

Exhibit No.:
Issue(s):
Witness/Type of Exhibit:
Sponsoring Party:
Case No.:

Fleet Fuel Costs
Trippensee/Direct
Public Counsel
ER-2009-0089

DIRECT TESTIMONY

OF

RUSSELL W. TRIPPENSEE

Submitted on Behalf of the Office of the Public Counsel

Kansas City Power & Light Company

CASE NO. ER-2009-0089

February 11, 2009

**BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI**

In the Matter of the Application of Kansas)
 City Power and Light Company for)
 Approval to Make Certain Changes in its)
 Charges for Electric Service To Continue)
 the Implementation of Its Regulatory Plan.)

ER-2009-0089

AFFIDAVIT OF RUSSELL W. TRIPPENSEE

STATE OF MISSOURI)
) ss
 COUNTY OF COLE)

Russell W. Trippensee, of lawful age and being first duly sworn, deposes and states:

1. My name is Russell W. Trippensee. I am the Chief Public Utility Accountant for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my direct testimony.
3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

Russell W. Trippensee

 Russell W. Trippensee

Subscribed and sworn to me this 11th day of February 2009.



KENDELLE R. SEIDNER
 My Commission Expires
 February 4, 2011
 Cole County
 Commission #07004782

Kendelle R. Seidner

 Kendelle R. Seidner
 Notary Public

My commission expires February 4, 2011.

DIRECT TESTIMONY
OF
RUSSELL W. TRIPPENSEE
KANSAS CITY POWER & LIGHT COMPANY
CASE NO. ER-2009-0089

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

2 A. Russell W. Trippensee. I reside at 1020 Satinwood Court, Jefferson City, Missouri 65109, and my
3 business address is P.O. Box 2230, Jefferson City, Missouri 65102.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am the Chief Utility Accountant for the Missouri Office of the Public Counsel (OPC or Public
6 Counsel).

7 **Q. ARE YOU A CERTIFIED PUBLIC ACCOUNTANT?**

8 A. Yes, I hold certificate/license number 2004012797 in the State of Missouri.

9 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.**

10 A. I attended the University of Missouri at Columbia, from which I received a BSBA degree, major in
11 Accounting, in December 1977. I also completed the requisite hours for a major in finance. I
12 attended the 1981 NARUC Annual Regulatory Studies Program at Michigan State University. I have
13 attended numerous seminars and conferences related to public utility regulation. Finally, I am
14 required to take a minimum of 40 hours per year of continuing professional education to maintain my
15 CPA license.

16 **Q. PLEASE DESCRIBE YOUR WORK EXPERIENCE.**

17 A. From May through August, 1977, I was employed as an Accounting Intern by the Missouri Public
18 Service Commission (MPSC or Commission). In January 1978 I was employed by the MPSC as a

1 Public Utility Accountant I. I left the MPSC staff in June 1984 as a Public Utility Accountant III and
2 assumed my present position.

3 **Q. PLEASE DESCRIBE YOUR PROFESSIONAL AFFILIATIONS.**

4 A. I served as the chairman of the Accounting and Tax Committee for the National Association of State
5 Utility Consumer Advocates from 1990-1992 and am currently a member of the committee. I am a
6 member of the Missouri Society of Certified Public Accountants.

7 **Q. PLEASE DESCRIBE YOUR WORK WHILE YOU WERE EMPLOYED BY THE MPSC
8 STAFF.**

9 A. Under the direction of the Chief Accountant, I supervised and assisted with audits and examinations
10 of the books and records of public utility companies operating within the State of Missouri with
11 regard to proposed rate increases.

12 **Q. WHAT IS THE NATURE OF YOUR CURRENT DUTIES WITH THE OFFICE OF
13 THE PUBLIC COUNSEL?**

14 A. I am responsible for the Accounting section of the Office of the Public Counsel and coordinating our
15 activities with the rest of our office and other parties in rate proceedings. I am also responsible for
16 performing audits and examinations of public utilities and presenting the findings to the MPSC on
17 behalf of the public of the State of Missouri.

18 **Q. HAVE YOU PREVIOUSLY FILED TESTIMONY BEFORE THE MPSC?**

19 A. Yes. I filed testimony in the cases listed on Schedule RWT-1 of my testimony on behalf of the
20 Missouri Office of the Public Counsel or MPSC Staff.

21 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

1 A. To present the Office of Public Counsel's position on fleet fuel costs that should be included in the
2 overall cost of service. This adjustment is necessary to reflect current market conditions and also will
3 highlight problems with adjustments 26b and 26c made by Kansas City Power & Light (KCPL or
4 Company) in its direct filing. It is my intention to address specific concerns with these two KCPL
5 sponsored adjustments in my rebuttal testimony.

6 **Q. WHAT ARE FLEET FUEL COSTS?**

7 A. The "fleet" referred to is the various motorized vehicles, transportation equipment, and equipment
8 that require diesel, gasoline, bio-diesel, or ethanol or operate. The quantity used and cost of these
9 fuels is maintained by the Company and is recorded in a fleet clearing account that accumulates all
10 costs associated with the fleet. Those costs are then charged to expense accounts or capitalized to
11 plant accounts based on the actual use of the individual components of the fleet and the operating unit
12 cost for each individual component.

13 It should be noted that an expense ratio or a capitalization ratio for the fleet clearing accounts can be
14 developed by analyzing the process discussed above.

15 **Q. WHAT IS PUBLIC COUNSEL'S RECOMMENDATION REGARDING FLEET FUEL
16 COSTS?**

17 A. I recommend that the revenue requirement be based on a total fleet fuel cost of \$1,566,997 prior to
18 allocation between expense accounts and capitalized accounts. The Company incurred \$1,944,015 of
19 fleet fuel costs during the 2007 test year.

20 **Q. DO YOU HAVE A SPECIFIC RECOMMENDATION REGARDING THE LEVEL OF
21 FLEET FUEL COST THAT SHOULD BE ASSIGNED TO EXPENSE?**

1 A. Yes. I believe that the test year expense for KCPL on a total company basis should be reduced by
2 \$257,315 to reflect current market conditions. This recommendation utilizes the test year expense
3 ratio for the fleet clearing account from the test year. This adjustment does not reflect the Missouri
4 retail allocation (on which I am not taking a position on at this time).

5 **Q. WHY DID YOU USE THE TEST YEAR FLEET CLEARING ACCOUNT EXPENSE**
6 **RATIO?**

7 A. The fleet clearing account expense ratio fluctuates from year to year depending on the activities for
8 which the equipment is used. I reviewed the four years from 2005 – 2008 and found the ratios did not
9 experience significant variation. The four years of expense ratios had a low of 66.34% in 2005 and a
10 high of 69.40% in 2005. The most recent two years were 68.25% in the test year, 2007, and 68.92%
11 in 2008. The four year average is 68.23%.

12 Based on the lack of significant variation over the four year period and the average being within 2
13 one-hundredths of a percent of the test year, I believed the test year to be representative of the on-
14 going level of the relationship between expense and capital projects that utilize the fleet.

15 **Q. YOU STATED YOUR PROPOSED ADJUSTMENT IS NECESSARY TO REFLECT**
16 **CURRENT MARKET CONDITIONS. PLEASE EXPLAIN.**

17 A. Everyone is well aware of the current economic conditions facing this country and this state. Fuel
18 prices have been materially affected. While we all hope and pray that these economic conditions will
19 improve, forecasts that I am aware of do not anticipate that fuel costs will return to levels experienced
20 during the test year before the Company's next rate case that is expected to reflect the in-service of
21 Iatan 2. Therefore, a failure to reflect the current cost of fuel in the revenue requirement

1 determination in this case will result in ratepayers' rates being based on an inflated expense level that
2 the Company is not reasonably expected to incur.

3 **Q. HOW DID YOU DETERMINE THE PER UNIT COST OF FUEL FOR YOUR**
4 **PROPOSED RECOMMENDED LEVEL?**

5 A. I utilized the Short-Term Energy Outlook published by the Energy Information Administration (EIA)
6 which is the source of "Official Energy Statistics from the U.S. Government." The cost information
7 used was contained in the Short-Term Energy Outlook dated January 13, 2009 which provides
8 gasoline and Diesel cost projections for the years 2009 and 2010. I used the 2009 costs and rounded
9 them up to the nearest 10 cents. I used the price of diesel for the cost of bio-diesel which KCPL also
10 uses. KCPL switches between bio-diesel and diesel throughout the period analyzed. KCPL also uses
11 ethanol which over the last two years has been approximately 20 cents less than gasoline; therefore I
12 used this differential in pricing out the normalized gallons of ethanol purchased.

13 Schedule RWT-2 is a copy of the January 13, 2009 Short-Term Energy Outlook that I utilized for this
14 recommendation.

15 **Q. WHAT WAS THE PRICE OF THE FUELS IN THE ENERGY INFORMATION**
16 **ADMINISTRATION'S SHORT-TERM ENERGY OUTLOOK?**

17 A. For 2009, the price of gasoline including taxes was expected to be \$1.87 nationally and \$1.83 for the
18 Midwest. An increase of \$.31 was expected in 2010 for a price of \$2.18 nationally and \$.32 for the
19 Midwest resulting in a price of \$2.15. Diesel prices were \$2.27 and \$2.54 respectively for 2009 and
20 2010 on the national level.

1 | **Q. ARE THE ENERGY INFORMATION ADMINISTRATION'S OUTLOOK PRICES**
2 | **FOR 2010 LOWER THAN THE PRICES EXPERIENCED BY THE COMPANY**
3 | **DURING THE TEST YEAR AND 2008?**

4 | A. Yes.

5 | **Q. WHY DID YOU NORMALIZE THE GALLONS OF EACH FUEL REQUIRED TO**
6 | **OPERATE THE FLEET?**

7 | A. As previously discussed, the actual usage of the fleet varies from year to year, therefore it must be
8 | determined if the test year represents the expected level of on-going operations. A basic test that is
9 | used is to look at historical information and any trends.

10 | **Q. WHAT DID YOUR ANALYSIS OF THE HISTORICAL DATA REVEAL?**

11 | A. Similar to expense ratio, there hasn't been significant variation in the total fuel usage. Therefore I
12 | utilized a four-year average to determine the on-going level to be used in determining the total fuel
13 | costs to include. This component of the analysis resulted in normalized gallons of fuel being greater
14 | than the test year by 26,439 gallons.

15 | **Q. WILL YOU HAVE TO UPDATE YOUR ANALYSIS?**

16 | A. Yes. The responses to my data requests did not include information for December, 2008. The
17 | recommendation in my direct testimony is based on the extrapolation of eleven months of 2008 data
18 | to obtain a full year of data. I will work with the Company to obtain the December data and revise
19 | my recommendation in either my rebuttal or surrebuttal testimony as the data becomes available.

20 | **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

21 | A. Yes.

Direct Testimony
Russell W. Trippensee
Case No. ER-2009-0089

Missouri Power & Light Company, Steam Dept., Case No. HR-82-179
Missouri Power & Light Company, Electric Dept., Case No. ER-82-180
Missouri Edison Company, Electric Dept., Case No. ER-79-120
Southwestern Bell Telephone Company, Case No. TR-79-213
Doniphan Telephone Company, Case No. TR-80-15
Empire District Electric Company, Case No. ER-83-43
Missouri Power & Light Company, Gas Dept., Case No. GR-82-181
Missouri Public Service Company, Electric Dept., Case No. ER-81-85
Missouri Water Company, Case No. WR-81-363
Osage Natural Gas Company, Case No. GR-82-127
Missouri Utilities Company, Electric Dept., Case No. ER-82-246
Missouri Utilities Company, Gas Dept., Case No. GR-82-247
Missouri Utilities Company, Water Dept., Case No. WR-82-248
Laclede Gas Company, Case No. GR-83-233
Great River Gas Company, Case No. GR-85-136 (OPC)
Northeast Missouri Rural Telephone Company, Case No. TR-85-23 (OPC)
United Telephone Company, Case No. TR-85-179 (OPC)
Kansas City Power & Light Company, Case No. ER-85-128 (OPC)
Arkansas Power & Light Company, Case No. ER-85-265 (OPC)
KPL/Gas Service Company, GR-86-76 (OPC)
Missouri Cities Water Company, Case Nos. WR-86-111, SR-86-112 (OPC)
Union Electric Company, Case No. EC-87-115 (OPC)
Union Electric Company, Case No. GR-87-62 (OPC)
St. Joseph Light and Power Company, Case Nos. GR-88-115, HR-88-116 (OPC)
St. Louis County Water Company, Case No. WR-88-5 (OPC)
West Elm Place Corporation, Case No. SO-88-140 (OPC)
United Telephone Long Distance Company, Case No. TA-88-260 (OPC)
Southwestern Bell Telephone Company, Case No. TC-89-14, et al. (OPC)
Osage Utilities, Inc., Case No. WM-89-93 (OPC)
GTE North Incorporated, Case Nos. TR-89-182, TR-89-238, TC-90-75 (OPC)
Contel of Missouri, Inc., Case No. TR-89-196 (OPC)
The Kansas Power and Light Company, Case No. GR-90-50 (OPC)
Southwestern Bell Telephone Company, Case No. TO-89-56 (OPC)
Capital City Water Company, Case No. WR-90-118 (OPC)
Laclede Gas Company, Case No. GR-90-120 (OPC)
Southwestern Bell Telephone Company, Case No. TR-90-98 (OPC)

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Empire District Electric Company, Case No. ER-90-138 (OPC)
Associated Natural Gas Company, Case No. GR-90-152 (OPC)
Southwestern Bell Telephone Company, Case No. TO-91-163 (OPC)
Union Electric Company, Case No. ED-91-122 (OPC)
Missouri Public Service, Case Nos. EO-91-358 and EO-91-360 (OPC)
The Kansas Power and Light Company, Case No. GR-91-291 (OPC)
Southwestern Bell Telephone Co., Case No. TO-91-163 (OPC)
Union Electric Company, EM-92-225 and EM-92-253 (OPC)
Southwestern Bell Telephone Company, TO-93-116(OPC) (OPC)
Missouri Public Service Company, ER-93-37, (January, 1993) (OPC)
Southwestern Bell Telephone Company, TO-93-192, TC-93-224 (OPC)
Saint Louis County Water Company, WR-93-204 (OPC)
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Empire District Electric Company, ER-94-174 (OPC)
Raytown Water Company, WR-94-211 (OPC)
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Capital City Water Company, WR-94-297 (OPC)
Southwestern Bell Telephone Company, TR-94-364 (OPC)
Missouri Gas Energy, GR-95-33 (OPC)
St. Louis County Water Company, WR-95-145 (OPC)
Missouri Gas Energy, GO-94-318 (OPC)
Alltel Telephone Company of Missouri, TM-95-87 (OPC)
Southwestern Bell Telephone Company, TR-96-28 (OPC)
Steelville Telephone Exchange, Inc., TR-96-123 (OPC)
Union Electric Company, EM-96-149 (OPC)
Imperial Utilites Corporation, SC-96-247 (OPC)
Laclede Gas Company, GR-96-193 (OPC)
Missouri Gas Energy, GR-96-285 (OPC)
St. Louis County Water Company, WR-96-263 (OPC)
Village Water and Sewer Company, Inc. WM-96-454 (OPC)
Empire District Electric Company, ER-97-82 (OPC)
UtiliCorp d/b/a Missouri Public Service Company, GR-95-273 (OPC)
Associated Natural Gas, GR-97-272 (OPC)
Missouri Public Service, ER-97-394, ET-98-103 (OPC)
Missouri Gas Energy, GR-98-140 (OPC)

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St. Louis County Water, WO-98-223 (OPC)
United Water Missouri, WA-98-187 (OPC)
Kansas City Power & Light/Western Resources, Inc. EM-97-515 (OPC)
St. Joseph Light & Power Company, HR-99-245 (OPC)
St. Joseph Light & Power Company, GR-99-246 (OPC)
St. Joseph Light & Power Company, ER-99-247 (OPC)
AmerenUE, EO-96-14, (prepared statement) (OPC)
Missouri American Water Company, WR-2000-281 (OPC)
Missouri American Water Company, SR-2000-282 (OPC)
UtiliCorp United Inc./St. Joseph Light & Power Company, EM-2000-292 (OPC)
UtiliCorp United Inc./Empire District Electric Company, EM-2000-369 (OPC)
St. Joseph Light & Power Company, EO-2000-845 (OPC)
St. Louis County Water Company, WR-2000-844 (OPC)
Union Electric Company, EO-2001-245 (OPC)
Laclede Gas Company, GM-2001-342 (OPC)
Empire District Electric Company, ER-2001-299 (OPC)
Missouri-American Water Company, et. al., WM-2001-309 (OPC)
AmerenUE, EC-2002-152, GC-2002-153 (OPC)
UtiliCorp United Inc., ER-2001-672 (OPC)
Aquila, Inc., GO-2002-175 (OPC)
AmerenUE, ER-2002-001 (OPC)
Laclede Gas Company, GA-2002-429 (OPC)
AmerenUE, GR-2003-0517 (OPC)
Algonquin Water Resources of Missouri & Silverleaf Resort, Inc. WO-2005-0206 (OPC)
Kansas City Power & Light Company, Case No. EO-2005-0329 (OPC)
Empire District Electric Company, Case No. ER-2006-0315 (OPC)
Kansas City Power & Light Company, Case No. ER-2006-0314 (OPC)
Atmos Energy Corporation, Case No. GR-2006-0387 (OPC)
Missouri Gas Energy, Case No. GR-2006-0422 (OPC)
Aquila, Inc., ER-2007-0004 (OPC)
Missouri American Water Company, WR-2007-0216, (OPC)
Kansas City Power & Light Company, ER-2007-0291 (OPC)
Kansas City Power & Light Company/Aquila, Inc., EM-2007-0374 (OPC)
Laclede Gas Company, GU-2007-0138 (OPC); AAO on Cold Weather Rule
Laclede Gas Company, GT-2009-0026: PGA inclusion of Uncollectible
Kansas City Power & Light Company, ER-2009-0089; Fleet Fuel Costs

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Energy Information Administration
Official Energy Statistics from the U.S. Government

Glossary

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Short-Term Energy Outlook



January 13, 2009 Release
(Next Update: February 10, 2009)

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Highlights

- This edition of the *Short-Term Energy Outlook* is the first to include monthly forecasts through December 2010.
- The energy forecast is sensitive to economic conditions. In this forecast, U.S. real gross domestic product (GDP) is expected to decline by 2 percent in 2009, leading to decreases in domestic energy consumption for all major fuels. Economic recovery is projected to begin in 2010, with 2 percent year-over-year growth in GDP.
- In the past 6 months, the monthly average price of West Texas Intermediate (WTI) crude oil has fallen from \$133 per barrel in July to \$41 in December. WTI prices are projected to average \$43 per barrel in 2009 and \$55 in 2010.
- Average monthly U.S. prices for regular gasoline and diesel fuel were \$1.69 and \$2.45 per gallon, respectively, in December 2008, more than \$2.25 per gallon below their monthly peaks last July. Economic contraction in 2009 and lower projected crude oil prices are expected to reduce annual average retail gasoline and diesel fuel prices in 2009 to \$1.87 and \$2.27 per gallon, respectively.
- Residential heating oil prices during the current (2008-09) heating season are projected to average \$2.48 per gallon, a reduction of 25 percent from the 2007-2008 heating season. Residential propane prices are projected to average \$2.14 this winter, a decrease of 13 percent from last winter. Residential natural gas prices are projected to average \$12.17 per thousand cubic feet (Mcf), a decrease of 4 percent from last winter.
- The U.S. economic downturn is also contributing to lower natural gas prices. The Henry Hub natural gas spot price is projected to decline from an average of \$9.13 per Mcf in 2008 to \$5.78 per Mcf in 2009, but then increase in 2010 to an average of \$6.63 per Mcf.

Global Petroleum

Overview. The downward trend in oil prices continued in December as the worsening global economy weakened oil demand and the second Organization of Petroleum Exporting Countries (OPEC) agreement for substantial production cuts within a month has failed, thus far, to support substantially higher prices. The outlook for supply and demand fundamentals indicates a fairly loose oil market balance over the next 2 years. The global economic downturn points to declining oil consumption in 2009, while additional production capacity from both OPEC and non-OPEC nations should boost surplus production capacity, reducing the likelihood of a renewed strong upward pressure on prices. Global real GDP growth (weighted according to shares of world oil consumption) is assumed to be 0.6 percent in 2009 and 3.0 percent in 2010. These projections compare with 4.6 percent real GDP growth in 2007 and 3.2 percent in 2008. The oil price path going forward will be driven mainly by the depth and duration of the global economic downturn, the pace and timing of the recovery, and actual OPEC production.

Consumption. World oil consumption continues to be revised downward in response to the global economic downturn. Global consumption is estimated to have been largely

New STEO Table:

Table 3d. World Petroleum Consumption

version	HTML version		PDF		
Price Summary					
	Year			Percent Change	
	2007	2008	2009	2010	07-08 08-09 00-10
WTI Crude^a	72.32	99.55	43.25	54.50	37.7 -56.6 26.0
(\$/barrel)					
Gasoline^b	2.81	3.25	1.87	2.18	15.9 -42.5 16.4
(\$/gal)					
Diesel^c	2.88	3.79	2.27	2.54	31.5 -40.1 12.1
(\$/gal)					
Heating Oil^d	2.72	3.30	2.22	2.40	21.5 -32.9 8.2
(\$/gal)					
Natural Gas^d	13.00	13.47	11.74	12.12	3.5 -12.8 3.3
(\$/mcf)					

^a West Texas Intermediate. ^b Average regular pump price.
^c On-highway retail. ^d Residential average.

Detailed STEO Information:

- ° [Query STEO database](#) assumptions, data, projections
- ° [Real Petroleum Prices](#) charts, data, projections

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Schedule RWT 2.1

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unchanged in 2008 and is projected to fall by 800,000 barrels per day (bbl/d) in 2009.

Total world oil consumption is expected to record a modest rebound in 2010, rising by 880,000 bbl/d from year-earlier levels, on the assumption of the beginning of an expected recovery in global economic growth. Oil consumption growth is concentrated in countries outside of the Organization for Economic Cooperation and Development (OECD), particularly China, the Middle East, and Latin America. However, projected declines in oil consumption in OECD countries more than offset any non-OECD oil consumption growth in 2009 ([World Oil Consumption](#)). If the world economic recovery happens sooner or is stronger than EIA now anticipates, oil consumption could decline at a slower rate or potentially increase at a faster rate than expected, putting upward pressure on oil prices.

Non-OPEC Supply. Non-OPEC supply is projected to rise modestly over the next 2 years. After falling by 340,000 bbl/d in 2008 because of project delays and disruptions in Central Asia and the Gulf of Mexico, non-OPEC supply is projected to grow by about 180,000 bbl/d in 2009 and 90,000 bbl/d in 2010. These projections assume that unexpected delays to new non-OPEC supply that have occurred in the past will continue through the forecast period. Supply growth in countries such as the United States, Brazil, and Azerbaijan is expected to more than compensate for continued declines in many non-OPEC nations, particularly Mexico, the North Sea, and Russia. The global economic slowdown and falling oil prices bring additional risk to the usual uncertainties concerning non-OPEC supply growth, such as unexpected disruptions, project delays, and underestimation of decline rates. Lower oil prices bring into doubt the viability of some high-cost non-OPEC projects, especially those utilizing nonconventional technology or those seeking to exploit frontier oil basins. The credit crunch associated with the global economic crisis can also make it difficult to acquire financing for new projects or even finance the investment required to prevent accelerated declines at producing fields. If conditions in global financial markets lead to delayed investment in existing and new oil fields, then even a short-lived economic downturn could have longer-term ramifications for world oil supply. This would heighten the risk of a return to a tight supply situation once the world economy and oil demand growth recover.

OPEC Supply. OPEC's December announcement that it would cut crude oil production again, following its earlier cut in November, has not yet led to a substantial increase in oil prices. Together, the two announced cuts imply a new overall target for production (excluding Iraq) of 24.845 million bbl/d, 4.2 million bbl/d below actual September production. However, the market is not presently convinced that OPEC members will willingly curtail output enough to lead to much higher prices. Adherence to the announced cuts will be challenging, as several individual countries are motivated to maintain production at higher levels to generate revenue needed to finance their government programs amid falling prices. The lack of transparency in the new agreement, highlighted by the failure to publicize individual country production cuts, is one indicator of the reluctance of countries to cut production consistent with the group's new overall production target. OPEC plans to meet again on March 15 in Vienna to evaluate the effectiveness of its recent actions.

EIA projects that total OPEC crude oil production (including Iraq) will fall by more than 2 million bbl/d, from 31.4 million bbl/d in September 2008 to 29.3 million bbl/d in the first quarter of 2009, implying a compliance rate of a little more than 50 percent. Because of Indonesia's exit from OPEC, EIA has revised its historic and forecasted values for OPEC oil production to be consistent with the current membership. OPEC crude oil production is expected to average 30.0 million bbl/d in 2009 and 30.7 million bbl/d in 2010. In addition, EIA expects that OPEC production of non-crude liquids will rise substantially next year, growing by 600,000 bbl/d in 2009 and by 850,000 bbl/d in 2010. The combination of lower demand for OPEC crude oil and the capacity expansions expected in several OPEC countries means that surplus production capacity could increase to roughly 4.0 million bbl/d in 2009 and 4.7 million bbl/d by the end of 2010, compared with the 1 to 2 million bbl/d of surplus capacity available over the past several years ([OPEC Surplus Oil Production Capacity](#)).

Inventories. Revised data indicate that OECD commercial inventories rose by 330,000 bbl/d in the third quarter of 2008, lower than historic rates for inventory builds during that time of year. OECD commercial inventories stood at 2.63 billion barrels at the end of the third quarter, equivalent to 57 days of forward consumption cover. On the basis of days of forward cover, OECD commercial inventories are well above average historic levels, and EIA projects that they will remain there through the end of 2010 (Days of Supply of OECD Commercial Stocks). The combination of substantial surplus capacity and above-average inventories should dampen price pressure over the period. In any event, a sustained rebound in prices is not likely until the economic recovery causes a sustained rebound in demand for OPEC crude oil.

U.S. Petroleum

Consumption. The increase in prices to record levels in 2008 and the weakening economy drove total petroleum products consumption down by about 1.2 million bbl/d, or 5.7 percent, from the 2007 average (U.S. Petroleum Products Consumption Growth). Motor gasoline consumption declined by slightly more than 300,000 bbl/d, or 3.3 percent.

Despite the cold weather that gripped much of the Nation in December, distillate fuel consumption in 2008 declined by 5.3 percent from the year before. In 2009, total

7a. U.S. Fuel Consumption for Electricity Generation by Sector	html	pdf
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Direct Testimony of Russell Trippensee

Case No. ER-2009-0089

petroleum products consumption is projected to fall by nearly 400,000 bbl/d, or 2 percent, due to continued economic weakness. Consumption for both motor gasoline and distillate fuel are forecasted to decline by about 100,000 bbl/d each. The expected economic recovery in 2010 is projected to boost total petroleum products consumption by 150,000 bbl/d, or 0.8 percent, and both motor gasoline and distillate consumption are each projected to rise by about 50,000 bbl/d.

Production. In 2008, domestic crude oil production averaged 4.9 million bbl/d, down by 140,000 bbl/d from 2007 (U.S. Crude Oil Production). However, in 2009, domestic output is projected to increase by over 300,000 bbl/d to an average of 5.25 million bbl/d. This would be the first increase in production since 1991. Output is projected to rise by a further 50,000 bbl/d in 2010. Contributing to the increases in output are the Gulf of Mexico Thunder Horse platform, which is coming on stream now, and the Tahiti platform, expected to come on stream late in 2009.

Prices. Having fallen from record highs to below \$40 per barrel, WTI prices averaged near \$100 per barrel in 2008. Under current economic assumptions and assuming no major crude oil supply disruptions, WTI prices are expected to average \$43.25 per barrel in 2009 and \$54.50 per barrel in 2010 (Crude Oil Prices).

Regular-grade gasoline prices averaged \$1.68 per gallon on January 5, down substantially from their July 14 peak of \$4.11 per gallon. These prices are projected to average \$1.87 per gallon in 2009 and \$2.18 per gallon in 2010. Because of lower motor gasoline consumption, the difference between the retail gasoline price and the cost of crude oil is expected to remain narrow for much of 2009 but is expected to increase slightly in 2010.

On-highway diesel fuel retail prices, which averaged \$3.79 per gallon in 2008, are projected to average \$2.27 per gallon in 2009 and \$2.54 in 2010. The projected continuation of the decline in the consumption of diesel fuel in the United States as well as a slowing of the growth in distillate fuel usage outside the United States are expected to result in a weakening of refining margins for distillate throughout the forecast.

Natural Gas

Consumption. Total natural gas consumption is estimated to have increased by 0.7 percent in 2008, primarily driven by a 5.8-percent increase in heating degree-days year-over-year. Natural gas consumption is projected to decline by 1.0 percent in 2009 and then increase by 0.7 percent in 2010 (Total U.S. Natural Gas Consumption Growth). The demand outlook for 2009 is largely driven by expectations of continued economic weakness. The slight consumption growth projected in the residential sector is expected to be more than offset by consumption declines in the commercial, industrial, and electric power sectors this year. With the natural-gas-weighted industrial production index projected to fall by 6.6 percent in 2009, industrial sector natural gas consumption is expected to decline by 3.0 percent. Consumption growth in 2010 is expected to be limited to the electric power sector, with all other sectors expected to decline slightly.

Production and Imports. Total U.S. marketed natural gas production is estimated to have increased by 5.9 percent in 2008 led by the development of unconventional reserves in the Lower-48 States. Total marketed production is expected to increase by 0.7 percent in 2009, and then decline by 0.9 percent in 2010. Producers have already begun to react to lower prices and the outlook for lower consumption as evidenced by the recent pullback in drilling activity. The number of rigs drilling for natural gas in the Lower-48 onshore region has fallen from about 1,540 in August 2008 to under 1,200 at the beginning of January 2009. Despite the cutback in drilling activity, the current outlook suggests that some production curtailments may be necessary during the latter part of 2009 in order to balance the market. Nevertheless, in 2009, Lower-48 production outside of the Gulf of Mexico (GOM) region is expected to increase by 1.0 percent. Although drilling activity is expected to begin recovery in 2010, production is projected to decline relative to 2009 by 4.7 percent in the Federal GOM and by 0.4 percent in the Lower-48 non-GOM.

U.S. imports of liquefied natural gas (LNG) are estimated to have totaled about 350 billion cubic feet (Bcf) in 2008. Shipments of LNG to the United States are currently expected to rise to about 420 Bcf in 2009. However, limits to natural gas storage capacity outside the United States could unexpectedly boost U.S. imports of LNG during the summer months if global demand for natural gas does not increase as expected. U.S. LNG imports in 2010 are projected to reach a little more than 500 Bcf.

Inventories. On January 2, 2009, working natural gas in storage was 2,830 Bcf (U.S. Working Natural Gas in Storage). Current inventories are now 87 Bcf above the 5-year average (2004-2008), and 31 Bcf above the level during the corresponding week last year. Storage inventories are expected to finish the 2009 winter season (March 31, 2009) at over 1.5 trillion cubic feet (Tcf), about 270 Bcf above the corresponding period last year, but below the 1.7 Tcf mark recorded in 2006. The expected supply overhang throughout the 2009 injection season (April 1 to October 31) is projected to send the resulting working gas inventories near the previous high reported on November 2, 2007.

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Prices. The Henry Hub spot price averaged \$9.13 per Mcf in 2008 but ended the year averaging \$5.99 per Mcf in December. Weak natural gas demand associated with poor economic conditions together with strong domestic production growth contributed to the recent decrease in prices that is expected to persist in 2009. On an annual basis, the Henry Hub spot price is expected to average \$5.78 per Mcf in 2009 and \$6.63 per Mcf in 2010. As consumption reacts to worsening economic factors, natural gas prices may need to fall further than currently forecast in order to restrain production activities and balance the market during the second half of 2009, particularly as inventory nears storage capacity. Prices are expected to begin to increase in 2010 as the economy improves.

Electricity

Consumption. Total electricity consumption is projected to decline by 0.5 percent in 2009 (U.S. Total Electricity Consumption), with an expected 3.6-percent decline in electricity sales to the industrial sector during due to economic conditions partially offset by slight growth in residential electricity sales. Total electricity consumption is expected to rebound in 2010 by 1.5 percent, driven by growth in the commercial and residential sectors.

Prices. A number of utilities that increased electricity rates last summer have begun reducing prices in response to fuel costs which have fallen from last year's peak levels. Other utilities are pursuing slight increases to cover the cost of upgrades to generation and transmission facilities. Overall, U.S. residential electricity prices are forecast to grow by 2.3 percent in 2009 and by 2.0 percent in 2010 (U.S. Residential Electricity Prices).

Coal

Consumption. The projected decline in electricity consumption, combined with projected increases from other generation sources (nuclear, petroleum, and wind) will lead to a 0.7-percent decline in electric-power-sector coal consumption, which accounts for more than 90 percent of total coal consumption. An expected increase in electricity consumption in 2010 of 1.5 percent will lead to a 1.9-percent increase in electric-power-sector coal consumption. Consumption growth in the coke plant sector is estimated to have been flat in 2008 but is expected to fall by 8.2 percent in 2009 and by 5 percent in 2010 due to the economic slowdown. Retail and other industrial sector coal consumption is expected to decline by 9.0 percent in 2009 but increase by 0.7 percent in 2010 as economic conditions improve (U.S. Coal Consumption Growth).

Production. A significant increase in coal exports in 2008 contributed to a 2.8-percent increase in coal production. Production is expected to fall in 2009 by 4.0 percent as lower total domestic coal consumption is combined with declines in exports and a small increase in imports. Production is projected to increase by 2.4 percent in 2010 as domestic consumption and exports increase with an improving economy (U.S. Annual Coal Production).

Exports. Reductions in global coal demand, coupled with the return to normal supply conditions in major coal-producing and exporting countries that experienced disruptions during 2008, are expected to reduce U.S. coal exports, which grew by nearly 40 percent in 2008, by 10 million short tons in 2009, a 12-percent decrease. The improving global economy in 2010 will spur global coal demand and this will lead to a projected 12-percent increase in exports.

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