UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Kern River Gas Transmission Company)   Docket No. RP04-__-000

PREPARED DIRECT TESTIMONY OF
CHARLES E. OLSON
ON BEHALF OF
KERN RIVER GAS TRANSMISSION COMPANY

Q. Please state your name, occupation and address.

A. My name is Charles E. Olson and I am an economist. My address is 10822 Alloway Drive, Potomac, Maryland 20854.

Q. Please summarize your education and experience.

A. I attended and received the following degrees from the University of Wisconsin at Madison: B.B.A. in 1964 (Senior Honors), M.S. in 1966, and Ph.D. in 1968. My doctoral dissertation analyzed the structure of the electric power industry.

I joined the University of Maryland in 1968 as an Assistant Professor and taught full-time in the College of Business and Management. I taught graduate courses in managerial economics, public utilities and transportation and undergraduate courses in public utilities and transportation.

In 1971, I was appointed Associate Professor and held that position until I left in September 1976 to join Zinder Companies, Inc. (Zinder) as Senior Economist. In December 1977, I was elected Vice President and in December 1979, I was elected Senior Vice President. In September 1980, I resigned to organize my own firm. I returned to Zinder in December 1986 as its President.

In November 2000 I resigned as President of Zinder. Currently, I am a Teaching Professor at the University of Maryland, Robert H. Smith School of Business where I teach courses in economics. I am also a public utility and pipeline rate consultant.

During the past 35 years, I have authored and co-authored various papers, articles, reports and other published material. These have been published in the Public Utilities Fortnightly, Land Economics, the Transportation Journal, Business Horizons, and the Highway Research Record. The Institute of Public Utilities at Michigan State University published a revised version of my thesis, which is titled "Cost Considerations for Efficient Electricity Supply." I have also contributed to two other volumes, Regional Economic Effects of Alternative Highway Systems (Ballinger Publishing Co., 1974) and Studies in Electric Utility Regulation (Ballinger Publishing Co., 1975).

I have given speeches, workshops and papers to many groups, both academic and business. I was a coordinator and lecturer in the American Gas Association's Annual Rate Fundamentals Course at the University of Wisconsin from 1971 to 1996. The topics I have lectured on in this course include pricing, utility accounting, rate level determination, cost of capital and cost of service analysis. I also have lectured at other American Gas Association short courses.

During the past 35 plus years as a consultant, I have worked on more than 400 rate and certificate cases and have presented testimony more than 300 times. I have testified before the Federal Communications Commission, the Postal Rate Commission, the Federal Energy Regulatory Commission (FERC), the Interstate Commerce Commission, the New York Energy Planning Board, the Dallas and Beaumont City Councils and public utilities commissions in 40 states, the District of Columbia and three Canadian provinces. The cases involved electric, gas, water and telecommunications utilities. I have also testified in oil pipeline and taxi cases. My testimony covered numerous subjects, including fair rate of return, rate base, revenue requirements, revenue and expense adjustments, pricing and rate design.

In addition, I have been a consultant on numerous other projects and studies, including a study of the Uniform System of Accounts for telephone companies and a study of entry and fare determination policies for the taxicab industry in Washington, D.C. Working for the Development Advisory Service of Harvard University, I advised the government of Colombia on public utility rates in 1969. From 1977 to 1978, I directed a demand study for the gas distribution utilities in New York. Finally, I also directed a study on gas rate design for the Economic Regulatory Administration from 1977 to 1978.

I have also done a significant amount of community service work, testifying in a number of cases on a pro bono basis. I have presented testimony before two congressional committees. I was a member of two Federal Power Commission (FPC) National Power Survey Advisory Committees. Finally, I was Vice Chairman of the former FPC's Gas Policy Advisory Council: Transmission, Distribution and Storage-Technical Advisory Task Force-Rate Design.

I am a member of the Transportation and Public Utilities Group of the American Economist Association and I am listed in Who's Who in America.

Q. Dr. Olson, what is the purpose of your testimony?

A. The purpose of my testimony is to provide an estimate of the cost of common equity to Kern River Gas Transmission Company ("Kern River" or "the Company").

Q. What conclusion did you reach regarding Kern River's estimated equity cost?

A. In my view, the appropriate return on common equity for Kern River should be set at 15.1 percent.

Q. Please summarize the analytical steps you followed to arrive at this conclusion.

A. I arrived at this conclusion using the Commission's preferred, two-step discounted cash flow ("DCF") model, which I then applied to six proxy pipeline companies that are reasonably comparable to Kern River. This calculation produced a range of equity returns of 9.0 to 15.1 percent. To determine the proper placement of Kern River within this range (*i.e.*, the final step of the DCF analysis), I evaluated Kern River's risk profile compared to the other proxy companies. This evaluation led me to conclude that Kern River faces financial and business risks that are atypical within the gas pipeline industry and place Kern River among the very riskiest of major gas pipelines. For this reason, I placed Kern River at the high-end of the range of equity returns.

Q. Is your recommended, "high-end," equity return for Kern River consistent with FERC's guidance on placing pipelines within the zone of reasonableness?

A. Yes. In its Opinion No. 396-B, FERC indicated that it will not attempt to seek precision in terms of determining where, within the zone of reasonableness, a particular pipeline should be placed. Rather, FERC indicated that it will assign pipelines to one of three points along the risk continuum, *i.e.*, low risk, average risk, high risk. Because, in my judgement, Kern River's risk profile makes it one of the riskiest of the major pipeline companies, I recommend an equity return that corresponds to this risk assessment.

Q. Please explain the basis for your statement that Kern River's risk profile makes it "one of the very riskiest" gas pipelines.

A. By virtually every objective measure, Kern River faces unique and significant risks that exceed the risks of other gas pipelines that operate in the United States. Kern River's business risks are a function of the company's high fixed costs, its largely undepreciated asset base, and the quality and character of the markets it serves. In addition, Kern River faces considerable financial risk due to its low common equity ratio.

Q. Please elaborate on Kern River's business risks.

A. All pipelines have high fixed costs because of the nature of the capital investment. Kern River is no exception to other pipelines in this regard. However, Kern River's relative newness means that very little of the capital investment has been recovered in rates, *i.e.*, via depreciation charges.

In contrast, many other, older vintage pipelines have already recovered a large percentage of their existing capital investment; this of course means that those companies have relatively fewer capital dollars remaining at risk. Kern River's capital recovery situation is exacerbated by its levelized ratemaking formula, which effectively delays the recovery of its capital investment through the creation of a regulatory asset.

Kern River's business risk also differs from that of other pipelines because of Kern River's market profile. Unlike pipelines that were built to serve primarily regulated gas distribution companies ("LDCs") with large numbers of retail customers, Kern River was originally constructed to serve primarily the enhanced oil recovery ("EOR") markets of California. However, over time, the newer markets that have developed on Kern River are largely in the electric generation sector. This sector has experienced wide-spread and continuing upheaval, owing to rising gas prices and the collapse of so-called "spark-spread" differentials. As a result, many of Kern River's current shippers are now marginal credits. And while Kern River's tariff requires that firm service customers have an investment grade rating, or provide other collateral, there is no guarantee that there will be enough qualified shippers at any given time who want service at cost based rates to sustain high throughput levels.

Q. But isn't this a risk common to all pipelines?

A. To a certain extent, it is. However, the degree of relative risk is, in large part, a function of a pipeline's particular shipper mix and/or end-use profile. The distinction I drew earlier -- *i.e.*, between more typical interstate pipelines that serve sizeable LDC markets *vs.* Kern River's current shipper profile that includes an unusually high percentage of merchant generators -- is a critical one. The battered credit ratings and balance sheets of companies in the merchant generation and trading sectors of the industry have been widely reported. See, e.g., Standard & Poor's "Utilities" Report, February 26, 2004 at 10. Accordingly, the overall credit "quality" of Kern River's shippers is significantly inferior to that of other major pipeline companies; as a result, Kern River faces considerable exposure in terms of sustaining historical throughput levels and revenue streams. Ms. Dahlberg's testimony, which contains credit profiles of many of Kern River's current shippers, provides specific empirical data relevant to these shipper-related business risks. A major conclusion of her analysis is that some 26 percent of Kern River's capacity is associated with companies that have less than investment grade bond ratings.

Q. You indicated that Kern River's shipper profile is "atypical" due to its high percentage of merchant generation shippers, and its relatively low percentage of LDC shippers. In that connection, have you analyzed, on a percentage of firm capacity subscriptions basis, how Kern River's shipper profile compares to the shipper profile of other gas pipelines?

A. Yes. For example, currently available Energy Information Administration ("EIA") data indicates that, on average, LDCs account for well over 50% of firm capacity subscriptions across the interstate gas pipeline network. In contrast, less than 7% of Kern River's firm capacity (based on percentage of daily maximum quantities) is subscribed by LDCs. The credit-risky merchant generation sector accounts for 35% of Kern River's firm contract reservations and another 16% is subscribed by other marketing and/or trading entities.

Q. You have characterized the overall credit quality of merchant generation shippers as "inferior" to LDC shippers. What factors have contributed to the credit and profitability problems of the so-called "merchant generation" market?

A. Among other factors, this market is particularly sensitive to gas prices. The margins for generating projects are often quite thin; escalating gas prices can make the difference between economic, and uneconomic, projects. Of course, the power crisis in California, the bankruptcy of Enron and other major players in the merchant generation business, and the collapse of power prices due to excess capacity have exacerbated the problem. All of these events have eroded investor confidence in this sector and contributed to the loss of hundreds of billions of dollars of equity and debt investment.

Q. Please explain the how these events and factors affect Kern River's business risk?

A. Obviously, to the extent generation projects fail, so too do the associated gas supply contracts. Indeed, Kern River has already witnessed the financial demise of one of its electric generation customers, Mirant, whose recent bankruptcy resulted in the cancellation of Mirant's firm transportation agreement with Kern

River. Increased gas costs fueling Mirant's power plants were specifically cited as a factor contributing to Mirant's insolvency. Mr. Warner's testimony points out that the required discounting on the Mirant capacity reduces revenue by some $12 million. The common equity return impact is almost 2 percentage points.

Moreover, the cascading impacts associated with the Western power crisis and the collapse of merchant companies like Enron and Mirant will continue to affect the sector for years to come. Credit ratings of merchant generation companies – already bruised and battered – will only decline further if rising gas prices continue to cut into generation profits. And attracting capital to an industry that has lost over $200 billion in equity value since January 2001, will not come cheap, assuming it comes at all.

Q. Has the gas price sensitivity risk alluded to above materialized in the generation markets served by Kern River?

A. Yes. The price of gas is far higher than was anticipated when Kern River's 2003 Expansion project was undertaken. In fact the price of gas in the U.S. has gone from being the lowest in the major countries of the world to the highest. As I noted above, rising gas prices were a significant factor leading to Mirant's insolvency and have undoubtedly contributed to the near-universal credit downgrades of major players such as Aquila, Dynegy, El Paso, and Reliant. In combination with the over-expansion of generation projects in Kern River's market area, gas price volatility adds significant uncertainty, and therefore incremental risk, to an already precarious sector of the market.

Longer term, Kern River's merchant generation market faces additional risk and uncertainty. Recent reports have touted the favorable economics of new coal-fired generation projects. To the extent that the predicted resurgence of coal actually materializes, the existing gas-fired, combined cycle plants served by Kern River could be displaced.

Q. Please explain in more detail why, relative to other gas pipelines, Kern River's operations are particularly vulnerable to the effects of sustained, high gas commodity prices.

A. In many end-use applications, natural gas is a competitive fuel because it is used in a consumer appliance instead of electricity or oil. The market for natural gas in residential and small commercial furnaces, boilers and water heaters is competitive even at high wellhead gas prices. Residential customers have to have heat and hot water; their choices are natural gas, propane, electricity and fuel oil. Since 1950 the overwhelming choice has been natural gas because it is cheap and clean. Propane requires a tank and the scheduling of fill ups and is far more costly on a Btu basis. Electricity must be generated using coal, oil, gas or nuclear energy as a fuel (hydro is not a significant source of generation) with losses of 40 to 70 percent in the generation function alone. Gas, because it is used on customer premises, has far lower losses. Oil has been more expensive on a Btu basis because of demand and required annual burner maintenance. In short, millions of already installed, residential and commercial gas furnaces, boilers and water heaters help keep the price sensitivity risk of most gas pipelines relatively low due to inelastic demand and more costly alternatives. Thus, a typical pipeline serving LDC markets (consisting of a relatively high percentage of demand-inelastic residential and commercial load) enjoys some measure of insulation from market risk related to load that is sensitive to high gas prices. Moreover, LDCs connected to these pipelines usually can simply pass through commodity cost increases under state regulatory schemes.

Q. In your view, does Kern River enjoy this market risk insulation?

A. No. As I explained above, Kern River's end use profile differs significantly from that of other major pipelines, with respect to both the Original System and 2003 Expansion services. Only a relatively small portion of Kern River's firm capacity is subscribed by low-risk LDCs and/or governmental entities, and a disproportionately large percent (35%) is contracted to the more credit-risky merchant generation sector. This shipper mix in large part defines Kern River's high-risk profile.

Q. Please explain.

A. For the reasons described above, Kern River's merchant generator shippers, unlike LDCs, are extremely vulnerable to gas price volatility. These shippers committed to their firm transportation service agreements when the most economical incremental electricity generation was with low capital cost, combined cycle generators fueled with natural gas. During the past 18 months, however, there has been a significant (50 plus percent) increase in the wholesale price of natural gas. This development has shifted the economics of incremental electricity generation to capital intensive, but lower fuel cost, coal-fired generation. Lower long-term interest rates also have worked in favor of more capital intensive coal-fired projects as well.

Q. Is there empirical support for the notion that coal-fired projects might pose a competitive threat to Kern River's merchant generation market?

A. Yes. Barron's, a well-known financial publication, recently made this observation: "Coal's resurgence got under way big time in the past year as natural gas - - which had been the fuel of choice for new electrical power plants - - no longer was as cheap or abundant as it had been during the two previous decades."

Barron's, March 1, 2004. The significance of an article such as this one being in Barron's, is that investors are aware of the changed economics. The Wall Street Journal, in a front page article dated April 1, 2004 indicated that more than 100 new coal-fired plants are in the works.

Q. Are there any other empirical data supporting coal's resurgence as a competitive alternative to natural gas?

A. Yes. In February of this year, the Department of Energy ("DOE") released a study tracking new coal-fired power plants across the United States. This report, titled "Coal's Resurgence in Electric Power Generation" is available on DOE's website at www.netl.doe/coalpower/OCES/pubs. According to DOE, approximately 17% of anticipated new generation between now and 2025 will be coal-fired. This is significant because virtually no new coal plants were brought on-line during the 1990's.

The report also projects the development of 94 new plants, totaling 62 GW of power at a cost of $ 72 billion. Nearly 18% of the projected capacity (in GW) is expected to be developed in southwestern United States (*i.e.*, California, Nevada, New Mexico, Arizona, Utah and Colorado).

Q. In your view, what are the implications of coal's projected resurgence, as reported by Barron's and DOE?

A. Investors can be expected to react negatively to any competition that is perceived as a threat to Kern River's ability to attract growth to its system and/or retain existing generation-based demand. Over time, pipeline assets like those of Kern River may become underutilized or perhaps, eventually, even stranded.

Q. Is there any other business risk that is unique to Kern River?

A. Yes. Kern River is largely dependent on Rocky Mountain gas supply. If that gas supply should sharply decrease or become more expensive, Kern River's ability to sustain historic throughput levels would be seriously compromised. Ms. Dahlberg's testimony discusses the decline in the basis differential that has taken place since the 2003 Expansion went into service less than a year ago.

In addition, as more fully explained in the testimony of Mr. John R. Smith, Kern River faces continuous risks associated with having to re-market turned-back capacity as contracts either fail or expire without renewal. These risks could, if they materialize, result in lower credit ratings for Kern River, ultimately leading to higher financing costs.

Q. What conclusions does Ms. Dahlberg reach regarding gas supply risk and its potential impact on Kern River's ability to maintain throughput levels?

A. Ms. Dahlberg documents the recent increase in unutilized firm capacity and the decline in value of interruptible capacity on Kern River's system. According to Ms. Dahlberg, these recent changes are traceable, at least in part, to shrinking price differentials for gas supply at major receipt and delivery points. Moreover, Ms. Dahlberg testifies that she expects the price differentials will continue to decline. These factors, as well as certain regulatory changes that provide existing shippers with more flexibility in marketing their own capacity, are cited by Ms. Dahlberg as impediments to Kern River's ability to sustain and/or increase system throughput.

Q. What conclusions does Mr. Smith reach with respect to capacity turn-back risk?

A. Mr. Smith explains that as credit problems persist or worsen within Kern River's shipper base, the risk associated with having to re-market turned-back capacity is correspondingly increased. Mr. Smith further testifies that Kern River has already confronted this risk with the Mirant insolvency and the resulting need to seek replacement shippers for the firm capacity previously held by Mirant. The prospect that other current shippers may default on existing contracts, or be unable to extend or renew these contracts, places additional pressures on Kern River's ability to meet throughput design levels.

Q. Does Kern River also face financial risk?

A. Yes. Kern River's common equity ratio is less than 40 percent. In contrast, most gas pipelines have common equity ratios of 50 or more percent. When Kern River's low common equity is considered relative to the proportion of its contracts associated with less than investment grade customers (26 percent), the possibility of earning far less than whatever return is authorized becomes quite evident. Moreover, Kern River's ability to extend long-term discounts is severely limited because of the most favored nation (MFN) feature in Kern River's transportation contracts.

CALCULATING KERN RIVER'S COST OF EQUITY

Q. Please explain the methodology you will use to estimate the rate of return on original cost common equity capital in this case.

A. I am using the same DCF methodology FERC historically has used. This methodology is based on certain fundamental economic principles that, at least in theory, drive investment decisions.

Q. Please explain.

A. Equity owners share in the residual that remains from revenues after expenses, including interest, are paid. Thus, there is no contractual relationship as to required earnings between the common stockholder and the corporation. Earnings on equity can only be judged in terms of whether they produce market prices for the common shares that permit capital attraction on terms that are considered fair and reasonable.

From an investor's viewpoint the cost of common equity of a given company is the minimum expected return which will induce him to buy stock at the going market price. Thus, the focus must be on what a reasonable investor – and not the analyst -- would consider is a reasonable return.

For illustrative purposes, consider the following simplified example: If an investor will buy a stock that is selling at $20.00 per share but will not buy it at a higher price, and expects to receive $1.20 in dividends and to sell it in exactly one year at $21.20, the cost of capital is 12 percent, as shown below:

Dividend Yield = ($1.20 ÷ $20.00)	= 6%
Growth = ($21.20 ÷ $20.00)-1	= 6%
Cost of common equity (k)	= 12%

Unfortunately, the task is not this easy because we do not know what investors really expect when they decide to buy a given stock.

In my opinion, a reasonable way to go about estimating the cost of common equity is to utilize the DCF approach. The DCF approach to estimating the cost of equity capital is based on the premise that the investor is buying two things when he purchases common stock, dividends and growth. Investors in American corporations have come to expect growth in earnings and dividends per share of common stock because of a public policy that is committed to increasing Gross Domestic Product (GDP). In addition, the experience of most U.S. corporations since the end of World War II has been one of increased dividends and earnings per share. The cost of equity capital using the discounted cash flow method is that discount rate which equates a given market price of a stock with the expected future flow of dividends.

The discounted cash flow method is frequently expressed as a formula in which "k", the cost of capital, is equal to D/MP (dividends divided by market price), the dividend yield, plus "g", expected growth in dividends. Thus:

$$k = D/MP + g$$

In utilizing this formula it must be assumed that "g" can not exceed "k" because that implies negative dividends. It must also be assumed that a growth rate, "g", that is equivalent to a constant rate of growth to infinity can be estimated. Mathematically this is true, but it is not important for purposes of application.

Implementation of the DCF approach requires the exercise of considerable judgment concerning the views of investors. The real question is what affects investor expectations. Estimating investor expectations is a difficult task because of the many factors that affect capital markets in general and common stocks in particular. The current state of the economy, Federal budget uncertainty, the trade deficit, fiscal policy, expected inflation, foreign exchange rates and Federal Reserve Board policy all impact significantly on investor judgments. In addition to these factors, the appropriate return on equity for Kern River is governed by all of the specific factors that influence its particular situation.

Q. What information is available and useful for purposes of making a DCF estimate of the cost of equity capital for Kern River?

A. Investors are aware of current conditions in the economy. Significant factors include the current budget and trade deficits, concerns about higher inflation, unemployment and uncertainty regarding fiscal policy. The type of information discussed at some length below is available in detail, particularly in this age of the worldwide web. Presumably, investors utilize it, understand the state of the economy and have their own expectations about GDP growth, interest rates and other factors. These opinions influence their return expectations and thereby determine the maximum price they will pay for various types of securities. Thus, because investors take the economic situation into account in their decision-making, information concerning the economy is reflected in the prices of stocks and bonds at any given time.

Q. Please explain generally how the Commission's DCF model is applied to establish a pipeline's rate of return on equity.

A. FERC has utilized the DCF approach in gas pipeline cases for more than 15 years. The DCF methodology generally has been implemented by using the publicly-traded holding companies that own FERC-regulated pipeline companies and imputing the results to those companies. Public companies that were used in the past included ANR, Panhandle Eastern, Texas Eastern, SONAT, Transco, Williams, El Paso, Enron and others. The group changed over time as mergers reshaped the industry, but the focus was always on finding appropriate -- i.e., comparable -- proxies for jurisdictional gas pipeline companies. Thus, when El Paso was owned by a railroad, Burlington Northern, it was not part of the group. However, after it was spun-off and acquired Tennessee Gas Pipeline, it became part of the comparable group. In a similar fashion, when Duke Energy acquired Panhandle Eastern Corporation, Duke was not included in the group because it was primarily a large electric utility with extensive retail electric customers and which owned numerous coal and nuclear generating units. Usually the FERC pipeline proxy group had between 4 and 6 companies, depending on the merger pattern. The group usually included most of the major operating gas pipelines in the U.S.

Q. How has the recent consolidation within the industry altered the proxy group selection process for DCF purposes?

A. Obviously, the universe of suitable proxy companies has been reduced in recent years. There is no longer a conventional, generally-accepted proxy group for use in pipeline rate proceedings. As a result, the identification and selection of appropriate proxy companies has become a more difficult, and often contentious, issue in rate case litigation. And because the reliability of any DCF analysis is necessarily a function of the reliability of the proxy companies used, selection of proxies that are not reasonably comparable (in terms of business and financial risk profiles) will produce skewed results.

Q. What approach is currently followed in selecting proxy companies?

A. In my view, the transitional posture of the industry, i.e., following the recent spate of mergers and consolidations, and the fallout from the Enron bankruptcy, has made it difficult to land on a standard proxy group that could be reliably applied across the pipeline industry. As a result, FERC Staff and other parties have, on occasion, proposed to include gas distribution or electric utilities in the proxy group. The Commission, however, has generally stuck to pipeline comparables in rate cases but has considered other approaches in certificate cases, such as <u>Young Gas Storage</u> and <u>Petal Gas Storage</u>. I note that in the recently litigated <u>Trailblazer</u>

proceeding, 106 FERC ¶ 63,005 (2004), Administrative Law Judge Birchman, over intervenor objections, determined that a four-company proxy group was appropriate, based on the ALJ's finding that these companies (and only these companies) were engaged primarily in gas pipeline operations and therefore were more comparable than the proxy group offered by intervenor's witness, which consisted of eight diversified energy companies and eight LDCs. As I discuss later, the proxy group I have selected for Kern River is similar to the group endorsed by the ALJ in Trailblazer.

Q. Please describe how the Commission's implementation of the DCF model has evolved over time.

A. FERC has consistently based its return on equity decisions on a group of pipeline holding companies (as previously discussed) using a two-stage DCF analysis to determine the required return. It has also used the middle of the range (midpoint or median) for rate setting purposes since the mid-1990s. (See Panhandle Eastern Pipe Line Company, 71 FERC ¶ 61,076 (1995) and Northwest Pipeline Company, 71 FERC ¶ 61,253 (1995)). While the group of preferred proxy companies has evolved as a result of mergers and other factors, FERC has not deviated from the use of a two-stage DCF, generally adopting as the appropriate return rate the central tendency (midpoint or median) of the group. More recent precedent indicates FERC's preference that the median should be used in setting gas pipeline returns.

The most recent orders on pipeline rate of return are Enbridge Pipelines, 100 FERC ¶ 61,260 (2002) and Williston Basin Interstate Pipeline Co. (104

FERC ¶ 61,036 (2003)). In Enbridge, FERC determined that a proxy group of four pipelines was too small. Accordingly, the Commission adopted a five-member proxy group recommended by Staff, which consisted of Coastal, Columbia Energy, El Paso, Enron and Williams. The return decided on was 11.83 percent, based on the median of the range.

In Williston Basin, decided in 2003, the Commission relied on an expanded proxy group of nine companies proposed by the pipeline. However, five of the nine proxy companies, Columbia, Equitable Gas, Kinder Morgan, National Fuel and Questar, were diversified, vertically-integrated companies, owning significant gas distribution assets.

Q. In your view, what is the viability and/or relevance of the proxy group determinations made by the Commission in Enbridge and Williston Basin?

A. Since these decisions were issued, the industry has continued to experience significant change. Mergers and bankruptcies, for example, have reduced the Enbridge proxy group to three companies, and these remaining three have undergone organizational and/or economic changes.

Q. Please explain.

A. For starters, Coastal Corp. was merged into El Paso. In addition, Enron has gone bankrupt and Columbia Energy was acquired by NiSource, a combination electric-gas utility. El Paso and Williams have experienced severe financial difficulty. These events have made it difficult to find a reliable proxy group that consists of four or more companies.

Q. What is your view of the proxy group used in Williston Basin?

A. I believe that LDCs, or companies with significant LDC (or retail electric utility) assets, are not appropriate proxy companies for purposes of setting equity returns for interstate gas pipelines.

Q. Please explain.

A. The risk profile of LDCs and/or retail electric utilities is significantly different from the risk profile of typical interstate pipelines. LDCs enjoy a natural service monopoly, with relatively low demand elasticity, price sensitivity and throughput risks. Retail electric utilities are operationally similar, with relatively stable and captive markets that provide fairly predictable revenue streams. The "franchise" structure of LDC and retail utility operations translates into lower overall business risk and lower investor expectations.

In contrast, gas pipelines are one level removed from the end-use markets served by LDCs and retail utilities and enjoy no such service monopoly or territorial franchise. Indeed, as I explained earlier, the relative risk *within* the pipeline sector is largely a function of whether, and to what extent, a pipeline's firm capacity is subscribed by comparatively stable LDCs, versus more price-sensitive end-users. Particularly when contrasted to the markets served, and risks faced, by Kern River, the use of LDCs, or companies with high-percentage LDC assets, as proxy companies does not produce a reliable or representative match.

Q. Is there any recent precedent that addresses the use of LDCs as proxies for pipeline equity return calculations?

A. Yes. In the recent <u>Trailblazer</u> proceeding, ALJ Birchman rejected a 16-member proxy group proposed by intervenors' expert witness. According to the ALJ, the proposed inclusion of LDCs in the proxy group was inconsistent with Commission precedent (citing Wyoming Interstate Co., 96 FERC ¶ 63,040 (2001) and Mountain Fuel Res. Inc., 28 FERC ¶ 61,195 (1984)) and inappropriately depressed the equity return results because LDCs face less risk than interstate pipelines.

Q. Were other proxy groups proposed in the Trailblazer proceedings?

A. Initially, FERC Staff witness Franklin D. Knight sponsored testimony using a group of 8 companies that was similar to the Petal group. Because, however, a majority of the parties later reached a settlement that was acceptable to Staff, the appropriateness of Mr. Knight's proxy group was never litigated. Nonetheless, because they may be suggested as reasonable proxy choices for this case, I will show that the companies included in Mr. Knight's proxy group are not comparable to, and therefore not reliable proxies for, Kern River.

Q. Please explain.

A. Mr. Knight's proxy group consisted of Centerpoint, Dominion, Duke, El Paso, Entergy, Kinder Morgan, National Fuel and NiSource. DCF calculations using the standard FERC two-stage model were then made. With the exception of Kinder Morgan, all of the individual company results were below 12 percent. The midpoint was 11.07 percent and the median was 11.26 percent. Five of the 8 companies have retail electric operations; seven have gas distribution operations

This group is inappropriate for analysis of Kern River for two reasons. First, several of the companies have financial problems and are expected to have atypical earnings growth rates. This group includes Centerpoint, Duke, El Paso and NiSource. Second, most of the companies have significant electric or gas distribution assets and, as explained, are far less risky than Kern River.

Q. Have you determined an appropriate proxy group for deriving a rate of return on equity for Kern River using the DCF model?

A. Yes. For purposes of this case, I have selected six entities that are primarily involved in the pipeline, processing and storage businesses. This proxy group is similar to the group determined to be appropriate by ALJ Birchman in Trailblazer. For the most part, these companies all own gas pipelines or other midstream assets and do not have an extensive base of residential and small commercial customers. Thus, unlike gas distributors and retail electric utilities, they do not have the degree of monopoly power that is associated with a traditional public utility franchise. The six entities are:

Enterprise Products Partners (EPD)
Gulfterra Energy Partner's, LP (GTM)
Kinder Morgan Energy Partners (KMP)
Kinder Morgan, Inc. (KMI)
Northern Border Partners (NBP)
Williams Companies (WMB)

Q. On what basis did you determine these companies to be comparable to Kern River?

A. In my opinion, an analysis of Kern River's equity return requirements cannot be reasonably or accurately undertaken based on a proxy group of holding companies with high percentages of retail gas and electric customers. Such companies are not comparable to Kern River due to their lower risk and return requirements. Accordingly, a proper application of the DCF approach must use companies that, as closely as possible, match the risk of the pipeline being analyzed. The companies I have selected have risk profiles that are generally comparable to Kern River. However, none of these companies, in my view, face the same level or types of business and financial risk as Kern River. In particular, I consider Williams to be a marginal proxy since, like El Paso, it has experienced financial turmoil owing to losses in merchant generation and trading investments. In light of the fact that there are currently no well-defined proxy groups for the gas pipeline industry, I included Williams so as not to limit my proxy group to five companies.

Q. Would you comment further on the appropriateness of the recently used Staff and Williston Basin proxy companies for pipeline rate of return purposes?

A. Yes. Recall that my objection to these proxy groups was based on their failure to reflect any risk-related distinctions between LDCs (or retail electric utilities) and interstate gas pipelines. This is a critical oversight. Gas pipelines provide wholesale service to gas distribution companies and sometimes to industrial users and electric generating plants. The gas pipeline network in the U.S. is well developed and this means that few gas pipelines have locational monopolies. Gas pipeline cash flow is stable and predictable only to the extent that there are firm, long-term contracts with investment grade distribution utilities and other customers. However, there is no monopoly power in the sense that LDCs and electric utilities have exclusive franchises. This translates generally to lower investor perceptions of risk for retail gas and electric companies than for interstate gas pipelines. Hence, the use of vertically integrated proxy companies -- whose large retail customer bases are inherently more secure and more stable than pipeline markets -- is totally inappropriate.

Q. Did you analyze these various integrated companies that have been suggested as pipeline proxies in prior cases?

A. Yes. CenterPoint Energy is an example of a gas and electric utility that has been inappropriately included as a comparable company in the past. CenterPoint has 1.8 million electric customers and over 3 million gas distribution customers in addition to its pipeline operation. The company's strategy puts the emphasis on low cost gas and electric operations. As shown at page 19 of its 2002 Annual Report, its pipeline operations are integrated with its gas distribution facilities. Neither its pipelines nor its gas and electric operations are comparable to Kern River.

Dominion Resources is another example of an electric and gas company with a relatively minor pipeline operation that has been used as a gas pipeline proxy company. It has 2.2 million retail electric customers and 1.7 million retail natural gas customers. Consolidated Natural Gas, its gas subsidiary, is an integrated storage, pipeline and gas distribution utility. CNG has some wholesale customers in addition to its own LDC customers, but its overall business is very small relative to the total assets of Dominion. Value Line classifies Dominion as an electric utility; in my view it does not belong in a group of gas pipeline comparables. Certainly, Dominion's operational, organizational and business risk characteristics make it an especially inappropriate proxy candidate for Kern River.

Duke Energy is another electric utility that sometimes has been used as a proxy for pipelines because it owns some pipeline assets. At the end of 2003, however, Duke's natural gas assets were less than 50 percent of its total assets on a gross basis; further, a significant potion of these assets relate to natural gas distribution in Canada. With seven nuclear power units and 2.1 million retail electric customers, Duke should not be viewed as a reasonable proxy for a pipeline company.

El Paso Corporation has long been used as a comparable pipeline in the determination of pipeline rate of return. While El Paso is primarily a natural gas pipeline, it heavily invested in the merchant generation and trading businesses, which contributed to its widely reported financial difficulties. El Paso is currently going through a restructuring process that involves the sale of assets to reduce its risk. Moreover, its stock price was recently dealt another significant blow when the company unexpectedly announced that it had overstated, by approximately $ 1 billion, the value of company-owned proven gas reserves. According to Value Line the expected annual return is in the range of 20 to 40 percent; this is indicative of high risk. Given the risky nature of these shares El Paso should not be used as a comparable company.

Entergy is yet another electric utility with millions of end-use customers and a relatively small gas pipeline and gas distribution business. A relatively low risk, non-regulated nuclear merchant business is an important earnings driver, as is a wholesale energy business that is jointly owned with Koch Industries. I refer to the merchant nuclear business as being low risk because the units were acquired at low cost and profit significantly from gas driven pricing in electric wholesale rates. There is no reasonable case to be made that Entergy is a logical pipeline proxy. Value Line, which lists Entergy as an electric utility, does not even mention gas pipeline ownership.

According to Value Line, Equitable Gas distributes natural gas to 275,000 customers in Pennsylvania, parts of West Virginia and Kentucky. Its pipeline operates in the same states, providing gas supply to its distribution customers. It obtains 30 percent of its gas supply from its own gas wells; its gas supply operations provide 59 percent of its earnings. Much of its production is hedged for 2004 and 2005; this suggests relatively low risk. According to the Company's 2002 Form 10-K, its interstate pipeline division offers transportation, storage and related services to its affiliates and others. Clearly, Equitable is a vertically integrated, low risk operation and is not viewed as an interstate pipeline company by investors. Value Line classifies Equitable as a diversified natural gas company.

MDU Resources (Montana-Dakota Utilities) is a diversified natural resource company with electric and natural gas distribution operations, a natural gas pipeline, natural gas and oil production and construction materials and mining. It has about 300,000 retail utility customers in five states. Currently it is considering the purchase of more electric utility assets. Value Line lists MDU as an electric utility.

NiSource is a combination electric and gas utility with more than 3.6 million end-use electric and gas customers in nine states. It acquired the

Columbia pipelines in 2000. Its 2002 Form 10-K indicates that its gas transmission and storage income ranged from less than 10 percent of its consolidated income up to 33 percent between 2000 and 2002. A significant portion of the gas it transported and stored was on behalf of its affiliate companies. Value Line lists NiSource as an electric utility.

National Fuel Gas in an integrated natural gas utility with 730,000 gas distribution customers in New York and Pennsylvania. Its pipeline and storage division has pipelines in these states that serve its distribution business and other customers as well. It also operates an oil and gas producer. Quite clearly the pipeline operation was established to connect the contiguous distribution properties in New York and Pennsylvania and not as a production-area-to-market-area transportation system.

Questar is also involved in natural gas production, transportation, storage and distribution with 750,000 end-use customers in Utah, Wyoming and Idaho. Its pipeline income is about 20 percent of total income and some of it is derived from its distribution affiliate. Value Line notes that the "stable gas distribution business underpins operations." Again, this is another example of a company that cannot be viewed as a reliable proxy for setting the return rate for an interstate natural gas pipeline.

Q. Please describe the business/organizational profiles of the proxy companies you chose for your DCF analysis?

A. Kinder Morgan, Inc. has been used by FERC as a pipeline proxy even though it owns some gas distribution operations. In 2002, its gas distribution assets contributed eight percent of total profits. Its affiliate, Kinder Morgan Energy Partners owns gas, oil and carbon dioxide pipelines, liquid terminals and dry bulk transfer facilities. A substantial portion of its revenue appears to be somewhat at risk. While the ownership of oil pipeline assets is not ideal from a comparability perspective, such assets are closer in risk to a gas pipeline than are distribution assets.

Northern Border Partners, L.P. operates several major natural gas pipelines. It is probably the "cleanest" gas pipeline equity vehicle that is available to investors.

Enterprise Products Partners, L.P. is an integrated provider of natural gas and natural gas liquids storage, transportation and processing. While some of its operations are unregulated, it clearly operates on the wholesale side of the natural gas industry. This makes it more comparable to Kern River than a gas distribution or an electric utility business.

Gulfterra Partners operates a midstream business that is similar to that of Enterprise Products. The two expect to merge later in 2004.

Williams Companies has long been used by FERC as a gas pipeline proxy company. As I explained above, I consider Williams to be a marginal proxy for current pipeline return analyses, given that it suffered significant financial losses in the wake of the Enron bankruptcy and the collapse of the generation and trading markets. However, Williams has taken steps toward recovery and currently has a larger percentage of gas pipeline assets than it did several years ago. In addition to gas pipelines, it has a large gathering and storage operation as well as an energy trading and marketing business. Still, its dividend yield is low and not representative of a stable midstream operation.

Q. Do all of the six proxy companies pay dividends or distributions?

A. Yes. Dividend yields for each of the six entities for the months of September 2003 through February of 2004 are shown on my Exhibit No. KR-11, Schedule 1. The average of the monthly dividend yields is presented in the right hand column. They range from a low of 0.4 percent for Williams Companies, to a high of 8.0 percent for Northern Border Partners.

Q. How does FERC determine the earnings growth rate for gas pipelines?

A. In gas pipeline cases, FERC prefers a two-stage DCF growth model. The first stage is the five-year earnings growth rate; first stage growth is given a weighting of two-thirds in the FERC model. I obtained the five-year growth rates from the Yahoo Finance website; the data are provided to Yahoo by Thompson First Call. Thompson recently bought IBES which is the source of five-year earnings forecasts in the FERC model. In that these growth rates are available at Yahoo Finance, it is clear that investors have ready access to them.

The growth rates in earnings per share for the six selected proxies are shown on my Exhibit No. KR-11, Schedule 2. They range from 3.5 percent for Northern Border Partners to 12.0 percent for Kinder Morgan, Inc. and average 8.8 percent.

Exhibit No. KR-11, Schedule 3 presents the calculation of the FERC two-stage growth rate that combines the five-year growth rates with the forecasted long-term GDP growth rate of 5.92 percent. Finally, Exhibit No. KR-11, Schedule 4 presents the cost of equity calculation for the six proxy pipeline companies. The range is from 9.0 to 15.1 percent and the median is 13.4 percent.

Q. What do you conclude the cost of common equity is for Kern River based on the analysis you have performed?

A. The DCF study supports a return on common equity capital of no less than 13.4 percent and no more than 15.1 percent. Because my analysis places Kern River at the top end of the risk continuum – indeed, I consider Kern River to be among the very riskiest of all major interstate pipelines in the country – I recommend an equity return of 15.1 percent. As I mentioned, Commission guidance in Order No. 396-B indicates that pipelines should be placed at either the low end, the median, or the high end of the continuum.

Q. Would you please elaborate on your conclusion that a return on common equity of 15.1 percent is justified at this time for Kern River?

A. FERC has long recognized that the appropriate return on common equity for a pipeline is a function of risk. The greater the risk, the higher should be the return. Kern River should be placed at the high end of the zone of reasonableness for several reasons. First, it is a new, relatively undepreciated pipeline with a levelized rate-making formula that defers the recovery of its equity investment. Deferral of capital recovery translates directly into higher risk because high gas prices will shift gas from Kern River's merchant generation market to residential and commercial markets. Hence, the probability of full recovery of its equity investment is lower than that of the comparables.

Second, Kern River faces considerably higher-than-average financial risk due to its relatively thin equity capitalization. Within the industry, Kern River's highly leveraged capital structure places it at the higher end of the risk continuum.

Third, a large percentage of Kern River's firm transportation agreements are with less than investment grade shippers. Kern River's merchant generation customers hold long-term service agreements, but their credit conditions pose the very risk recently realized with Mirant. With deposits that cover one year of billings, Kern River effectively has a high percentage of rolling one year contracts with marginal credits. According to Ms. Dahlberg's testimony, some 26 percent of Kern River's capacity is contracted to less than investment grade shippers. None of the companies within my proxy group face a similar situation; indeed none has had a bankruptcy as significant as that of Mirant.

Fourth, the long-term electricity generation market will move toward reoptimization because of the sharp and persistent increase in gas prices in combination with lower interest rates. During the past 18 months, gas has gone from being cheap to being expensive while interest rates have decreased. This sets the stage for growing competition from coal-fired electric generation that could displace gas-fired generation. Gas-fired electric generation projects owned by companies such as Calpine, Duke, Mirant, NRG, Reliant and others are high-risk businesses, with capital structures that are typically leveraged with high debt components. In turn, companies such as Kern River that provide services to these high-risk entities are also at risk and should be appropriately compensated.

Q. Isn't the 13.25 percent return on equity established in the Original System and 2003 Expansion cases adequate to cover the risks that you have just discussed?

A. No. There was no expectation that gas prices would increase as sharply as they have when Kern River was at the certificate stage for its 2003 Expansion or when the rate for the Original System was agreed upon. Normally, risk is expected to decrease for a gas pipeline as it moves from the planning stage to the operational stage and then to the capital recovery phase. However, in Kern River's case, the risks have increased post-commissioning. Accordingly, an increase in the return on equity is appropriate at this time.

Q. Do the risks you describe threaten Kern River's ability to service its debt?

A. Although Kern River's debt is secure at this time (as reflected in Kern River's current debt ratings), this is largely because of Kern River's historic ability to sustain throughput at levels that provide more than adequate debt-service coverage. As I noted, however, Kern River faces increasing exposure due to the credit risks of its shippers.

Moreover, debt-service risk must be (and is) distinguished from equity-related risk. In the latter case, the risk is that the authorized return on common equity capital will not be earned because a significant portion of the throughput will be unsubscribed or have to be sold at less than prevailing contract prices.

Q. In your view, could the Commission reasonably adopt and apply to Kern River a DCF analysis based on a different proxy group that included LDCs and retail utilities?

A. No. The resulting equity returns would not accurately reflect the cost of common equity to Kern River. Returns in the range of 12% (which have been produced by using LDCs and retail utilities in the proxy group) are not reflective of the significant business and financial risks facing Kern River, and will not permit Kern River to attract capital and provide a reasonable return to existing investors. The Commission itself has recognized that pipelines are generally more risky than LDCs and retail utilities. Given my conclusion that Kern River is among the very riskiest of major pipelines in the United States, it would be entirely unreasonable and inappropriate to treat Kern River, for equity return purposes, as if it is comparable to these manifestly less risky companies.

Q. Has FERC found any pipeline to be above average in risk during the past 15 years in any rate case?

A. No. In practice, the risk continuum produced by the Commission's DCF approach is really not a continuum at all. This is because of the Commission's unwavering refusal to recognize any pipeline as having above-average risk. Thus, the "continuum" is effectively reduced to a single data-point – i.e. the median.

This case presents compelling grounds for the Commission to apply the DCF model in a manner that actually accounts for the varying degrees of risk that individual pipelines face. For the reasons set forth above, the Commission should recognize Kern River as a high-risk pipeline and set its equity return accordingly.

Q. Does this conclude your testimony?

A. Yes, it does.

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Kern River Gas Transmission Company) Docket No. RP04-___-000

AFFIDAVIT OF
CHARLES E. OLSON

Charles E. Olson, being first duly sworn, on oath states that he is the witness whose testimony appears on the preceding pages entitled "Prepared Direct Testimony of Charles E. Olson on behalf of Kern River Gas Transmission Company;" that, if asked the same questions that appear in the text of said direct testimony, he would give the answers that are herein set forth; and that he adopts the aforesaid testimony as his sworn, direct testimony in this proceeding.

Charles E. Olson

Charles E. Olson

Subscribed and sworn to me, a Notary Public, in and for the ~~District of Columbia,~~ County of Montgomery
this 21st day of April, 2004.

Annamma Yogiaveetil

My commission expires: 01-10-2004

ANNAMMA YOGIAVEETIL
NOTARY PUBLIC STATE OF MARYLAND
My Commission Expires January 10, 2006

k\kern\rp04-xx\final direct testimony\Olson Affidavit

KERN RIVER GAS TRANSMISSION COMPANY

Dividend Yields
Comparable Gas Pipelines
September 2003 – February 2004

	Dividend Yields						
Company	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Avg.
Enterprise Products Partners	7.0	7.1	7.0	6.6	6.5	6.9	6.8
Gulfterra Partners, L.P.	7.2	7.0	7.2	6.9	6.8	7.1	7.0
Kinder Morgan, Inc.	3.0	2.9	3.0	3.9	3.7	3.7	3.4
Kinder Morgan Energy Partners	6.3	6.0	6.0	5.8	5.7	6.0	6.0
Northern Border Partners	7.4	7.7	8.2	8.3	8.2	8.0	8.0
Williams Companies	0.4	0.4	0.4	0.4	0.4	0.4	0.4

KERN RIVER GAS TRANSMISSION COMPANY
Five Year Earnings and Earnings Growth Rates,
Comparable Gas Pipelines
March 2004

Company	Five Year Growth Rate
Enterprise Products Partners	10.0 %
Gulfterra Partners	6.8 %
Kinder Morgan, Inc.	15.0 %
Kinder Morgan Energy Partners	8.0 %
Northern Border Partners	3.5 %
Williams Companies	10.0 %
Average	8.8 %
Median	9.0 %

Source: Yahoo Finance, March 11, 2004

KERN RIVER GAS TRANSMISSION COMPANY

Average Growth Rate, Five-Year Earnings and GDP Growth
Comparable Gas Pipelines
March 2004

Company	Five Year Growth Rate (2/3 Weight)	GDP Growth (1/3 Weight)	Average
Enterprise Products Partners	10.0 %	5.92 %	8.64%
Gulfterra Partners	6.8 %	5.92 %	6.50 %
Kinder Morgan, Inc.	12.0 %	5.92 %	9.97 %
Kinder Morgan Engy Partners	8.0 %	5.92 %	7.30 %
Northern Border Partners	3.5 %	5.92 %	4.30 %
Williams Companies	10.0 %	5.92 %	8.64 %

KERN RIVER GAS TRANSMISSION COMPANY

Cost of Equity Capital,
Comparable Gas Pipelines
March 2004

Company	Dividend[1] Yield	Average[2] Growth	Adjusted Yield	Cost of Equity
Enterprise Products Partners	6.8 %	8.6 %	7.1 %	15.1 %
Gulfterra Partners	7.0 %	6.5 %	7.2 %	13.7 %
Kinder Morgan, Inc.	3.4 %	10.0 %	3.6 %	13.6 %
Kinder Morgan Engy Partners	6.0 %	7.3 %	6.2 %	13.2 %
Northern Border Partners	8.0 %	4.3 %	8.2 %	12.5 %
Williams Companies	0.4 %	8.6 %	0.4 %	9.0 %
Median				13.4 %
Mean				12.8 %
Midpoint				12.0 %

[1] From Schedule 1.
[2] From Schedule 3