Exhibit No.:	
Witness:	Maurice Brubaker
Type of Exhibit:	Direct Testimony
Issue:	Fuel and Variable Purchased Power Cost Recovery
Sponsoring Parties:	Explorer Pipeline Company and Praxair, Inc.
Case No.:	ER-2006-0315

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the matter of The Empire District Electric Company of Joplin, Missouri for authority to file tariffs increasing rates for electric service provided to customers in the Missouri service area of the Company	**)))))))**	**Case No. ER-2006-0315**

Direct Testimony of

Maurice Brubaker
on Revenue Requirement Issues

On Behalf of

Explorer Pipeline Company
and
Praxair, Inc.

June 23, 2006

BRUBAKER & ASSOCIATES, INC.
ST. LOUIS, MO 63141-2000

Project 8531

"NON-PROPRIETARY"
Version

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the matter of The Empire District Electric Company of Joplin, Missouri for authority to file tariffs increasing rates for electric service provided to customers in the Missouri service area of the Company	)))))))	**Case No. ER-2006-0315**

STATE OF MISSOURI	)	
	)	**SS**
COUNTY OF ST. LOUIS	)	

Affidavit of Maurice Brubaker

Maurice Brubaker, being first duly sworn, on his oath states:

1. My name is Maurice Brubaker. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 1215 Fern Ridge Parkway, Suite 208, St. Louis, Missouri 63141-2000. We have been retained by Explorer Pipeline Company and Praxair, Inc. in this proceeding on their behalf.

2. Attached hereto and made a part hereof for all purposes is my direct testimony on revenue requirement issues which was prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2006-0315.

3. I hereby swear and affirm that the testimony is true and correct and that it shows the matters and things it purports to show.

M S Brubaker

Maurice Brubaker

Subscribed and sworn to before this 23rd day of June 2006.

CAROL SCHULZ
Notary Public - Notary Seal
STATE OF MISSOURI
St. Louis County
My Commission Expires: Feb. 26, 2008

Carol Schulz

Notary Public

My Commission Expires February 26, 2008.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the matter of The Empire District Electric Company of Joplin, Missouri for authority to file tariffs increasing rates for electric service provided to customers in the Missouri service area of the Company	**)))))))**	**Case No. ER-2006-0315**

Direct Testimony of Maurice Brubaker

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Maurice Brubaker. My business address is 1215 Fern Ridge Parkway, Suite 208, St. Louis, Missouri 63141-2000.

Q WHAT IS YOUR OCCUPATION?

A I am a consultant in the field of public utility regulation and president of Brubaker & Associates, Inc., energy, economic and regulatory consultants.

Q PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A This information is included in Appendix A to my testimony.

Q ON WHOSE BEHALF ARE YOU SUBMITTING TESTIMONY IN THIS PROCEEDING?

A I am submitting testimony on behalf of Explorer Pipeline Company and Praxair, Inc. (hereafter Industrials). These companies purchase substantial amount of electric power from Empire District Electric Company (Empire or Company) and are vitally concerned about the level of rates that will be determined as a result of this proceeding.

Q WHAT MAGNITUDE OF RATE INCREASES HAVE THESE CUSTOMERS FACED?

A For Praxair, information is available back to Case No. ER97-82. Praxair's per unit cost of electricity has increased over 44% from the rates that were in effect at the time Empire filed its application in Case No. ER97-82 up to the current rates that were established in Case No. ER-2004-0570. The rates which Empire now proposes in this current case would add an additional 10% to Praxair's per unit cost, making the cumulative increase approximately 55%. This increase is significantly greater than the overall increase in the consumer price index (CPI) or the gross national product implicit price deflator (GNPIPD).

It is quite obvious that Empire's rates have increased significantly in recent years, and the Company simply proposes to perpetuate that pattern with its filing in this case.

Q HAVE YOU REVIEWED THE TESTIMONY, EXHIBITS, WORKPAPERS AND OTHER MATERIAL PERTAINING TO THIS CASE?

A Yes. I have reviewed the direct testimony, the supporting exhibits, the underlying workpapers and the responses to numerous data requests. I have also reviewed the stipulation from the previous Empire rate case (Case No. ER-2004-0570), the stipulation from the Empire regulatory plan case (Case No. EO-2005-0263), as well as other relevant material.

Summary

Q IN THIS CASE, WHAT POSITION HAVE INDUSTRIALS TAKEN WITH RESPECT TO THE RECOVERY OF FUEL AND VARIABLE PURCHASED POWER COSTS?

A Industrials have taken the position that the Interim Energy Charge (IEC) adopted in Case No. ER-2004-0570 provides for a cost recovery mechanism that extends over a period of three years from the effective date of the tariffs established in that case. Accordingly, it is the position of Industrials that Empire may not request, in this proceeding, the inclusion in revenue requirements of fuel and variable purchased power costs greater than the amount resulting from the combination of base rate costs and the IEC established in Case No. ER-2004-0570. One of the reasons industrial customers agreed to an IEC mechanism was to provide some certainty in rates. As mentioned earlier, rates have already increased significantly. Although my clients sought to address this matter at an earlier point so that a timely decision could be made, neither that decision process nor the resolution of this legal matter have been completed. Therefore, the balance of this testimony is without prejudice to my clients' positions on this developing issue.

With that as a given, and on that basis, I have calculated that the allowable amount of fuel and variable purchased power costs for which Empire might assert for this proceeding equals the fuel and variable purchased power costs stipulated as being included in base rates ($21.975 per MWh sold) plus the stipulated IEC factor ($2.131 per MWh), or a total of $24.106 per MWh sold. Applied to the Missouri retail energy sales in this case (4,021,170 MWh), the amount of allowable fuel and variable purchased power costs recovery is $96.9 million. As compared to the ****** million claim Empire presently asserts, the allowable amount is less by ****** million.

Q ARE YOU AWARE THAT EMPIRE TAKES A DIFFERENT VIEW OF ITS ENTITLEMENT TO REQUEST REVENUES TO COVER ADDITIONAL FUEL AND VARIABLE PURCHASED POWER COSTS IN THIS CASE?

A Yes, I am aware that Empire takes a different position. This matter is currently pending before the Commission and, as noted, my testimony is subject to and without prejudice to the legal arguments and my clients' positions on this matter.

Q GIVEN THAT LIMITATION, HAVE YOU ALSO CALCULATED THE AMOUNT THAT COULD BE INCLUDABLE IN BASE RATES IF THE COMMISSION WERE TO DECIDE THAT EMPIRE MAY, IN THIS CASE, UNILATERALLY ABANDON ITS EXISTING IEC?

A Yes, I have. I examined the results of Empire's fuel and purchased power cost simulation (Exhibit TWT-9) as well as numerous documents associated with Empire's hedge program and its hedged positions. Based on this information and the current outlook for the price of natural gas, I believe that the maximum includable amount of fuel and variable purchased power costs would be approximately $101 million, as compared to Empire's claim for a cost level of ****** million.

The Current IEC Mechanism

Q BY WHAT MECHANISM DOES EMPIRE CURRENTLY HAVE THE OPPORTUNITY TO RECOVER FUEL AND VARIABLE PURCHASED POWER COSTS?

A The mechanism currently in place is an IEC, combined with amounts in base rates, as stipulated by Empire, Industrials and Public Counsel in Case No. ER-2004-0570.

Q WHAT ARE THE AMOUNTS OF FUEL AND VARIABLE PURCHASED POWER INCLUDED IN BASE RATES AND IN THE IEC?

A The fuel and variable purchased power cost component included in base revenues is $21.975 per MWh sold and the amount included in the refundable IEC is $2.131 per MWh sold, for a total cost recovery of $24.106 per MWh sold.

Q GIVEN THESE FACTORS, WHAT IS THE AMOUNT OF FUEL AND VARIABLE PURCHASED POWER COSTS WHICH IS INCLUDED IN EMPIRE'S CURRENT TARIFFS, BASED ON THE CLAIMED LEVEL OF MISSOURI RETAIL SALES IN THIS CASE?

A The calculations of these amounts appear on Schedule 1 attached to this testimony. The schedule shows the base amount of fuel and variable purchased power costs, the amount included as a refundable IEC and the claimed level of Missouri retail sales in accordance with Empire's filed case. As shown on this Schedule, the combination of base rates plus the IEC, as applied to this current kWh sales level, produces total recoverable fuel and purchased power costs of approximately $96.9 million. This is the amount of variable fuel and purchased power costs that Empire may assert and be consistent with its existing IEC.

Q HOW DOES THIS AMOUNT COMPARE TO THE AMOUNT THAT EMPIRE CLAIMS ENTITLEMENT TO IN THIS CASE?

A By abandoning its IEC, and basing its claim on a production cost simulation run, its natural gas hedge program and its view of the natural gas market at the time of its filing, the total amount sought from Missouri retail customers for these items is approximately ****** million. (Calculations showing the derivation of this amount appear on Schedule 2.) Note that this amount is approximately $15.9 million greater than the amount collected pursuant to the base rates and existing IEC.

Q DO INDUSTRIALS CONTEND THAT BECAUSE OF THE EXISTENCE OF THE IEC THAT EMPIRE MAY NOT SEEK ADDITIONAL REVENUES FROM THE COMMISSION?

A No. Although I am not intending to provide legal testimony, industrials only contend that the existing IEC, combined with the amounts specified as included in base rates in the last rate case, determines the amount of fuel and purchased power cost recovery and the mechanism for recovering such costs for the remainder of its agreed term of three years. Industrials do not assert that Empire may not seek additional revenues to recover changes in the level of the costs of other components of the revenue requirement.

Q BASED ON THIS POSITION WITH RESPECT TO FUEL AND VARIABLE PURCHASED POWER COSTS, HOW MUCH OF EMPIRE'S CLAIMED INCREASE OF $29.5 MILLION WOULD BE DISALLOWED?

A Based on the current IEC and base rate fuel and variable purchased power costs, the amount of increase which Empire seeks through its case, exclusive of fuel and variable purchased power costs, is approximately $13.6 million.

Fuel and Variable Purchased Power Cost Recovery if Empire is Permitted to Abandon Its Existing IEC

Q ARE YOU AWARE THAT EMPIRE DISAGREES WITH THE POSITION OF INDUSTRIALS WITH RESPECT TO ITS ABILITY TO REQUEST HIGHER FUEL AND PURCHASED POWER COST RECOVERY IN THIS PROCEEDING?

A Yes, I am. This has been the subject of several filings with the Commission and rulings by the Commission. It is my understanding that Empire continues to assert a unilateral right to abrogate the IEC Stipulation and unilaterally change the level of fuel cost recovery included in base rates even though the existing IEC has not reached the end of its contracted and tariff-approved term of three years.

Q HAVE YOU CALCULATED WHAT AMOUNT COULD APPROPRIATELY BE INCLUDED IN BASE RATES IF EMPIRE WERE PERMITTED TO ABANDON ITS EXISTING IEC AND INSTEAD COLLECT FUEL AND VARIABLE PURCHASED POWER COSTS THROUGH BASE RATES?

A Yes, I have.

Q WHAT WAS THE STARTING POINT FOR THIS ANALYSIS?

A I started with Exhibit TWT-9. This is Empire's fuel and purchased power cost simulation result for total company retail operations. The amount of the various types of fuels, including natural gas, and the unit cost are all shown on this summary schedule.

Q TO WHAT EXTENT DID YOU ADJUST THE RESULTS OF THIS PRODUCTION SIMULATION?

A For purposes of this calculation, I have adjusted only the natural gas cost component. In performing additional simulations, it also would be appropriate to adjust purchased power prices and other key parameters.

Q HOW DID YOU DERIVE AN APPROPRIATE NATURAL GAS COST COMPONENT?

A I first looked at Empire's hedge position statement which showed its price hedges for natural gas. Knowing the amounts of gas hedged and the associated strike price, it was possible to then determine the additional quantity of natural gas expected to be burned (by subtracting the quantity hedged from the quantity required), and pricing the unhedged gas based on the current outlook for Southern Star natural gas prices. It then was possible to determine the revised or adjusted total fuel and variable purchased power costs. The summary is presented on Schedule 3 and the details for the determinations are presented on the subschedules to Schedule 3.

Q PLEASE REFER TO SCHEDULE 3 AND PROVIDE A SUMMARY OF YOUR FINDINGS.

A Column 1 on Schedule 3 shows total Empire amounts and column 2 shows the amounts allocated to Missouri retail customers. Both columns exclude costs associated with off-system sales.

Line 1 on Schedule 3 shows Empire's claimed fuel and variable purchased power costs. These costs were based on Empire's hedged gas volumes as of November 1, 2005, and the forward prices for natural gas as applied to the unhedged volumes as of the same date.

Line 3 on Schedule 3 shows the gas cost component of Empire's fuel and variable purchased power cost if the costs are based on the current hedge position plus the forward prices as of June 13, 2006. Line 4 shows the difference between the claimed natural gas costs (line 2) and the gas costs based on the current hedged position and the June 13, 2006 forward prices (line 3).

Line 5 shows an additional reduction to Empire's natural gas costs by recognizing the profit which Empire made from unwinding the hedged positions for natural gas deliveries in future years. The unwinding took place during the test year, and should be credited to gas costs for the benefit of Empire's retail customers.

Finally, line 6 shows the total adjustments (line 4 and line 5) which I would propose to match Empire's claimed purchased power costs if the Commission permits Empire to abandon its three-year IEC and instead base rates on current price information. As noted, the reduction in Empire's claimed purchased power costs for Missouri retail jurisdictional customers is approximately ****** million.

Q PLEASE EXPLAIN YOUR APPROACH IN MORE DETAIL.

A As noted above, I begin by examining Empire's hedged position and its price assumptions with respect to the unhedged natural gas. When Empire submitted its testimony, it was using a set of futures prices from November 2005, a time when 2006 future prices were near the top of the market. Schedule 3.1 basically replicates Empire's analysis. It uses projected 2006 Southern Star natural gas prices based on November 1, 2005 pricing for the unhedged volumes. The weighted average cost of the unhedged volumes, i.e., the additional volumes that Empire would need to acquire in order to complete its supply portfolio, was approximately $9.23 per MMBtu. (See the "total" column, line 8.)

Schedule 3.2 shows the same analysis except using actual prices, up to April 2006 forecasted gas prices as of April 21, 2006 for the remaining months. Using these prices, the overall cost of unhedged natural gas is approximately $7.14 per MMBtu ("total" column, line 8) and the total cost of natural gas (hedged plus unhedged volumes) is less than Empire's claim by more than $6 million (see line 12). Schedule 3.3 presents the development of costs using actual prices up to June 2006 and forward prices as of June 13, 2006 for the remaining months. At this point in time, the weighted average cost of the unhedged volumes is approximately $6.15 per MMBtu ("total" column, line 8) and the total cost of gas is less by an additional $3 million, making gas costs more than $9 million less than the amount claimed in Empire's filing (see line 12).

Q WHICH NATURAL GAS PRICES SHOULD BE USED FOR THE UNHEDGED VOLUMES?

A The more current forward price information is, in my opinion, a more reliable indicator of the prices that Empire will face during the time that the rates that will be set in this proceeding are in effect. Thus, it is more appropriate to use the more recent information as to the market's belief concerning future prices of natural gas than to use the price outlook as of November 1, 2005 when prices were still significantly impacted by the abnormal events of hurricanes Katrina and Rita. Forward prices have dropped significantly since that point in time.

Returning to Schedule 3, line 3 shows the total natural gas cost based on current hedge positions and the June 13, 2006 forward prices. As shown in column 2 on line 4 of Schedule 3.0, the Missouri retail jurisdictional portion of the difference in costs is approximately $7.9 million per year.

Q PLEASE EXPLAIN WHAT YOU HAVE SHOWN ON LINE 5 OF SCHEDULE 3.0.

A Line 5 of Schedule 3.0 shows the gain realized by Empire as a result of unwinding a hedge position for future (post-test year) natural gas requirements. The background for this adjustment is information contained in Empire's response to Praxair and Explorer Data Request Item Nos. 37 and 202, and the response to OPC Data Request No. 754.

Essentially, Empire had locked up prices for a quantity of supplies to be delivered during the years 2009 through 2011 at a price level significantly below what has turned out to be the futures prices for delivery during that period of time. During the test year, Empire unwound this transaction by closing it to the market and realized a net profit of approximately $5 million. Since this forward position, and the unwinding, was a part of the natural gas hedging program that was developed and implemented for the benefit of retail customers, it is appropriate that retail customers be credited with the benefit of this gain on the unwinding of the hedge position.

Q HAS EMPIRE NOT REFLECTED THIS GAIN IN ITS FUEL AND VARIABLE PURCHASED POWER CALCULATIONS IN THIS CASE?

A It has not. While it suggests that the gain was for the benefit of retail customers, it is clear from the response to Praxair and Explorer Data Request No. 202, that the gain did not find its way into the pro forma calculations. In particular, when Empire was asked "how this amount is reflected in the test year proposals, if at all," Empire responded by saying "the test year contained normalized fuel and purchased power expense."

From this response, as well as examining the numbers that underlie Empire's fuel and variable purchased power cost claim, it is clear that Empire wants to pocket this gain for itself, and not allow customers to have the benefit. If Empire were living with the terms of the three-year IEC, this issue would not arise until later, when Empire will have to replace the gas. However, under a circumstance where Empire would be permitted to abandon the three-year IEC, it is imperative that the gain from unwinding this forward position be credited to retail consumers. Accordingly, line 5 on Schedule 3.0 shows the crediting of this amount to retail customers. The net impact of reflecting this gain along with current forward prices for unhedged natural gas volumes is to decrease Empire's claims by approximately $12 million per year.

Q HOW DOES THIS COMPARE TO EMPIRE'S CLAIMED FUEL AND VARIABLE PURCHASED POWER EXPENSE IN EXCESS OF WHAT IS INCLUDED CURRENTLY IN BASE RATES PLUS IN THE IEC?

A As shown on Schedule 2, the amount claimed exceeds what is reflected in current base rates and IEC by approximately ****** million. This amount would be reduced by $12 million as shown on Schedule 3, by reflecting a current outlook for natural gas prices as applied to unhedged volumes, plus recognizing this gain on unwinding the forward position. Accordingly, the difference between what is included in current base rates and the amount that Empire should be entitled to recover in rates, even if it is permitted to abandon the three-year IEC, is only about ****** million. While Empire may believe that it has experienced uncompensated costs in past months, ratemaking is prospective. In the context of prospective adjustments, the ****** million difference is relatively modest in terms of Empire's overall fuel cost, revenues and earnings.

Q IS IT POSSIBLE THAT NATURAL GAS PRICES WILL CONTINUE TO DECREASE, AND THAT THE **** MILLION DIFFERENCE WILL BE FURTHER ERODED, OR EVEN REVERSED TO THE BENEFIT OF EMPIRE?**

A Yes. Natural gas prices continue to decrease as storage inventories build and as the risk premium for future delivery decreases. The relatively small ****** million difference at this point in time is hardly sufficient to cause an abandonment of the existing three-year IEC that was the subject of a multi-party stipulation in the last case, and which was approved by the Commission.

Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A Yes, it does.

Appendix A

Qualifications of Maurice Brubaker

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Maurice Brubaker. My business address is 1215 Fern Ridge Parkway, Suite 208, St. Louis, Missouri 63141.

Q PLEASE STATE YOUR OCCUPATION.

A I am a consultant in the field of public utility regulation and President of the firm of Brubaker & Associates, Inc., energy, economic and regulatory consultants.

Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A I was graduated from the University of Missouri in 1965, with a Bachelor's Degree in Electrical Engineering. Subsequent to graduation I was employed by the Utilities Section of the Engineering and Technology Division of Esso Research and Engineering Corporation of Morristown, New Jersey, a subsidiary of Standard Oil of New Jersey.

In the Fall of 1965, I enrolled in the Graduate School of Business at Washington University in St. Louis, Missouri. I was graduated in June of 1967 with the Degree of Master of Business Administration. My major field was finance.

From March of 1966 until March of 1970, I was employed by Emerson Electric Company in St. Louis. During this time I pursued the Degree of Master of Science in Engineering at Washington University, which I received in June, 1970.

In March of 1970, I joined the firm of Drazen Associates, Inc., of St. Louis, Missouri. Since that time I have been engaged in the preparation of numerous studies relating to electric, gas, and water utilities. These studies have included analyses of the cost to serve various types of customers, the design of rates for utility services, cost forecasts, cogeneration rates and determinations of rate base and operating income. I have also addressed utility resource planning principles and plans, reviewed capacity additions to determine whether or not they were used and useful, addressed demand-side management issues independently and as part of least cost planning, and have reviewed utility determinations of the need for capacity additions and/or purchased power to determine the consistency of such plans with least cost planning principles. I have also testified about the prudency of the actions undertaken by utilities to meet the needs of their customers in the wholesale power markets and have recommended disallowances of costs where such actions were deemed imprudent.

I have testified before the Federal Energy Regulatory Commission (FERC), various courts and legislatures, and the state regulatory commissions of Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Guam, Hawaii, Illinois, Indiana, Iowa, Kentucky, Louisiana, Michigan, Missouri, Nevada, New Jersey, New Mexico, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, South Dakota, Texas, Utah, Virginia, West Virginia, Wisconsin and Wyoming.

The firm of Drazen-Brubaker & Associates, Inc. was incorporated in 1972 and assumed the utility rate and economic consulting activities of Drazen Associates, Inc., founded in 1937. In April, 1995 the firm of Brubaker & Associates, Inc. was formed. It includes most of the former DBA principals and staff. Our staff includes consultants with backgrounds in accounting, engineering, economics, mathematics, computer science and business.

During the past ten years, Brubaker & Associates, Inc. and its predecessor firm has participated in over 700 major utility rate and other cases and statewide generic investigations before utility regulatory commissions in 40 states, involving electric, gas, water, and steam rates and other issues. Cases in which the firm has been involved have included more than 80 of the 100 largest electric utilities and over 30 gas distribution companies and pipelines.

An increasing portion of the firm's activities is concentrated in the areas of competitive procurement. While the firm has always assisted its clients in negotiating contracts for utility services in the regulated environment, increasingly there are opportunities for certain customers to acquire power on a competitive basis from a supplier other than its traditional electric utility. The firm assists clients in identifying and evaluating purchased power options, conducts RFPs and negotiates with suppliers for the acquisition and delivery of supplies. We have prepared option studies and/or conducted RFPs for competitive acquisition of power supply for industrial and other end-use customers throughout the Unites States and in Canada, involving total needs in excess of 3,000 megawatts. The firm is also an associate member of the Electric Reliability Council of Texas and a licensed electricity aggregator in the State of Texas.

In addition to our main office in St. Louis, the firm has branch offices in Phoenix, Arizona; Chicago, Illinois; Corpus Christi, Texas; and Plano, Texas.

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EMPIRE DISTRICT ELECTRIC COMPANY

Fuel and Variable Purchased Power Costs
Included in Present Missouri Retail Rates

Line	Description	Amount '($000)
		(1)
1	Amount in Base Rates (4,021,170,MWh Sales X $21.975/MWh)	$88,365
2	Amount in Interim Energy Charge (IEC) (4,021,170,MWh Sales X $2.131/MWh)	$8,569
3	Total Fuel & Power Costs	$96,934
4	Total $/MWh	$24.106

Source:
Schedule WSK-2

EMPIRE DISTRICT ELECTRIC COMPANY

Fuel and Variable Purchased Power Costs Claimed by Empire

Line	Description	Amount '($000) (1)
1	Total company claim from TWT-9	[redacted]
2	Allocation to MO Retail [1]	[redacted]
3	Dollar amount claimed for MO Retail rates	[redacted]
4	Amount in excess of current rate recovery [2]	[redacted]

Source:

[redacted]

EMPIRE DISTRICT ELECTRIC COMPANY

Adjustments to Claimed Fuel & Variable Purchased Power Costs if Empire is Permitted to Abandon its Current 3-Year Interim Energy Charge

Line	Description	Total Company Amount '($000) (1)	MO Retail Amount '($000) (2)
1	Empire Claim Fuel and Variable Purchase Power Costs [1]	[redacted]	[redacted]
	Natural Gas Portion of Above Costs		
2	Empire Claimed Gas Costs Based on November 1, 2005 Forward Prices	[redacted]	[redacted]
3	Revised Gas Costs Based on June 13, 2006 Forward Prices	[redacted]	[redacted]
4	Decrease in Claimed Natural Gas Costs	[redacted]	[redacted]
	Other Natural Gas Adjustments		
5	Gain from Unwinding Hedge Positions	[redacted]	[redacted]
6	Total Adjustments to Make to Empire Claimed Purchase Power Costs	[redacted]	[redacted]

Notes:

[1] Natural gas costs portion of Empire's assumed power costs is based on natural gas forward prices as of November 1, 2006.

Schedule 3.1

THE EMPIRE DISTRICT ELECTRIC COMPANY

2006 NATURAL GAS HEDGING SUMMARY - NOVEMBER 1, 2005 PRICING (EDE FILING)

Line	Description	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Total
	Analysis Based on Zero Gas Hedged:													
1	**Forecasted Gas Usage (DTh)** [1]	[redacted]												
2	**S. Star Gas Price ($/MMBtu)** [2]													
3	**Forecasted Gas Expense**													
	Analysis Based on Actual Hedged Gas:													
4	**Total Gas Hedged (DTh)** [3]	[redacted]												
5	**Strike Price** [3]													
6	**Cost of Forward Hedged Gas**													
7	**Amount Of Gas Unhedged (DTh)**	[redacted]												
8	**S. Star Gas Price ($/MMBtu)** [2]													
9	**Cost of Unhedged Gas**													
10	**Forecasted Gas Exp. (Incl Hedges)**	[redacted]												
11	**Benefit/(Loss) of Hedging Program**	[redacted]												

Line	**Summary:**	
12	**Forecasted Gas Usage (DTh)**	[redacted]
13	**Policy Minimum hedged DTh - 60%**	
14	**Policy Maximum hedged DTh - 80%**	
15	**Amount Actually Hedged For 2006**	
16	**Percent of Forecasted Usage**	

Sources:

[1] Data response to Praxair/Explorer Date Request No. 204 - Model Input Information is not labeled as highly confidential

[2] Page 23 of Mr. Todd Tarter's direct testimony (public version)

[3] Page 22 of Mr. Todd Tarter's direct testimony (highly confidential version)

Schedule 3.2

THE EMPIRE DISTRICT ELECTRIC COMPANY

2006 NATURAL GAS HEDGING SUMMARY - APRIL 21, 2006 PRICING

Line	Description	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Total
	Analysis Based on Zero Gas Hedged:													
1	Forecasted Gas Usage (DTh) [1]	[redacted]												
2	S. Star Gas Price ($/MMBtu) [2]													
3	Forecasted Gas Expense													
	Analysis Based on Actual Hedged Gas:													
4	Total Gas Hedged (DTh) [3]	[redacted]												
5	Strike Price [3]													
6	Cost of Forward Hedged Gas													
7	Amount Of Gas Unhedged (DTh)	[redacted]												
8	S. Star Gas Price ($/MMBtu) [2]													
9	Cost of Unhedged Gas													
10	Forecasted Gas Exp. (Incl Hedges)	[redacted]												
11	Forecasted Gas Exp. (Incl Hedges) November 1, 2005 Forward Prices													[redacted]
12	Difference in April 21, 2006 Forecasted Gas Expense to November 1, 2005 Forecasted Gas Expense													[redacted]
13	Benefit/(Loss) of Hedging Program	[redacted]												

Line	Summary:	
14	Forecasted Gas Usage (DTh)	[redacted]
15	Policy Minimum hedged DTh - 60%	
16	Policy Maximum hedged DTh - 80%	
17	Amount Actually Hedged For 2006	
18	Percent of Forecasted Usage	

Sources:

[1] Data response to Praxair/Explorer Date Request No. 204 - Model Input Information is not labeled as highly confidential

[2] Data response to Praxair/Explorer Date Request No. 41 - not labeled as highly confidential

[3] Page 22 of Mr. Todd Tarter's direct testimony (highly confidential version)

Schedule 3.3

THE EMPIRE DISTRICT ELECTRIC COMPANY

2006 NATURAL GAS HEDGING SUMMARY - JUNE 13, 2006 PRICING

Line	Description	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Total
	Analysis Based on Zero Gas Hedged:													
1	Forecasted Gas Usage (DTh) [1]	[redacted]												
2	S. Star Gas Price ($/MMBtu) [2]													
3	Forecasted Gas Expense	[redacted]												[redacted]
	Analysis Based on Actual Hedged Gas:													
4	Total Gas Hedged (DTh) [3]	[redacted]												
5	Strike Price [3]													
6	Cost of Forward Hedged Gas													
7	Amount Of Gas Unhedged (DTh)	[redacted]												
8	S. Star Gas Price ($/MMBtu) [2]													
9	Cost of Unhedged Gas													
10	Forecasted Gas Exp. (Incl Hedges)	[redacted]												[redacted]
11	Forecasted Gas Exp. (Incl Hedges) November 1, 2005 Forward Prices													[redacted]
12	Difference in June 13, 2006 Forecasted Gas Expense to November 1, 2005 Forecasted Gas Expense													[redacted]
13	Benefit/(Loss) of Hedging Program	[redacted]												

Line	Summary:	
14	Forecasted Gas Usage (DTh)	[redacted]
15	Policy Minimum hedged DTh - 60%	
16	Policy Maximum hedged DTh - 80%	
17	Amount Actually Hedged For 2006	
18	Percent of Forecasted Usage	

Sources:

[1] Data response to Praxair/Explorer Date Request No. 204 - Model Input Information is not labeled as highly confidential

[2] Jan. 2006 - June 2006 are actual S. Star Monthly Index Prices, Prices for July 2006 - Dec. 2006 are Henry Hub Forward Prices on June 13, 2006, Adjusted for Revised S. Star Basis

[3] Page 22 of Mr. Todd Tarter's direct testimony (highly confidential version)