TSA for Alternate Period Two with a non-conforming provision will be filed with the Commission in accordance with 18 C.F.R. § 154.1(d). Appendix E contains a list of those existing Period Two TSAs that contain non-conforming provisions.

G. Alternate Period Two Election. At the conclusion of Period 2A, an Alternate Period Two Shipper shall be eligible for Period 2B, provided such shipper submits a binding request for Period 2B service in accordance with Tariff Section 30. The term of Period 2B shall be the 15 years or 10 years remaining in Period Two for such Alternate Period Two Shipper.

H. Eligibility of Period Three. Only Alternate Period Two Shippers electing both Period 2A and Period 2B shall be eligible for Period Three at the end of the 25-year term of Period Two for such Alternate Period Two Shipper, *i.e.*, an Alternate Period Two Shipper that elects Period 2A but does not elect Period 2B is not eligible for Period Three.

ARTICLE V

EFFECTIVE DATE

New Rate Effective Date. For all Eligible Shippers that elect Alternate Period Two pursuant to this Stipulation, the new rates set forth in Appendix B shall commence on the Period Two beginning dates in accordance with Tariff Section 30.4 (the "New Rate Effective Date"). Alternate Period Two Shippers for whom Period Two service has already commenced shall be entitled to a refund without interest from the New Rate

Effective Date for the difference between the reservation rate set forth on Appendix B[12] and the actual Period Two reservation rate paid by such shippers. The refund shall be paid within one hundred twenty (120) calendar days of the Final Order.[13]

ARTICLE VI

RATE DESIGN

A. Rate Design. Other than the extended levelization periods, Alternate Period Two rates set forth in Appendix B to this Stipulation are designed in accordance with the Original Certificate and the ending balances (as set forth in this Article) established by the last Kern River rate case in Docket No. RP04-274, as accepted by the Commission in the August 2011 Compliance Filing (if applicable).

B. Rate Base, Cost of Service and Billing Determinants. The rate base, cost of service and billing determinants are those established in Docket No. RP04-274 as of October 31, 2004, as accepted by the Commission in the August 2011 Compliance Filing (if applicable). These rate base, cost of service and billing determinants were utilized to develop the rates set forth in Appendix B for Alternate Period Two Shippers. The methodology used to derive the rates in Appendix B is consistent with Tariff Section 30.4.

C. No Change to Billing Determinants and Cost Allocation Until Next Rate Case. Absent a rate case commenced pursuant to section 4 or section 5 of the Natural Gas Act, the billing determinants and cost allocation for each Shipper Group (which shall be further distinguished by Period Two and Alternate Period Two as a result of this Stipulation) shall

[12] Subject to recomputation of the Rolled-In Rate Credit for those shippers electing Alternate Period Two. *See, e.g.*, Article VIII(D).

[13] For the Los Angeles Department of Water and Power, the refund shall be paid within the later of (i) sixty (60) calendar days of the Final Order or (ii) thirty (30) calendar days after the date on which the Los Angeles Department of Water and Power returns an Alternate Period Two TSA to Kern River.

remain unchanged for purposes of designing rates, including, but not limited to, those billing determinants and cost allocations applicable to any Shipper Group as a result of this Stipulation.

ARTICLE VII

DEPRECIATION AND RATES

A. Book Depreciation. Pursuant to this Stipulation, beginning with the first day of the calendar month following a Final Order, Kern River will extend the book depreciable life of its transmission plant facilities through December 31, 2056, which is approximately a 40-year book depreciable life from the date of this Stipulation, at the rates set forth in Appendix D.

B. Regulatory Depreciation. Pursuant to this Stipulation, Kern River will record regulatory depreciation based on a 25 year Period Two levelization period for all capacity, including capacity not recontracted for Period Two, but excluding capacity associated with shippers that elect to retain the current 10 year or 15 year Period Two regulatory depreciation levelization periods. For Period Two Shippers not electing Alternate Period Two rates, the regulatory depreciation will continue to be recorded at the 10 year or 15 year Period Two regulatory depreciation levelization periods. For each Shipper Group, at the end of Period Two and Alternate Period Two, one hundred percent of the original invested capital as of October 31, 2004, established in Docket No. RP04-274 and accepted by the Commission in the August 2011 Compliance Filing (if applicable), will be fully depreciated for regulatory purposes.

ARTICLE VIII

INTERRUPTIBLE/AUTHORIZED OVERRUN TRANSPORTATION, CAPACITY RELEASE, RECOURSE RATE AND ROLLED-IN CREDIT

A. No Effect on Interruptible/Authorized Overrun Transportation. Nothing in this Stipulation shall affect the rate for interruptible or authorized overrun transportation.

B. No Effect on Recourse Rate. Nothing in this Stipulation shall affect the maximum recourse rate for short-term or long-term firm transportation.

C. Capacity Release. The allowable rate for capacity releases shall be as set forth by Commission regulation. For all Shippers, for purposes of determining whether a capacity release is a capacity release above the "applicable maximum rate" as such term is defined in 18 C.F.R. § 284.8(a)(s), the maximum rate shall be the applicable recourse rate, whether such Shipper becomes an Alternate Period Two Shipper or not.

D. Rolled-In Rate Credit. Upon issuance of a Final Order, Kern River shall file to adjust the Rolled-In Rate Credit as determined in Docket No. RP17-146 within ten (10) calendar days of the election date of an Alternate Period Two Shipper pursuant to Article IV. Until the next rate proceeding under section 4 or 5 of the Natural Gas Act, Kern River shall, pursuant to the conditions below, insulate any Period Two Eligible Shipper that is a Rolled-In Shipper, and that does not elect Alternate Period Two, from the incremental change attributable to the Rolled-In Rate Credit caused solely by the election of Alternate Period Two by other Rolled-In Shippers; provided, however, that any such Rolled-In Shipper desiring such insulation:

a. Shall elect such insulation within ten (10) calendar days of the Rolled-In Rate Credit filing required by this Article VIII(D) pursuant to the procedures set forth in Tariff Section 30 (as amended by the terms of this Stipulation);

b. Shall forfeit its right to elect Alternate Period Two for any and all rolled-in capacity of the Rolled-In Shippers;[14] and

c. Shall not thwart the intention of this Article by consummating a transfer of any kind of its capacity, including, but not limited to, a capacity release to an Affiliate.

A Rolled-In Shipper under this Article VIII(D) shall be subject to the Period Two Insulated Rates, which shall be the rates set forth in Docket No. RP17-146, and which shall be published in the Tariff.

ARTICLE IX

RETENTION OF RIGHTS

Retention of Rights. Except as expressly provided in Article XIV(E), nothing in this Stipulation shall modify any party's rights or obligations under section 4 or 5 of the Natural Gas Act, including, but not limited to, those arising under the Original Certificate or any order or opinion of the Commission.[15]

[14] For clarity, any Rolled-In Shipper electing the Period Two Insulated Rate pursuant to this Article VIII(D) shall not be required to forfeit its right to elect Alternate Period Two for the 2003 Expansion 10-Year Shipper Group, the 2003 Expansion 15-Year Shipper Group, the 2010 Expansion 10-year Shipper Group or the 2010 Expansion 15-Year Shipper Group.

[15] This includes, but is not limited to, all orders and opinions of the Commission in the Opinion No. 486 series, *e.g.*, Opinion No. 486, Opinion No. 486-A, Opinion No. 486-B, Opinion No. 486-C, Opinion No. 486-D, Opinion No. 486-E, Opinion No. 486-F and Opinion No. 486-G.

ARTICLE X

TREATMENT OF CONTESTING PARTIES

Approval of this Stipulation is in the Public Interest. The Settling Parties submit that approval of this Stipulation is in the public interest. If there are any Contesting Parties, the Settling Parties agree that the Commission should decide the merits of any contested settlement issues and not sever any Contesting Party. No Settling Party shall argue or advocate that there are any genuine issues of material fact or that the record does not contain substantial evidence upon which the Commission may base a reasoned decision approving the Stipulation. The Settling Parties agree that the Commission should impose the benefits and obligations of this Stipulation on any Contesting Party.

ARTICLE XI

NON-SEVERABLE

Non-Severable. The provisions of this Stipulation are not severable and may become effective only in accordance with the terms of the Stipulation.

ARTICLE XII

TARIFF CHANGES TO IMPLEMENT THIS STIPULATION

Tariff Sheets. Appendix C to this Stipulation includes a marked version of the applicable portions of Kern River's Tariff showing all changes required to implement the terms of this Stipulation. Immediately after issuance of a Final Order, as defined in Article XIII(A), Kern River will file to implement the tariff records in Appendix C.

ARTICLE XIII

FINAL ORDER, EFFECTIVE DATE AND WITHDRAWAL RIGHTS

A. Final Order. This Stipulation and accompanying tariff sheets shall become effective upon Commission approval without modification or condition unacceptable to Kern River by a final Commission order, subject to the rights of Kern River to withdraw the Stipulation, as provided in Article XIII(B). The order becomes "final" either by issuance of an order on rehearing approving the Stipulation without modification or condition unacceptable to Kern River or, if no rehearing request is filed, thirty (30) days after issuance of the Commission order approving the Stipulation without modification or condition unacceptable to Kern River.

B. Withdrawal Rights. In the event the Commission modifies or conditions this Stipulation or any appendix hereto, including, but not limited to, tariff sheets filed contemporaneously herewith, in a manner unacceptable to Kern River, or if the Commission does not impose the benefits and obligations of this Stipulation on any Contesting Party, Kern River shall have the option, but not the obligation, to withdraw this Stipulation, including tariff sheets, by providing written notice to the Commission and the Settling Parties within fifteen (15) calendar days of the Commission making such modifications or imposing such conditions. If Kern River elects to withdraw this Stipulation, this Stipulation shall be of no further force and effect. In the event the Commission modifies or conditions this Stipulation or any appendix hereto, including, but not limited to, tariff sheets filed contemporaneously herewith, in a manner unacceptable to a Settling Party, such Settling Party may withdraw support for this Stipulation by

providing written notice to the Commission, Kern River and the other Settling Parties within fifteen (15) calendar days of the Commission making such modifications or imposing such conditions, and thereby become a Contesting Party.

ARTICLE XIV

MISCELLANEOUS

A. Non-Precedential Nature of Stipulation. Kern River and the Settling Parties agree that this Stipulation is specifically designed to apply to the unique, current physical, operational, market and other circumstances on the Kern River system and should not be regarded as applicable to, or as a precedent for, any other pipeline system.

B. Privileged Document. This Stipulation is made pursuant to Rule 602 of the Commission's Rules of Practice and Procedure, and, until it is approved and becomes effective, it shall be privileged and of no effect, and it shall not be admissible in evidence in any proceeding.

C. No Settled Practice. Nothing in this Stipulation shall be deemed to create a settled practice within the meaning of the decision of the U.S. Court of Appeals for the District of Columbia Circuit in *Public Service Commission of New York v. FERC* [16] or to affect or shift the burden of proof on any issue in any proceeding. Other than as expressly set forth herein, this Stipulation is in no way an agreement by Kern River or the Settling Parties to any changes in or variation from FERC orders approving the existing Tariff, and this Stipulation may not be used by Kern River or any Settling Party for section 4 or 5 filings to establish a different rate making principle than already existed prior to the approval of this Stipulation.

[16] *Public Service Commission of New York v. FERC*, 642 F.2d 1335 (D.C. Cir. 1980).

D. Standard of Review. The standard for review of proposed changes to the provisions of this Stipulation by Kern River or a Settling Party shall be the "public interest" standard for review set forth in *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*[17] and *Federal Power Commission v. Sierra Pacific Power Co.*[18] (the "Mobile-Sierra doctrine"). The standard of review for any change to this Stipulation proposed by a non-party to the Stipulation, a Contesting Party or the Commission acting *sua sponte*, shall be the most stringent standard permitted by law.

E. Non-Permitted Actions. The following actions shall not be taken by Kern River or any Settling Party: (a) seeking rehearing of an order that approves this Stipulation without condition or modification unacceptable to Kern River or such Settling Party; (b) appealing a Final Order as defined in Article XIII(A); (c) seeking to set aside this Stipulation in whole or in part; (d) challenging this Stipulation's applicability to Kern River or any Settling Party once it has become effective; or (e) advancing any claim or right contrary to the express terms and conditions of this Stipulation during the term of this Stipulation.

F. Conflicts. In the event a statement in the attached Explanatory Statement conflicts with either this Stipulation or a pro forma tariff provision attached to this Stipulation (or an accepted Tariff provision, once this Stipulation is approved), the Stipulation or pro forma tariff provision or the accepted Tariff provision shall control.

[17] *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 U.S. 332 (1956).
[18] *Federal Power Commission v. Sierra Pacific Power Co.*, 350 U.S. 348 (1956).

G. Successors and Assigns. This Stipulation shall be binding on and shall inure to the benefit of the successors, assigns, or purchasers for value of the stock or substantially all the assets of Settling Party.

ARTICLE XV

For the foregoing reasons, Kern River respectfully requests approval of this Stipulation as filed.

Respectfully submitted,

KERN RIVER GAS TRANSMISSION COMPANY

/s/ *J. Gregory Porter*

J. Gregory Porter
Vice President and General Counsel
Darla S. Zink
Senior Counsel
Kern River Gas Transmission Company
1111 South 103rd Street
Omaha, NE 68124-1000
(402) 398-7248
greg.porter@nngco.com
darla.zink@nngco.com

Of Counsel:
Thomas Knight
Jennifer L. Brough
Steve Stojic
Locke Lord LLP
701 8th Street, N.W., Suite 700
Washington, D.C. 20001
(202) 220-6922
tknight@lockelord.com
jbrough@lockelord.com
steve.stojic@lockelord.com

Dated: December 1, 2016

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon all customers as of the date of the filing and all affected state regulatory commissions.

Dated at Omaha, Nebraska this 1st day of December 2016.

/s/ *J. Gregory Porter*

APPENDIX A

List of Settling Parties

Aera Energy LLC
American Pacific Corporation
Anadarko Energy Services Company
Boston Energy Trading & Marketing LLC
Calpine Energy Services, L.P.
Chevron U.S.A. Inc.
CIMA Energy, Ltd.
Citadel Energy Marketing LLC
CRC Marketing, Inc.
EDF Trading North America, LLC
Mercuria Energy America, Inc.
Nevada Cogeneration Associates #1
Nevada Cogeneration Associates #2
Nevada Power Company d/b/a NV Energy
Occidental Energy Marketing, Inc.
Questar Gas Company
RRI Energy Services, LLC
San Diego Gas & Electric
Seneca Resources Corporation
Sequent Energy Management, L.P.
Shell Energy North America (US) L.P.
Southern California Gas Company
Southwest Gas Corporation

APPENDIX B

Alternate Period Two Rates[19]

[19] Subject to recomputation of the Rolled-In Rate Credit for those shippers electing Alternate Period Two. *See, e.g.*, Article VIII(D).

Shipper Group	Current Period Two Rate --Daily Reservation / Demand Rates	Alternate Period Two Rate – Daily Reservation / Demand Rates[1]	
		Rate	Diff.
Original System 10-Year – 10-year Period Two Service:			
May 1, 2012 [2]	$0.2608	N/A[3]	
May 1, 2017 [4]	$0.2720	N/A[3]	
Original System 10-Year – 15-year Period Two Service:			
May 1, 2012 [2]	$0.2218	N/A[3]	
May 1, 2017 [4]	$0.2329	N/A[3]	
Original System 15-Year – 10-year Period Two Service:			
October 1, 2016 [2]	$0.2187	$0.1622	($0.0565)
January 1, 2017	$0.2193	$0.1626	($0.0567)
May 1, 2017 [3]	$0.2298	$0.1747	($0.0551)
Original System 15-Year – 15-year Period Two Service:			
October 1, 2016 [2]	$0.1841	$0.1622	($0.0219)
January 1, 2017	$0.1846	$0.1626	($0.0220)
May 1, 2017 [3]	$0.1951	$0.1747	($0.0204)
2002 Expansion 10-Year – 10-year Period Two Service:			
May 1, 2012 [2]	$0.2608	N/A[3]	
May 1, 2017 [4]	$0.2329	N/A[3]	
2002 Expansion 10-Year – 15-year Period Two Service:			
May 1, 2012 [2]	$0.2218	$0.1971	($0.0247)
January 1, 2013	$0.2224	$0.1976	($0.0248)
January 1, 2016 [2]	$0.2218	$0.1971	($0.0247)
January 1, 2017	$0.2224	$0.1976	($0.0248)
May 1, 2017 [4]	$0.2329	$0.2097	($0.0232)
2002 Expansion 15-Year – 10-year Period Two Service:			
May 1, 2017 [3]	$0.2298	N/A[3]	
2002 Expansion 15-Year – 15-year Period Two Service:			
May 1, 2017 [3]	$0.1951	$0.1747	($0.0204)
2003 Expansion 10-Year – 10-year Period Two Service:			
May 1, 2013 [3]	$0.2565[5]	N/A[3]	

Shipper Group	Current Period Two Rate -- Daily Reservation / Demand Rates	Alternate Period Two Rate – Daily Reservation / Demand Rates[1]	
		Rate	Diff.
2003 Expansion 10-Year – 15-year Period Two Service:			
May 1, 2013	$0.2238	$0.2027	($0.0211)
January 1, 2016 [2]	$0.2232	$0.2021	($0.0211)
January 1, 2017	$0.2238	$0.2027	($0.0211)
May 1, 2017	$0.2238	$0.2027	($0.0211)
2003 Expansion 15-Year – 10-year Period Two Service:			
May 1, 2018 [3]	$0.2543	$0.2018	($0.0525)
2003 Expansion 15-Year – 15-year Period Two Service:			
May 1, 2018 [3]	$0.2224	$0.2018	($0.0206)
2010 Expansion 10-Year – 10-year Period Two Service [5]:			
November 1, 2020 [6]	$0.2558	$0.2021	($0.0538)
2010 Expansion 10-Year – 15-year Period Two Service:			
November 1, 2020 [6]	$0.2232	$0.2021	($0.0211)
2010 Expansion 15-Year – 10-year Period Two Service:			
November 1, 2025	$0.2543	$0.2018	($0.0525)
2010 Expansion 15-Year – 15-year Period Two Service:			
November 1, 2025	$0.2224	$0.2018	($0.0206)

1. Alternate Period Two rates for all shipper groups are calculated commencing on the applicable Period Two starting dates.
2. Rates are adjusted to reflect leap year rates.
3. No eligible shippers requested Period Two Service.
4. Rate is subject to re-computation of the Rolled-In Rate Credit for shippers electing Alternate Period Two. *See, e.g.,* Article VIII(D).
5. Rate shown, although not applicable to 2003 Expansion 10-year capacity because there were no 2003 Expansion 10-Year shippers that elected 10-Year Period Two Service, is calculated by reference to the 2003 Expansion 10-Year capacity, which forms the basis for the rate applicable to 2010 Expansion 10-year capacity with a 10-year term for Period Two.
6. Rates are adjusted to reflect leap year rates for the 2010 Expansion 10-year shippers who step down on November 1, 2020. The non-leap year rates are $0.2565 and $0.2027 for 10-year service, respectively, and $0.2238 and $0.2027 for 15-year service, respectively.

APPENDIX C

Marked Tariff Sheets

Kern River Gas Transmission Company
Docket No. RP17-____
December 1, 2016

Appendix C

Pro Forma Tariff Sheets

(Marked*)

*The proposed revisions cause the content of the currently-effective tariff sheets to exceed the available space on those sheets. The marked versions of the tariff sheets reflect only additions and deletions. Revisions due solely to currently-effective language being moved from one tariff sheet to another are not marked.

STATEMENT OF RATES 1/
RATE SCHEDULE KRF-1
PERIOD TWO RATES/ALTERNATE PERIOD TWO RATES FOR FIRM ROLLED-IN RATE SERVICE 2/
ORIGINAL SYSTEM/2002 EXPANSION PROJECT
(RATES PER DTH)

Base Tariff Rate 3/

Period Two Reservation/Demand Rates

	Period Two Insulated Rates 5/	Period Two Rates
Period Two Reservation/Demand Rates Applicable to Former Period One 10-Year Rolled-in Rate Shippers:		
10-Year Period Two Rate:		
Daily Reservation/Demand Rate 4/		
Maximum	$ 0.2720	$ 0.2743
Minimum	$ 0.0000	$ 0.0000
15-Year Period Two Rate:		
Daily Reservation/Demand Rate 4/		
Maximum	$ 0.2329	$ 0.2352
Minimum	$ 0.0000	$ 0.0000
Period Two Reservation/Demand Rates Applicable to Former Period One 15-Year Rolled-in Rate Shippers:		
10-Year Period Two Rate:		
Daily Reservation/Demand Rate 4/		
Maximum	$ 0.2298	$ 0.2321
Minimum	$ 0.0000	$ 0.0000
15-Year Period Two Rate:		
Daily Reservation/Demand Rate 4/		
Maximum	$ 0.1951	$ 0.1974
Minimum	$ 0.0000	$ 0.0000

Alternate Period Two Reservation/Demand Rates

Alternate Period Two Reservation/Demand Rate Applicable to Former Period One 10-Year Rolled-in Rate Shippers:	
25-Year Period Two Rate:	
Daily Reservation/Demand Rate 4/	
Maximum	$ 0.2097
Minimum	$ 0.0000
Alternate Period Two Reservation/Demand Rate Applicable to Former Period One 15-Year Rolled-in Rate Shippers:	
25-Year Period Two Rate:	
Daily Reservation/Demand Rate 4/	
Maximum	$ 0.1747
Minimum	$ 0.0000

STATEMENT OF RATES 1/
RATE SCHEDULE KRF-1
PERIOD TWO RATES FOR FIRM ROLLED-IN RATE SERVICE 2/
ORIGINAL SYSTEM/2002 EXPANSION PROJECT
(RATES PER DTH)

(Continued)

Other Rates

Firm Transportation Commodity/Usage Rate:	
Maximum	$ 0.0031
Minimum	$ 0.0031
Authorized Overrun Rate:	
Maximum	$ 0.4380
Minimum	$ 0.0037

1/ All costs included in rates are transmission costs. Kern River provides no storage or gathering services.

2/ The rates shown on this sheet are applicable to Shippers in accordance with Section 30 of the General Terms and Conditions of this Tariff.

3/ Transportation rates set forth herein are exclusive of ACA Surcharges, which all Shippers must pay pursuant to Section 5.4 of Rate Schedule KRF-1, and fuel used and lost and unaccounted-for gas, which all Shippers must furnish in-kind each Day by applying a fuel reimbursement factor to receipt point nominations, pursuant to Section 12 of the General Terms and Conditions.

In addition, rolled-in rate shippers are subject to an electric compressor fuel surcharge for quantities scheduled for delivery from any receipt point on Transporter's wholly-owned system or from the Dag Moj receipt point to delivery points downstream of the Daggett compressor station. The surcharge is $0.0005/Dth for quantities within contract demand and $0.0003/Dth for authorized overrun quantities.

4/ All reservation rates are daily rates computed on the basis of 365 days per year, except that such rates for leap years are computed on the basis of 366 days.

5/ See Section 30.2(e) of the General Terms and Conditions of Transporter's Tariff for eligibility regarding Period Two Insulated Rates.

STATEMENT OF RATES 1/
RATE SCHEDULE KRF-1
FIRM INCREMENTAL RATE SERVICE
PERIOD TWO RATES/ALTERNATE PERIOD TWO RATES FOR 2003 EXPANSION PROJECT 2/
(RATES PER DTH)

Base Tariff Rate 3/

Period Two Reservation/Demand Rates

Period Two Reservation/Demand Rates Applicable to Former Period One 10-Year 2003 Expansion Shippers:

10-Year Period Two Rate:	
Daily Reservation/Demand Rate 4/	
Maximum	$ 0.2565
Minimum	$ 0.0000
15-Year Period Two Rate:	
Daily Reservation/Demand Rate 4/	
Maximum	$ 0.2238
Minimum	$ 0.0000

Alternate Period Two Reservation Demand Rates

Alternate Period Two Reservation/Demand Rate Applicable to Former Period One 10-Year 2003 Expansion Shippers

25-Year Alternate Period Two Rate:	
Daily Reservation/Demand Rate 4/	
Maximum	$ 0.2027
Minimum	$ 0.0000

Other Rates

Firm Transportation Commodity/Usage Rate:	
Maximum	$ 0.0044
Minimum	$ 0.0044
Authorized Overrun Rate:	
Maximum	$ 0.4392
Minimum	$ 0.0037

1/ All costs included in rates are transmission costs. Kern River provides no storage or gathering services.

2/ The rates shown on this sheet are applicable to Shippers in accordance with Section 30 of the General Terms and Conditions of this Tariff.

STATEMENT OF RATES 1/
RATE SCHEDULE KRF-1
FIRM INCREMENTAL RATE SERVICE
PERIOD TWO RATES/ALTERNATE PERIOD TWO RATES FOR 2003 EXPANSION PROJECT 2/
(RATES PER DTH)

Base Tariff Rate 3/

Period Two Reservation/Demand Rates

(continued)

3/ Transportation rates set forth herein are exclusive of ACA Surcharges, which all Shippers must pay pursuant to Section 5.4 of Rate Schedule KRF-1, and fuel used and lost and unaccounted-for gas, which all Shippers must furnish in-kind each Day by applying a fuel reimbursement factor to receipt point nominations, pursuant to Section 12 of the General Terms and Conditions.

In addition, 2003 Expansion rate shippers are subject to an electric compressor fuel surcharge for quantities scheduled for delivery from any receipt point on Transporter's wholly-owned system or from the Dag Moj receipt point to delivery points downstream of the Daggett compressor station. The surcharge is $0.0001/Dth for quantities within contract demand and $0.0003/Dth for authorized overrun quantities.

4/ All reservation rates are daily rates computed on the basis of 365 days per year, except that such rates for leap years are computed on the basis of 366 days.

GENERAL TERMS AND CONDITIONS
(Continued)

30. CONTRACTING FOR SERVICE SUBJECT TO PERIOD TWO RATES AND ALTERNATE PERIOD TWO RATES

This section sets forth the conditions for, and applicability of, Period Two rates, and Alternate Period Two rates, the contracting process for service subject to Period Two rates and Alternate Period Two rates, and certain requirements related to Period Three.

30.1 Definitions.

(a) Alternate Period Two Stipulation: The Stipulation and Agreement of Settlement pertaining to Alternate Period Two dated December 1, 2016.

(b) Alternate Period Two: A 25-year term comprised of Period 2A and Period 2B that commences when an Eligible Shipper's Period One Transportation Service Agreement ends.

(c) Alternate Period Two TSA: A transportation service agreement entered into between Transporter and Eligible Shipper that contains a DMDQ no greater than Eligible Shipper's Period One DMDQ for the term set forth below:

(1) For an Eligible Shipper that has executed a Period Two TSA prior to May 1, 2017, or has elected Period Two service prior to May 1, 2017, the Period 2A term of the Alternate Period Two TSA shall be equal to the term of such Eligible Shipper's Period Two TSA. At Shipper's option, the Period 2A term shall be followed by a Period 2B term of 10 years or 15 years, as applicable, for a total Alternate Period Two term of 25 years; and

(2) For all other Eligible Shippers, the Period 2A term of the Alternate Period Two TSA shall be either 10 or 15 years. At Shipper's option, the Period 2A term shall be followed by a Period 2B term of 10 or 15 years, as applicable, for a total Alternate Period Two term of 25 years.

(d) Eligible Shipper: A Shipper (or its successor, assignee, or permanent replacement shipper) that has paid the maximum applicable levelized rate for a full 10-year or 15-year Period One contract term, that has met the conditions of Section 30.2, and to which the Period Two Rates or Alternate Period Two Rates are available pursuant to Section 30.3.

(e) Period 2A: The initial 10-year or 15-year term of an Alternate Period Two TSA.

(f) Period 2B: The 10-year or 15-year term of an Alternate Period Two TSA that commences immediately upon the expiration of Period 2A, for a total Alternate Period Two term of 25 years.

(g~~b~~) Period One: The original term of an Eligible Shipper's transportation service agreement, as extended (if applicable) pursuant to the 2000 Extended Term Rate Settlement approved by the Commission August 17, 2000 in Docket No. RP00-298.

(h~~e~~) Period Two: The contract term that commences when the primary term of an Eligible Shipper's Period One transportation service agreement ends and during which an Eligible shipper will be charged Period Two rates or Period Two Insulated Rates, as applicable.

GENERAL TERMS AND CONDITIONS
(Continued)

30. CONTRACTING FOR SERVICE SUBJECT TO PERIOD TWO RATES (Continued)

30.1 Definitions. (Continued)

(i) Period Two Insulated Rates: The rates Transporter will provide to Original System and 2002 Expansion Shippers that have submitted to Transporter a valid insulation election in accordance with Section 30.2 (e) to be insulated from the incremental rate increase resulting solely from the reduction in the rolled-in credit attributable to 2002 Expansion Shippers electing Alternate Period Two rates.

(j) Period Two TSA: A new transportation service agreement entered into between Transporter and Shipper that contains a DMDQ no greater than the Eligible Shipper's Period One DMDQ, is for a term of either 10 or 15 years, and commences on the first day of Period Two.

(ek) Period Three: The term that commences when the ~~primary~~ term of an Eligible Shipper's Period Two TSA or Period 2B or Alternate Period Two TSA ends, whichever is applicable. ~~ends.~~

30.2 Conditions of Eligibility for Period Two Rates and Alternate Period Two Rates.

An Eligible Shipper may retain its DMDQ in Period Two or Alternate Period Two and will qualify for Period Two rates or Alternate Period Two rates by complying with the conditions set forth herein.

(a) Except as provided in section 30.2 (b) below, ~~A~~an Eligible Shipper must submit to Transporter a binding request for Period Two or Alternate Period Two transportation service not less than twelve (12) months prior to the expiration of the ~~primary~~ term of its Period One transportation service agreement; provided, however, that ~~Eligible Shippers, whose Period One transportation service agreements expire April 30, 2012, must submit a binding request for transportation service no later than November 1, 2011, and~~ Eligible Shippers with only seasonal service must submit a binding request for transportation service at the same time as the other Eligible Shippers in their respective Shipper group. Such request shall be signed by an authorized representative of the Shipper, shall state the requested DMDQ and shall specify either a 10- or 15-year term for Eligible Shipper's Period Two TSA or a 10-year or 15-year Period 2A term for an Alternate Period Two TSA. If the requested DMDQ is less than Eligible Shipper's then-current DMDQ, the request shall state the associated reduction to the Shipper's primary receipt and delivery point entitlements. An Eligible Shipper's Period Two TSA or Alternate Period Two TSA, as applicable, must be for the same calendar months as its Period One transportation service. If applicable, an Eligible Shipper must submit a binding request for Period 2B transportation service not less than twelve (12) months prior to the expiration of the Period 2A term of its Alternate Period Two TSA.

GENERAL TERMS AND CONDITIONS
(Continued)

30. CONTRACTING FOR SERVICE SUBJECT TO PERIOD TWO RATES (Continued)

30.2 Conditions of Eligibility for Period Two Rates. (Continued)

(b) An Eligible Shipper that has executed a Period Two TSA prior to May 1, 2017, or that has elected Period Two service prior to May 1, 2017, may elect Alternate Period Two by submitting a binding request to Transporter no later than fifteen (15) calendar days after the date on which an order approving the Alternate Period Two Stipulation becomes final. Within thirty (30) days of receipt of such a request, Transporter shall tender to Eligible Shipper an Alternate Period Two TSA that restates its Period Two TSA and includes, if applicable, the previously-approved nonconforming provisions applicable to Eligible Shipper's Period Two TSA. Eligible Shipper will execute and return to Transporter the Alternate Period Two TSA within ten (10) calendar days of receipt, or Eligible Shipper shall forfeit its right to Alternate Period Two service.

(c~~b~~) All Eligible Shippers that wish to retain their DMDQs at Period Two rates or Alternate Period Two rates at the end of the ~~primary~~ term of their Period One transportation service agreements must enter into a Period Two TSA or an Alternate Period Two TSA, as applicable.

(d~~c~~) Except as provided in Section 30.2 (b), ~~W~~within ninety (90) days after receipt of Eligible Shipper's request, Transporter will tender a Period Two TSA or an Alternate Period Two TSA, as applicable, to each Eligible Shipper, ~~subject to the provisions of Section 30.2(b),~~ and Eligible Shipper must execute and return to Transporter such Period Two or Alternate Period Two TSA within ten (10) business days of tender.

(e~~d~~) Original System and 2002 Expansion Shippers that elect Period Two Insulated Rates shall notify Transporter in writing of such election within ten (10) calendar days after Transporter submits a tariff filing to revise the Period Two rates previously filed in Docket No. RP17-146 to reflect an adjustment to the rolled-in rate credit resulting from 2002 Expansion Shippers that elect Alternate Period Two. Such Shippers shall forfeit their right to elect Alternate Period Two for any of their rolled-in capacity.

~~Eligible Shippers whose Period One transportation service agreements end September 30, 2011 must submit a binding request for transportation service no later than September 1, 2011. Transporter will tender Period Two TSAs by September 16, 2011, and Eligible Shippers must execute and return to Transporter the agreements by September 29, 2011.~~

30.3 Availability.

Subject to compliance with the requirements of this Section 30, and in accordance with Section 30.4 below, the Period Two Rates or Alternate Period Two rates, as applicable, are available to Eligible Shippers that are part of the Rolled-in shipper group or part of the 2003 Expansion/2010 Expansion shipper group, respectively, as follows

Period Two Rates:

(a) October 1, 2011 Period Two Rate. The 10-year or 15-year Rolled-in Period Two Rate, as applicable, is effective October 1, 2011 for Eligible Shippers that are part of the Rolled-

in Original System shipper group whose Period One transportation service agreements end September 30, 2011, and that enter into Period Two TSAs that commence October 1, 2011;

GENERAL TERMS AND CONDITIONS
(Continued)

30. CONTRACTING FOR SERVICE SUBJECT TO PERIOD TWO RATES (Continued)

30.3 Availability. (Continued)

(b) May 1, 2012 Period Two Rate. The 10-year or 15-year Rolled-in Period Two Rate, as applicable, is effective:

(1) May 1, 2012 for Eligible Shippers that are part of the Rolled-in 2002 Expansion shipper group whose Period One transportation service agreements end April 30, 2012, and that enter into Period Two TSAs that commence May 1, 2012; and

(2) May 1, 2012 for Eligible Shippers that are part of the Rolled-in Original System shipper group whose Period One transportation service agreements ended September 30, 2011 and that entered into Period Two TSAs that commenced October 1, 2011.

(c) May 1, 2013 Period Two Rate. The 10-year or 15-year, 2003 Expansion Period Two Rate, as applicable, is effective May 1, 2013 for Eligible Shippers that are part of the 2003 Expansion shipper group whose Period One transportation service agreements end April 30, 2013 and that enter into Period Two TSAs that commence May 1, 2013.

(d) October 1, 2016 Period Two Rate. The 10-year or 15-year, Rolled-in Period Two Rate, as applicable, is effective:

(1) October 1, 2016 for Eligible Shippers that are part of the Rolled-in Original System shipper group whose Period One transportation service agreements end February 29, 2016 or September 30, 2016 and that enter into Period Two TSAs that commence October 1, 2016; and

(2) March 1, 2017 for Eligible Shippers that are part of the Rolled-in Original System shipper group whose Period One transportation service agreements end February 28, 2017 and that enter into Period Two TSAs that commence March 1, 2017.

(e) May 1, 2017 Period Two Rate Applicable to the Former Period One 15-year Rolled-in Shipper Group. The 10-year or 15-year, Rolled-in Period Two Rate, as applicable, is effective:

(1) May 1, 2017 for Eligible Shippers that are part of the Rolled-in 2002 Expansion shipper group whose Period One transportation service agreements end April 30, 2017, and that enter into Period Two TSAs that commence May 1, 2017;

(2) May 1, 2017 for Eligible Shippers that are part of the Rolled-in Original System shipper group whose Period One transportation service agreements ended on September 30, 2016 and that entered into Period Two TSAs that commenced October 1, 2016 or March 1, 2017; and

(3) May 1, 2018 for Eligible Shippers that are part of the Rolled-in Original System shipper group whose Period One transportation service agreements end April 30, 2018, and that enter into Period Two TSAs that commence May 1, 2018.

GENERAL TERMS AND CONDITIONS
(Continued)

30. CONTRACTING FOR SERVICE SUBJECT TO PERIOD TWO RATES (Continued)

30.3 Availability (Continued)

(f) May 1, 2017 Period Two Rate Applicable to the Former Period One 10-year Rolled-in Shipper Group. The 10-year or 15-year, Rolled-in Period Two Rate, as applicable, is effective:

(1) May 1, 2017 for Eligible Shippers that are part of the Rolled-in Original System shipper group whose Period One transportation service agreements ended September 30, 2011 and that entered into Period Two TSAs that commenced October 1, 2011; and

(2) May 1, 2017 for Eligible Shippers that are part of the Rolled-in 2002 Expansion shipper group whose Period One transportation service agreements ended on April 30, 2012 and that entered into Period Two TSAs that commenced May 1, 2012.

(g) May 1, 2018 Period Two Rate. The 10-year or 15-year, 2003 Expansion Period Two Rate, as applicable, is effective May 1, 2018 for Eligible Shippers that are part of the 2003 Expansion shipper group whose transportation service agreements end April 30, 2018 and that enter into Period Two TSAs that commence May 1, 2018.

(h) November 1, 2020 Period Two Rate. The 10-year or 15-year 2010 Expansion Period Two Rate, as applicable, is effective November 1, 2020 for Eligible Shippers that are part of the 2010 Expansion shipper group whose transportation service agreements end October 31, 2020 and that enter into Period Two TSAs that commence November 1, 2020.

(i) November 1, 2025 Period Two Rate. The 10-year or 15-year 2010 Expansion Period Two Rate, as applicable, is effective November 1, 2025 for Eligible Shippers that are part of the 2010 Expansion shipper group whose transportation service agreements end October 31, 2025 and that enter into Period Two TSAs that commence November 1, 2025.

Alternate Period Two Rates:

(j) October 1, 2011 Alternate Period Two Rate. The October 1, 2011 Alternate Period Two Rate is effective from October 1, 2011, through April 30, 2012, for Original System 10-year Shippers that entered into Period Two TSAs commencing October 1, 2011, and that submitted binding requests for Alternate Period Two in accordance with Section 30.2(b).

(k) May 1, 2012 Alternate Period Two Rate. The May 1, 2012 Alternate Period Two Rate is effective from May 1, 2012, through April 30, 2017, for the following Shippers:

(1) Original System 10-year Shippers that entered into Period Two TSAs commencing October 1, 2011, and that submitted binding requests for Alternate Period Two in accordance with Section 30.2(b).

(2) 2002 Expansion 10-year Shippers that entered into Period Two TSAs commencing May 1, 2012, and that submitted binding requests for Alternate Period Two in accordance with Section 30.2(b).

GENERAL TERMS AND CONDITIONS
(Continued)

30. CONTRACTING FOR SERVICE SUBJECT TO PERIOD TWO RATES

30.3 Availability (Continued)

Alternate Period Two Rates (Continued)

(l) May 1, 2013 Alternate Period Two Rate. The May 1, 2013 Alternate Period Two Rate is effective from May 1, 2013, through April 30, 2017, for 2003 Expansion 10-year Shippers that entered into Period Two TSAs commencing May 1, 2013, and that submitted binding requests for Alternate Period Two in accordance with Section 30.2(b).

(m) October 1, 2016 Alternate Period Two Rates. The October 1, 2016 Alternate Period Two Rate is effective from October 1, 2016, through April 30, 2017, for Original System 15-year Shippers that entered into Period Two TSAs commencing October 1, 2016, and that submitted binding requests for Alternate Period Two in accordance with Section 30.2(b).

(n) May 1, 2017 Alternate Period Two Rates. The applicable May 1, 2017 Alternate Period Two Rate (A, B or C) as reflected on the table on Sheet No. 299H is effective as follows:

(1) May 1, 2017 (A):

(i) Original System 10-year Shippers that entered into Period Two TSAs commencing October 1, 2011, and that submitted binding requests for Alternate Period Two in accordance with Section 30.2(b); and

(ii) 2002 Expansion 10-year Shippers that entered into Period Two TSAs commencing May 1, 2012, and that submitted binding requests for Alternate Period Two in accordance with Section 30.2(b).

(2) May 1, 2017 (B):

(i) 2003 Expansion 10-year Shippers that entered into Period Two TSAs commencing May 1, 2013, and that submitted binding requests for Alternate Period Two in accordance with Section 30.2(b).

(3) May 1, 2017 (C):

(i) Original System 15-year Shippers that entered into Period Two TSAs commencing October 1, 2016 and that submitted binding requests for Alternate Period Two in accordance with Section 30.2(b); and

(ii) 2002 Expansion 15-year Shippers that enter into Period Two TSAs commencing May 1, 2017, and that submitted binding requests for Alternate Period Two in accordance with Section 30.2(b).

(o) May 1, 2018 Alternate Period Two Rate. The May 1, 2018 Alternate Period Two Rate is effective May 1, 2018 for Eligible Shippers that are part of the 2003 Expansion 15-year shipper group that enter into Alternate Period Two TSAs that commence May 1, 2018.

~~RESERVED FOR FUTURE USE~~ GENERAL TERMS AND CONDITIONS
(Continued)

30. CONTRACTING FOR SERVICE SUBJECT TO PERIOD TWO RATES

30.3 Availability (Continued)

Alternate Period Two Rates (Continued)

(p) November 1, 2020 Alternate Period Two Rate. The November 1, 2020 Alternate Period Two Rate is effective November 1, 2020 for Eligible Shippers that are part of the 2010 Expansion 10-year shipper group that enter into Alternate Period Two TSAs commencing November 1, 2020.

(q) November 1, 2025 Alternate Period Two Rate. The November 1, 2025 Alternate Period Two Rate is effective November 1, 2025 for Eligible Shippers that are part of the 2010 Expansion 15-year shipper group that enter into Alternate Period Two TSAs commencing November 1, 2025.

30.4 Period Two Rates, Period Two Insulated Rates and Alternate Period Two Rates:~~.~~

~~Except for the rates to be effective October 1, 2011 and May 1, 2012, and as authorized by paragraphs 43-44 of the Order on Compliance Tariff Records issued August 29, 2011 in Docket No. RP11-2356-000, 136 FERC Para 61,141,~~ Transporter will make a limited rate change filing under Section 4 of the Natural Gas Act ("limited section 4 filing") to establish and make effective the applicable reservation rate(s) for Period Two rates and Alternate Period Two rates no less than six months prior to the effective date of each ~~Period Two rate; provided, however, for the rates to be effective May 1, 2012, Transporter will make a limited section 4 filing establishing the rate(s) for Period Two no less than five months prior to the effective date.~~ rate; provided, however

(a) The Period Two rates and Period Two Insulated Rates for periods prior to the effective date of the Alternate Period Two Stipulation, which will be used for refund purposes only, are set forth on Appendix B to the Alternate Period Two Stipulation; and

(b) Transporter will make a limited section 4 filing within ten (10) calendar days following the deadline set forth in Section 30.2 (b) for receipt by Transporter of binding requests for Alternate Period Two service from existing Period Two Shippers. The purpose of the filing is to establish the following rates to be effective May 1, 2017: (1) the Period Two rates for Rolled-in Shippers that do not elect to be insulated, (2) the Alternate Period Two rates for Rolled-in Shippers, and (3) the Alternate Period Two rates for 10-year 2003 Expansion Shippers.

Any limited section 4 filing made pursuant to this provision shall involve determination only of the Period Two rate(s) and Alternate Period Two rate(s) identified in such filing.

The methodology used to derive the Period Two rates and Alternate Period Two rates filed pursuant to this provision will be consistent with the methodology used to derive the applicable rates shown on Sheet No. 299H~~E~~; provided, however,

(c) Transporter may adjust such rates as necessary to reflect leap years and any current or future surcharges.

(d) In accordance with paragraph 44 of -the Order on Compliance Tariff Records issued August 29, 2011in Docket No. RP11-2356-000, 136 FERC Para 61,141, rates applicable to the Rolled-in shipper group, as may be revised from time to time, will be dependent

upon and shall be adjusted by Transporter according to the duration of Period Two or Alternate Period Two TSAs selected by other Eligible Shippers in the Rolled-in shipper group and will reflect adjustments to the applicable revenue credits to reflect the ending of Period One TSAs.

~~RESERVED FOR FUTURE USE~~ GENERAL TERMS AND CONDITIONS
(Continued)

30. CONTRACTING FOR SERVICE SUBJECT TO PERIOD TWO RATES

30.4 Period Two Rates, Period Two Insulated Rates and Alternate Period Two Rates

(e) The Period Two rates and Alternate Period Two rates shall be adjusted to reflect changes applicable to the Rolled-in shipper group when Transporter implements Period Three rates, in order to reflect reductions in revenue credits that result from the ending of Period Two TSAs and Alternate Period Two TSAs.

Nothing in this Section 30.4 shall be construed to limit or otherwise modify Transporter's right to propose from time to time, by means other than a limited section 4 filing, any change to any or all proposed Period Two rates or Alternate Period Two rates in accordance with the Natural Gas Act.

30.5 Period Three Rates.

Transporter will file pro forma tariff records containing proposed Period Three rates, as well as any related adjustments to Period Two rates and Alternate Period Two rates, two years prior to the end of the ~~primary~~ term of each shipper group ~~of~~ with expiring Period Two or Alternate Period Two TSAs.

30.6 Period Two Rate, Period Two Insulated Rate and Alternate Period Two Rate Options

The following Period Two ~~reservation~~ rates, Period Two Insulated Rates and Alternate Period Two rates will be applicable at the indicated dates, dependent on Eligible Shippers' selected terms for Period Two or Alternate Period Two TSAs and subject to Sections 30.3 and 30.4 above.

Reservation Rates (Non-Leap Year)

Shipper Group	Period Two Term 10-Year: Period Two Insulated Rates	10-Year: Period Two Rates	Period Two Term 15-Year: Period Two Insulated Rates	15-Year: Period Two Rates	Alternate Period Two P2A and P2B
Original System 10-yr Shipper 1/					
10/1/2011	$ 0.2560		$ 0.2169		
5/1/2012	$ 0.2615	$ 0.2622	$ 0.2224	$ 0.2231	$ 0.1976
5/1/2017 (A) 2/	$ 0.2720	$ 0.2743	$ 0.2329	$ 0.2352	$ 0.2097
2002 Expansion 10-yr Shipper 1/					
5/1/2012	N/A	N/A	$ 0.2224		$ 0.1976
5/1/2017 (A) 3/	N/A	N/A	$ 0.2329		$ 0.2097
2003 Expansion 10-yr Shipper 1/					
5/1/2013		$ 0.2565	$ 0.2238		$ 0.2027
5/1/2017 (B) 4/					$ 0.2027
Original System 15-yr Shipper 1/					
10/1/2016	$ 0.2193	$ 0.2200	$ 0.1846	$ 0.1853	$ 0.1626
5/1/2017 (C) 5/	$ 0.2298	$ 0.2321	$ 0.1951	$ 0.1974	$ 0.1747
2002 Expansion 15-yr Shipper 1/					
5/1/2017 (C) 6/	N/A	N/A	$ 0.1951	$ 0.1974	$ 0.1747
2003 Expansion 15-yr Shipper					
5/1/2018		$ 0.2543	$ 0.2224		$ 0.2018
2010 Expansion 10-yr Shipper					
11/1/2020		$ 0.2565	$ 0.2238		$ 0.2027
2010 Expansion 15-yr Shipper					
11/1/2025		$ 0.2543	$ 0.2224		$ 0.2018

The actual rates to be effectuated will reflect adjustments for leap years, any applicable current or future surcharges and impact of the rolled in shipper credit.

1/ Pursuant to Section 30.4, rates reflect applicable roll-in adjustments at 5/1/2017.
2/ *See* Section 30.3(n)(1)(i).
3/ *See* Section 30.3(n)(1)(ii).
4/ *See* Section 30.3(n)(2)(i).
5/ *See* Section 30.3(n)(3)(i).
6/ *See* Section 30.3(n)(3)(ii).

(Placement on page, number of pages, format, capitalization and font may vary)

[If applicable – RESTATEMENT OF]
[If applicable – ((PERIOD TWO) or (ALTERNATE PERIOD TWO))] FIRM TRANSPORTATION SERVICE AGREEMENT
Rate Schedule KRF-1

CONTRACT NO. _____

THIS [if applicable – RESTATED] [if applicable – ((PERIOD TWO) or (ALTERNATE PERIOD TWO))] FIRM TRANSPORTATION SERVICE AGREEMENT ("Agreement") [if applicable, insert: , which was originally executed on (insert original contract execution date),]is made and entered into as of this _____ day of [insert month and year] by and between KERN RIVER GAS TRANSMISSION COMPANY ("Transporter") and _____ ("Shipper"), and supersedes all previous versions of this Agreement, if any.

[Insert applicable WHEREAS clauses for background purposes – not to include binding consideration]

NOW, THEREFORE, in consideration of the mutual covenants and agreements as herein set forth, the parties agree as follows:

ARTICLE I - GAS TO BE TRANSPORTED

1.1 Subject to the terms, conditions and limitations hereof, Transporter agrees to receive, on a firm basis, from Shipper for Transportation at the Receipt Point(s) specified in Exhibit "A" and to transport and deliver Thermally Equivalent Quantities to Shipper at the Delivery Point(s) specified in Exhibit "A," Quantities of Natural Gas, exclusive of Quantities required for fuel used and lost and unaccounted-for Gas, up to Shipper's [TMDQ. Shipper's TMDQ is (____ Dth per day.) or (set forth on Exhibit "A.") Shipper's DMDQ is equal to Shipper's TMDQ.] or [MDQ. Shipper's MDQ is (_____ Mcf per day.) or (set forth on Exhibit "A.") Shipper's DMDQ is (_____ Dth per day.) or (set forth on Exhibit "A."]

1.2 Shipper will reimburse Transporter for fuel used and lost and unaccounted-for Gas on an in-kind basis at the factors applicable to [(rolled-in rate service) or (incremental rate service related to the [insert name of project]),] pursuant to the General Terms and Conditions of Transporter's FERC-approved tariff, as revised from time to time ("Transporter's Tariff"). Backhaul Shippers will reimburse Transporter for system-wide lost and unaccounted-for Gas, but will not reimburse Transporter for compressor fuel.

(Insert page number.)

ARTICLE II - APPLICABLE RATE SCHEDULE

2.1 Shipper agrees to pay Transporter for all Natural Gas Transportation service rendered under the terms of this Agreement in accordance with Rate Schedule KRF-1 of Transporter's Tariff. This Agreement will be subject to the provisions of such Rate Schedule and the General Terms and Conditions of Transporter's Tariff, which by this reference are incorporated herein and made a part hereof.

2.2 [If applicable - Shipper's rates for Transportation service will be in accordance with Transporter's effective Rate Schedule KRF-1 for [(maximum recourse) or (10-year) or (15-year) or (insert term)] [(rolled-in rate service) or (incremental rate service related to the {insert name of project})], subject to the parties' understanding and agreement that Transporter may change the rates from time to time in accordance with the Natural Gas Act. [if applicable – add any information necessary to properly identify the applicable rate][if applicable – Notwithstanding the foregoing, Shipper and Transporter have mutually agreed to a [(discounted) or (negotiated)] rate for all or a portion of the capacity under this Agreement, as set forth on Exhibit "B."]] or

[If applicable - Shipper's rates for Transportation service will be the [{[(10-year) or (15-year)) ((Period Two rates | or Period Two Insulated Rates))] or [Alternate Period Two Rates]] applicable to former Period One (10-year) or (15-year) ~~Period One~~ [(rolled-in rate, {original system} or {2002 Expansion Project} shippers) or (incremental rate, {insert name of project} shippers)], subject to the parties' understanding and agreement that Transporter may change the rates from time to time in accordance with the Natural Gas Act. [if applicable – add any information necessary to properly identify the applicable rate.] [if applicable – Notwithstanding the foregoing, Shipper and Transporter have mutually agreed to a [(discounted) or (negotiated)] rate for all or a portion of the capacity under this Agreement, as set forth on Exhibit "B"]]

[If applicable - Shipper has acquired its capacity via capacity release. Shipper's reservation rate for Transportation service is the rate Shipper bid for the capacity, as set forth on Exhibit "B." Shipper's usage rate is the applicable maximum rate for [(rolled-in) or (incremental) rate service, as such rate may change from time to time in accordance with the Natural Gas Act.]] [Also add, if applicable - Special terms and conditions included in Releasing Shipper's Offer to Release are set forth on Exhibit "C."]

2.3 Notwithstanding Section 5.5 of the General Terms and Conditions of Transporter's Tariff, and subject to any negotiated credit set forth in this transportation service agreement; or, if there is no individually negotiated provision any Reservation Charge Adjustments applicable pursuant to Section 9 of Rate Schedule KRF-1, Shipper will make payment of the Monthly Reservation Charge pursuant hereto in full irrespective of (but without prejudice to the rights otherwise of Shipper with respect to) any dispute relative to the amount invoiced, and will not be entitled to any abatement of such payment or any set-off against it, including but not limited to, abatement or set-off due or alleged to be due by reason of any past, present or future claims or other rights of Shipper against Transporter or any other person or entity, whether in connection herewith or any unrelated transaction.

ARTICLE III - TERM OF AGREEMENT

3.1 [Insert term of agreement, including any contingencies, such as completion of construction or board or governmental approval; term may include extension rights such as an evergreen, rollover or right-of-first-refusal provision and related termination provision, if applicable.]

[If applicable (for use in Alternate Period 2A Agreements) – Shipper has elected an Alternate Period 2A term of [(10) or (15)] years, beginning (insert date) and ending (insert date). Pursuant to Section 30 of the General Terms and Conditions of Transporter's Tariff, Shipper may elect to retain its capacity at the expiration of this Agreement for a Period P2B term of [(10) or (15)] years, for a total Alternate Period Two term of 25 years.]

[If applicable (add to above paragraph for Alternate Period 2B Agreements) – Shipper has elected an Alternate Period 2B term of [(10) or (15) years], beginning (insert date) and ending (insert date).

ARTICLE IV – MISCELLANEOUS PROVISIONS

4.1 This Agreement constitutes the entire agreement between the parties with respect to the subject matter of this Agreement and shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and assigns. No promises, agreements or warranties additional to this Agreement other than as may be contained in Transporter's Tariff will be deemed to be a part of this Agreement, nor will any alteration, amendment or modification be effective unless confirmed in writing by the parties.

4.2 This Agreement shall incorporate and in all respects shall be subject to the General Terms and Conditions and the applicable Rate Schedule(s) set forth in Transporter's Tariff. Transporter may file and seek approval from the FERC under Section 4 of the Natural Gas Act ("NGA") at any time and from time to time to change any rates, charges or other provisions set forth in the applicable Rate Schedule(s) and the General Terms and Conditions in Transporter's Tariff, and Transporter shall have the right to place such changes in effect in accordance with the NGA, and this Agreement shall be deemed to include such changes and any change that becomes effective by operation of law and FERC order, without prejudice to Shipper's right to protest the same.

4.3 The priority of service for this Agreement shall be [insert applicable date and/or contract reference].

[If applicable--

4.4 TO THE FULLEST EXTENT PERMITTED BY LAW, SHIPPER AND TRANSPORTER WAIVE ANY RIGHT THEY MAY HAVE TO A TRIAL BY JURY IN RESPECT OF LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT. EACH PARTY FURTHER WAIVES ANY RIGHT TO CONSOLIDATE ANY ACTION IN WHICH A JURY TRIAL HAS BEEN WAIVED WITH ANY OTHER ACTION IN WHICH A JURY TRIAL CANNOT BE OR HAS NOT BEEN WAIVED.]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of this _____ day of [insert month and year].

[Insert signature blocks]

(Insert page number.)

(Placement on page, number of pages, format, capitalization and font may vary.)

EXHIBIT "A"

[if applicable – TO AMENDMENT] TO [if applicable – RESTATED]
[if applicable – PERIOD TWO/ALTERNATE PERIOD TWO] FIRM TRANSPORTATION SERVICE AGREEMENT

CONTRACT NO. _____

BETWEEN

_____

AND

KERN RIVER GAS TRANSMISSION COMPANY

Execution Date of this Exhibit "A": _____, _____

[Term] [Insert term(s) of service and any changes to receipt/delivery points and/or entitlement and/or quantity, as applicable; repeat as needed.]

[If applicable - Effective beginning (insert date(s); repeat as needed):]

[TMDQ:_____Dth] or [MDQ:_____Mcf
DMDQ:_____Dth]

Receipt Point(s)	Meter Number	Loc.	Type	Receipt Point Entitlement (Dth)	[If applicable - Receipt Pressure 1/ (psig)]

Total Receipt Point Entitlement: _____Dth

Delivery Point(s)	Meter Number	Loc.	Type	Delivery Point Entitlement (Dth)	[If applicable - Delivery Pressure 1/ (psig)]

Total Delivery Point Entitlement: _____Dth

[1/ If applicable – Insert provision(s) related to receipt and/or delivery pressure pursuant to section(s) 6.2 and/or 6.4 of the General Terms and Conditions of Tariff.]

(Insert page number.)

(Placement on page, number of pages, format, capitalization and font may vary.)

(To be used if applicable)

EXHIBIT "B"

[if applicable – TO AMENDMENT] TO [if applicable - RESTATED]
[if applicable – PERIOD TWO/ALTERNATE PERIOD TWO]
FIRM TRANSPORTATION SERVICE AGREEMENT

CONTRACT NO. _____

BETWEEN

_____

AND

KERN RIVER GAS TRANSMISSION COMPANY

Execution Date of this Exhibit "B": _____, ____

[If applicable - Effective beginning (insert date(s); repeat as needed):]

[Insert rate provisions]

(Insert page number.)

APPENDIX D

Book Depreciation Rates

Facilities	Current	Settlement
APEX	3.00%	2.34%
Big Horn	6.67%	0.52%
Expansion 2002	1.95%	2.48%
Expansion 2003	3.00%	1.80%
Expansion 2010	3.00%	2.25%
High Desert	4.76%	1.16%
Vintage	1.95%	1.15%
Mountain Pass	3.00%	2.32%

APPENDIX E

List of Period Two TSAs That Contain Non-Conforming Provisions

The following Period Two contracts, as shown in Kern River's Tariff, Vol. 1A, as of the date of this settlement, have non-conforming provisions:

A. Period Two Firm Transportation Service Agreement with Southern California Gas Company Dated December 9, 2015, Contract No. 20015

B. Period Two Firm Transportation Service Agreement with Shell Energy North America (US), L.P. Dated November 12, 2015, Contract No. 20005

C. Period Two Firm Transportation Service Agreement with Southwest Gas Corporation Dated December 23, 2015, Contract No. 20016

D. Period Two Firm Transportation Service Agreement with Nevada Cogeneration Associates #1 Dated December 22, 2015, Contract No. 20010

E. Period Two Firm Transportation Service Agreement with Nevada Cogeneration Associates #2 Dated December 9, 2015, Contract No. 20011

F. Period Two Firm Transportation Service Agreement with Citadel Energy Marketing LLC (Originally WPX Energy Marketing, LLC) Dated December 22, 2015, Contract No. 20017

G. Period Two Firm Transportation Service Agreement with Southwest Gas Corporation Dated December 23, 2015, Contract No. 20020

H. Period Two Firm Transportation Service Agreement with RRI Energy Services, LLC Dated January 11, 2016, Contract No. 20021

I. Period Two Firm Transportation Service Agreement with Chevron U.S.A. Inc. Dated December 22, 2015, Contract No. 20008

J. Period Two Firm Transportation Service Agreement with Seneca Resources Corporation Dated January 6, 2016, Contract No. 20014

K. Period Two Firm Transportation Service Agreement with Shell Energy North America (US), L.P. Dated November 12, 2015, Contract No. 20006

L. Period Two Firm Transportation Service Agreement with Aera Energy LLC Dated December 22, 2015, Contract No. 20007

M. Period Two Firm Transportation Service Agreement with Nevada Power Company d/b/a NV Energy Dated December 22, 2015, Contract No. 20012

N. Period Two Firm Transportation Service Agreement with Nevada Power Company d/b/a NV Energy Dated December 22, 2015, Contract No. 20013

O. Period Two Firm Transportation Service Agreement with The Department of Water and Power of the City of Los Angeles Dated September 21, 2015, Contract No. 20002

P. Period Two Firm Transportation Service Agreement with CRC Marketing, Inc. Dated December 22, 2015, Contract No. 20009

Q. Period Two Firm Transportation Service Agreement with Southwest Gas Corporation Dated December 23, 2015, Contract No. 20018