Exhibit No.:	502
Witness:	Maurice Brubaker
Type of Exhibit:	Direct Testimony
Issue:	Fuel Adjustment Clause / Rate Design
Sponsoring Parties:	Enbridge Energy, LP Explorer Pipeline Company General Mills Praxair, Inc. Wal-Mart Stores, Inc.
Case No.:	ER-2008-0093

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	**)**	**Case No. ER-2008-0093**
Rates for Electric Service Provided to	**)**	
Customers in the Missouri Service	**)**	
Area of the Company	**)**	

Direct Testimony and Schedules of

Maurice Brubaker
on Fuel Adjustment Clause / Rate Design

On Behalf of

Enbridge Energy, LP
Explorer Pipeline Company
General Mills
Praxair, Inc.
Wal-Mart Stores, Inc.

March 7, 2008

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

Project 8875

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-2008-0093

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 Enbridge Energy, LP; Explorer Pipeline Company; General Mills; Praxair, Inc. and Wal-Mart Stores, Inc. in this proceeding on their behalf.

2. Attached hereto and made a part hereof for all purposes is my direct testimony and exhibits on fuel adjustment clause / rate design which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2008-0093.

3. I hereby swear and affirm that the testimony and exhibits are true and correct and that they show the matters and things that they purport to show.

M E Brubaker
Maurice Brubaker

Subscribed and sworn to before this 6th day of March, 2008.

TAMMY S. KLOSSNER
Notary Public - Notary Seal
STATE OF MISSOURI
St. Charles County
My Commission Expires: Mar. 14, 2011
Commission # 07024862

Tammy S Klossner
Notary Public

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-2008-0093**

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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-2008-0093**

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 fuel adjustment clause / revenue requirement direct testimony.

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

A I am submitting testimony on behalf of Enbridge Energy, LP; Explorer Pipeline Company; General Mills; Praxair, Inc. and Wal-Mart Stores, Inc. These companies purchase substantial amount of electric power from Empire District Electric Company

(Empire or Company) and are vitally concerned about the level and structure of rates that will be determined as a result of this proceeding.

INTRODUCTION AND SUMMARY

Q WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A The purpose of this testimony is to address fuel adjustment-related issues for Empire.

Q PLEASE SUMMARIZE YOUR TESTIMONY AND RECOMMENDATIONS.

A My testimony and recommendations may be summarized as follows:

1. Empire's proposal that customers be held responsible for 95% of the difference between actual costs and base rate costs is not based on the results of any specific analysis, but was merely copied from another utility without justification.

2. I propose (as shown on Schedule 2) a sharing mechanism for the Fuel Adjustment Clause (FAC) which will track variations, both upward and downward, from the base level. This sharing provides incentives to Empire to reduce costs and to improve operations to the mutual benefit of Empire and its customers, while capping the impact to Empire of the sharing at ± 50 basis points return on equity.

3. Rather than Empire's proposed fuel adjustment mechanism, I propose that if an FAC is approved it include all appropriate variable fuel and purchased power costs that are incurred to serve both native load and off-system sales, with an offset for all revenues received from off-system sales.

4. The base level of the FAC in this case should be set equal to the Commission's final determination of includable variable fuel and purchased power costs, minus the expected margin from off-system sales.

5. Fixed costs should be excluded from the FAC. Empire has included several fixed costs which should be removed in calculating the base, and in tracking cost changes. In particular, costs associated with unit trains, fuel handing costs and natural gas demand charges should not be included in the FAC.

6. Empire has proposed to include SO_2 emission allowance costs in its FAC. These costs should not be tracked through the FAC. They can be tracked through an Environmental Cost Recovery Mechanism (ECRM) if Empire is authorized to have one.

ADJUSTMENT FOR CHANGES IN THE LEVEL OF FUEL AND PURCHASED POWER COSTS

Q ARE YOU FAMILIAR WITH EMPIRE'S PROPOSAL TO IMPLEMENT AN FAC?

A Yes, I am. Empire proposes to implement an FAC which would track increases and decreases in the level of fuel and variable purchased power expenses allocated to Missouri retail customers. It is important to note that the Company's FAC proposal also tracks changes in certain fixed cost items, such as natural gas pipeline reservation charges and transportation charges, and SO_2 emission allowance costs.

Q PUTTING ASIDE THE QUESTION OF WHETHER OR NOT EMPIRE SHOULD BE ALLOWED TO IMPLEMENT AN FAC, ARE THERE ASPECTS OF ITS PROPOSED FAC TO WHICH YOU TAKE EXCEPTION?

A Yes, there are several. First, I believe that Empire's proposal to implement a 95% customer/5% stockholders sharing mechanisms for deviations from base costs does not provide adequate incentives to Empire.

Second, I am concerned that the proposal to exclude off-system sales margins from the FAC will lead to circumstances where there may be mis-assignments or mis-allocations of resources between off-system sales and native load, to the detriment of Missouri retail jurisdictional customers.

Third, any FAC should include only costs that are variable with the level of output, and which are difficult to predict or manage. Empire has included several fixed costs that fall into neither category. Those costs should be excluded.

Fourth, Empire has proposed to include SO_2 emission allowance costs in its FAC. These more appropriately belong in base rates or an ECRM.

Empire's Proposed Sharing Mechanism Does Not Provide Adequate Incentives

Q WHAT HAS EMPIRE PROPOSED FOR THE SHARING MECHANISM?

A Under the structure of Empire's FAC, when the cost of fuel and purchased power that is built into base rates is different than the actual cost of fuel and purchased power experienced in a subsequent period, Missouri retail customers would be responsible for 95% of such variations, while Empire would retain only 5%.

Q HAS THE COMPANY PROVIDED ADEQUATE JUSTIFICATION FOR ITS PROPOSAL TO PASS ALONG TO CUSTOMERS 95% OF THE DIFFERENCE BETWEEN ACTUAL FUEL-RELATED COSTS AND BASE FUEL-RELATED COSTS?

A No. From the response to MPSC Staff Data Request No. 169, it is evident that the 95%/5% structure is simply based on the outcome of a recent Aquila Networks, Missouri PSC Rate Order (Case No. ER-2007-0004), and not an analysis of the incentives present in this mechanism or the impact on the utility's return on equity of the proposed sharing of the deviations in the level of fuel and purchased power costs from the base. Moreover, I am advised by counsel that the Aquila decision is under judicial review.

Q WERE YOU INVOLVED IN THE REFERENCED AQUILA NETWORKS RATE PROCEEDING, CASE NO. ER-2007-0004?

A Yes. I was a witness in that proceeding, and addressed fuel and purchased power issues and the appropriate voltage-related loss factors to be included in the FAC. Although I did not testify with respect to the cost sharing feature of the FAC, I am familiar with the positions of the parties. My comments in this case are without prejudice to any positions asserted in that earlier case.

Q IN THE AQUILA CASE, DID THE COMMISSION EXPLAIN WHY IT ADOPTED A 95% COST RECOVERY STRUCTURE?

A Not explicitly. In its Order, the Commission does not reveal how the 95%/5% sharing formula was derived. The Commission did note that it is important for an FAC to have incentives for the utility to manage its fuel and purchased power costs. In particular, the Commission said the following at page 53 of its May 17, 2007 Report and Order:

> "While the Commission believes Aquila should be given the opportunity to recover its prudently incurred fuel costs, it also agrees with Mr. Johnstone and Ms. Brockway that: 1) after-the-fact prudence reviews alone are insufficient to assure Aquila will continue to take reasonable steps to keep its fuel and purchased power costs down; and 2) the easiest way to ensure a utility retains the incentive to keep fuel and purchased power costs down is to allow less than 100% pass through of those costs. Accordingly, it is not appropriate to allow Aquila to pass 100% of its fuel and purchased power costs, above those included in its base rates, through its fuel adjustment clause. (footnote omitted).

Q WHAT POSITIONS WERE ASSERTED BY THE PARTIES IN THE CASE?

A Aquila contended for 100% pass through of increases and decreases in costs. The Industrials and AARP proposed a 50% sharing of deviations in fuel and purchased power costs. The Commission found that full cost recovery was not appropriate because it did not provide adequate incentives for the utility to manage its costs. It also found that only 50% recovery of deviations was inappropriate because of the large financial exposure the utility would have to increased costs.

The 95%/5% sharing arrangement is not a proposal that was made by any party to the proceeding.

Q HAVE YOU ANALYZED THE IMPACT ON EMPIRE OF ITS PROPOSED 95%/5% SHARING MECHANISM?

A Yes. This is summarized on Schedule 1 attached to my testimony.

Q PLEASE EXPLAIN THIS SCHEDULE.

A The schedule illustrates the impact on Empire's return on equity of deviations in the cost of fuel and purchased power from the base level that the Company proposes to use to establish its initial FAC. For purposes of illustration, three different scenarios are used. In the first scenario, fuel expense is assumed to deviate a total of 5%, or $6.4 million on an annual basis, from the base level. As shown on lines 9 and 13, respectively, the net impact on return on equity of the 5% retention would be $198 thousand which is 0.06% or 6 basis points. The second scenario shows a 10% deviation, and the third scenario shows a 15% deviation. Even at a 15% deviation, which represents $19 million of additional costs, the 95%/5% sharing mechanism produces an impact on Empire's earnings of only $565 thousand or only 0.16 percentage points or 16 basis points to its ROE. This does not provide a sufficient incentive to Empire to control costs.

An Alternative Sharing Mechanism That <u>Contains Meaningful Incentives Should Be Adopted</u>

Q IF AN FAC IS IMPLEMENTED IN THIS PROCEEDING, SHOULD IT CONTAIN A PROVISION THAT PASSES THROUGH TO CUSTOMERS 95% OF ANY CHANGES IN THE LEVEL OF COSTS?

A No. It is important that any adjustment mechanism implemented provide greater incentives for the utility to control costs and take other actions which will reduce the level of charges to customers. As developed above, even a fairly significant 15%

deviation in the overall cost of fuel and purchased power from the base results in only minor consequences to the utility – either negative or positive, depending upon whether costs go up or costs go down.

A more structured sharing mechanism, which would provide greater incentives to the utility, would be more appropriate.

Q WHY IS A MEANINGFUL SHARING MECHANISM APPROPRIATE?

A A meaningful sharing mechanism provides an incentive for the utility to manage and control its costs. If costs were simply passed through or if the sharing percentage were minimal (i.e., 5%) then the price signal to the utility is very weak. The price signal needs to be strong enough to be meaningful.

My sharing mechanism serves to align the interests of the utility with those of its customers. By virtue of the sharing mechanism, the utility experiences some negative impact if fuel costs rise, but experiences a positive impact if it is able to control and manage fuel costs to a lower level. This incentive would not be present if there were a full pass through, and is barely noticeable in Empire's proposed 95%/5% sharing mechanism.

This alignment of interests makes it more likely that the utility will be concerned about its fuel and purchased power costs, and that it will attempt to improve upon price offers and maintenance practices, as well as take other actions that allow it to achieve greater efficiencies and lower costs.

Q DO YOU HAVE A SPECIFIC PROPOSAL?

A Yes, I do. My proposal consists of an FAC with a base level surrounded by a symmetrical deadband, followed on each side by two symmetrical sharing bands. I also propose a cap on the maximum amount of retention. Details of my proposal are illustrated on Schedule 2.

Q PLEASE ELABORATE ON YOUR PROPOSAL.

A Note on Schedule 2 that the clause is symmetrical in its treatment of increased costs and decreased costs. Structurally, I propose that there be a ±$1,200,000 deadband around the base level in the FAC. Within this band, Empire would retain 100% of the variations in costs. This deadband gives the utility an incentive to manage costs and also adds stability to the rates because small changes or deviations from the base level would not trigger changes in the level of rates. The $1,200,000 annual variation is about 1% of fuel costs and translates into approximately 0.20 percentage points (20 basis points) rate of return on common equity.

Outside the deadband, I propose that for up to the next ±$6,000,000 (5% of fuel costs) of change in net costs above or below the ±$1,200,000 deadband, there be a sharing of 90% to customers and 10% to stockholders. At the full ±$6,000,000 in these bands, the 10% to stockholders amounts to $600,000 or approximately 0.1% or 10 basis points in return on equity. Considering both the deadband and this first $6,000,000 band, the total dollars to stockholders would be $1,800,000, and the cumulative impact on return equity would be 30 basis points.

If costs deviated more than this initial ±$6,000,000 band, the next $6,000,000 (an additional 5% of fuel costs) would be split 80% to customers and 20% to stockholders, and at the full ±$6,000,000 in this band would represent $1,200,000 or 20 basis points return on equity for stockholders. At this point, considering the deadband and both sharing bands, the amount to stockholders would be $3 million and the impact on return equity would be 50 basis points.

Beyond this $13,200,000 (deadband plus two sharing bands), there would be a full flow through to customers of any additional change in net costs.

The cumulative impact at a $13,200,000 deviation from the base is $3,000,000 to stockholders or 50 basis points return on equity.

Q HOW ARE COST INCREASES AND DECREASES BEYOND ±$13,200,000 TREATED?

A First, consider increases in costs beyond $13,200,000 from the base. If fuel costs increase by exactly $13,200,000, the customers will have borne $10,200,000 of the costs and stockholders will have absorbed $3,000,000 of the costs. Assume now that costs increase to $14,200,000. In this band, customers would be responsible for the full amount of the $1,000,000 additional cost increase, so would bear $11,200,000 of costs. The stockholder absorption would remain at the $3,000,000 capped level.

Consider now cost decreases greater than $13,200,000. At $13,200,000, customers would have received $10,200,000 of the benefits of cost decreases, while stockholders will have enjoyed $3,000,000 of the benefits of the cost reductions. If costs decrease by an amount greater than $13,200,000, customers will receive the full amount of the additional decrease, in addition to the initial $10,200,000 that they received. Thus, if costs decrease by $14,200,000, customers will receive all of the additional decreases, bringing their total benefit to $11,200,000. The stockholder benefit is capped at $3,000,000.

Q PLEASE EXPLAIN WHY YOU ARE MAKING THIS SPECIFIC PROPOSAL.

A I believe it is important that the utility have an incentive to control costs and to perform in a superior manner. Allowing the utility to share in the benefits of such performance, and requiring it also to share in the consequences of performance that results in higher costs to customers, gives the utility the proper incentive.

Under this form of the fuel clause, if the utility reduces its costs it can reap some of the rewards of its performance. Both customers and shareholders are beneficiaries under such circumstances. Similar incentives exist under circumstances of increasing costs. In other words, it is a symmetrical incentive.

The sharing percentages are tapered so that the utility absorbs a larger percentage of costs as they increase, but at the same time would retain a larger percentage of the benefit of decreases in costs. This recognizes that it is more difficult to achieve the larger decreases, by providing a larger incentive for the utility to engage in practices that would increase savings beyond the initial band. On the increase side, the stockholder retains a larger percentage of increased costs as an incentive to control the level of fuel and purchased power costs.

Q WHAT IS THE PURPOSE OF FLOWING THROUGH TO CUSTOMERS 100% OF THE DEVIATIONS BEYOND ±$13,200,000 FROM THE BASE LEVEL?

A Given the $1,200,000 deadband and the two sharing bands, at a deviation of $13,200,000 either way from the base level, the variation in the utility's return on equity is 50 basis points. It is not unreasonable to have some cap on the level of the sharing in order to protect the utility from too large of a financial impact if costs increase dramatically. Concern about the financial impact on the utility of a large increase in fuel costs was noted by the Commission in the Aquila case. My proposal addresses that concern by explicitly limiting the amount of stockholder exposure.

In return for this cap, there is, as discussed above, a symmetrical floor on the decrease side to allow the customers to receive the majority of the benefits if costs go down significantly.

Q WHY DID YOU SELECT ±$3,000,000 AS THE MAXIMUM STOCKHOLDER AMOUNT?

A Based on the rate base proposed by Empire in this case, and its proposed capital structure, the ±$3,000,000 stockholder amount equates to an impact on return on equity of approximately ±50 basis points. This ±50 basis points generally reflects the width of the range of Mr. Gorman's return on equity recommendations, so variations of this magnitude should not be viewed as having an excessive financial impact.

Q WHEN WOULD THIS NUMBER BE DETERMINED?

A It would be determined at the time the Commission issues its order in this case. If the Commission chose to adopt my ±50 basis points return on equity, but found a different rate base or capital structure, the dollar equivalent of ±50 basis points can easily be recalculated. If the Commission were to determine that ±50 basis points did not provide an adequate incentive, then it could recalculate a number comparable to the ±$3,000,000 by adopting a different variation in ROE along with the capital structure and rate base that it found appropriate.

Q DOES YOUR METHOD REQUIRE ONGOING MEASUREMENT OF THE ACTUAL RETURN ON EQUITY?

A No. There is no ongoing requirement to redetermine actual earned return on equity. I have used the illustrative ±50 basis points along with other parameters of Empire's filing in order to set reasonable bandwidths and sharing. The actual earned ROE in between rate cases is not relevant to this fuel clause structure or amount of permissible fuel adjustment, and need not be calculated.

Q PLEASE EXPLAIN HOW THIS SHARING MECHANISM WOULD BE ADMINISTRATED IN THE CONTEXT OF THE FUEL FILINGS.

A The deadband and sharing bands are expressed on an annual basis. In the context of semi-annual filings, 50% of the bands would be allocated to each half for purposes of the semi-annual filings proposed by Empire. At the end of each 12-month period, the deadband and sharing bands would be applied on an annual basis and reconciled against the amounts applied on a semi-annual basis.

All Costs Of Generation And Purchased Power (For Both Native Load And Off-System Sales) Should Be Included In The FAC, And All Revenues Received From Off-System Sales Should Be Subtracted

Q HAVE YOU IDENTIFIED ANY OTHER CONCERNS?

A Yes. Another concern relates to the exclusion of off-system sales costs and revenues in the development of the base cost of energy under the FAC. According to Company witness Scott Keith's direct testimony: "Off-system sales have been addressed entirely as a component of base electric rates," rather than a component of the FAC (Keith Direct at 25).

Q HAS THE COMPANY PROVIDED REASONING AS TO WHY IT IS NOT INCLUDING OFF-SYSTEM SALES REVENUES IN THE CALCULATION OF AN FAC?

A No.

Q IS THE COMPANY OPPOSED TO THE IDEA OF INCLUDING OFF-SYSTEM SALES REVENUE IN THE DEVELOPMENT OF THE FAC?

A No. Mr. Keith clearly states: "Empire is not opposed to including 100% of its actual Missouri jurisdictional off-system sales margins as a component of the FAC. Either treatment, base rate or as a component of the FAC, appears to be acceptable under the terms of Empire's approved regulatory plan" (Keith Direct at 26).

Q IF AN FAC IS PERMITTED, HOW SHOULD OFF-SYSTEM SALES REVENUE AND THE COSTS ASSOCIATED WITH OFF-SYSTEM SALES BE HANDLED?

A Total variable fuel and purchased power costs (associated with native load sales as well as off-system sales) should be included in the fuel clause, and the entire amount of revenues collected from off-system sales should be handled as a credit and used to offset costs in the FAC.

Inclusion of all of the costs, with an offset for all revenues collected from off-system sales, eliminates the risk of mis-assignments and allocations. In addition, because the level of off-system sales is difficult to predict, including the revenues from off-system sales in the FAC has the added benefit of tracking the level of sales and flowing the actual level through to customers.

Q PLEASE SUMMARIZE WHY YOUR PROPOSAL FOR THE TREATMENT OF OFF-SYSTEM SALES IS SUPERIOR TO THAT WHICH IS CONTAINED IN EMPIRE'S PROPOSED FAC,

A I believe it is superior because it avoids the complexities and potential for mis-assignments or mis-allocations of costs between native load sales and off-system sales, and also because it provides for a tracking of the difficult to predict margins from off-system sales.

Q PLEASE ELABORATE ON THE COST SEPARATION ISSUES.

A Empire's proposed clause requires a determination of the costs attributable to supplying native load customers, as distinguished from the costs to supply off-system sales. This determination has to be made every hour during which Empire is engaging in off-system sales. Accordingly, there must be an allocation or assignment of costs between native load sales and off-system sales. In the absence of an FAC, a lack of precision in this assignment or allocation does not have any rate consequences because no adjustments are taking place and rates are not being set on the basis of that separation.

However, if there is a fuel adjustment in place, and if off-system sales are not reflected through the FAC, then the hourly allocation or assignment must take place, and there is a potential for an over-allocation or over-assignment of costs to retail customers through the FAC. My approach reduces the risk to customers of bearing too much of the costs, or receiving too little of the revenues

Q PLEASE EXPLAIN HOW YOUR APPROACH ADDRESSES THE TRACKING OF OFF-SYSTEM SALES MARGINS.

A It retains for the benefit of retail customers the total amount of the margin actually realized from difficult to forecast off-system sales by including the actual costs and revenues in the FAC.

Q ARE THERE ANY OTHER BENEFITS TO YOUR PROPOSAL?

A Yes. In addition, it greatly simplifies the auditing process. Under Empire's proposed FAC, a full audit would require a detailed examination of the hourly dispatch as well as the assignments and allocations of costs between native load sales and off-system sales in order to be sure that these allocations and assignments were appropriate.

Under my approach, this is not necessary since the full amount of the revenues from off-system sales is subtracted from the total costs of fuel and purchased power, including both that incurred to serve native load and that incurred to serve off-system sales.

Q DOES THE FUEL AND PURCHASED POWER COST RECOVERY RULE RECENTLY ADOPTED BY THE COMMISSION PERMIT THIS TREATMENT OF REVENUES FROM OFF-SYSTEM SALES?

A Yes. The adopted rule explicitly allows for the inclusion in the FAC of the costs and revenues associated with off-system sales.

Q YOU INDICATED THAT THE FAC SHOULD INCLUDE ALL FUEL AND VARIABLE PURCHASED POWER COSTS, THAT USED FOR SERVING NATIVE LOAD SALES AS WELL AS THAT USED TO SUPPORT OFF-SYSTEM SALES, REDUCED BY THE FULL AMOUNT OF REVENUE FROM OFF-SYSTEM SALES. IS THAT HOW THE BASE LEVEL SHOULD BE SET IN THIS CASE?

A No. Empire has only provided a net number for the margin from off-system sales. Therefore, in setting the base level, the margins should be subtracted from the fuel and variable purchased power costs that have been attributed to native load sales. In practice, this is the same as including all of the fuel and variable purchased power costs and subtracting all of the revenues from off-system sales. In future cases, either approach can be taken in setting the base level.

In the periodic FAC filings which are used to reconcile costs and collections, the appropriate treatment is to include all fuel and variable purchased power costs, that used for native load sales as well as that used to support off-system sales, and subtract the full amount of revenue from off-system sales. By taking this approach, any differences will automatically be reconciled.

Fixed Costs Should Be Excluded From The FAC

Q WHAT COST ELEMENTS SHOULD BE INCLUDED IN THE FAC?

A Only those elements that are fuel-related and which vary directly with the volume of fuel utilized in the utility's generating stations, or with the quantity of kilowatthours purchased from other entities. These are the costs that are truly a function of kilowatthour sales, and which are likely to fluctuate.

Fixed costs, such as purchased power demand charges, natural gas reservation demand charges, unit train costs and similar items are not variable and should not be included in the fuel adjustment. They are essentially fixed costs. Tracking these costs through the FAC is unnecessary because they are substantially more stable than are fuel costs and variable purchased power costs.

In addition, items such as fuel handling labor are costs that are under the control of the utility and can be managed. Allowing the FAC to increase because a utility grants an increase in wages is not an appropriate role for an FAC. An FAC should be designed primarily to track costs that are volatile and otherwise difficult to manage.

Q HAS EMPIRE INCLUDED IN ITS FAC ANY OF THESE FIXED COSTS OR OTHER COSTS WHICH SHOULD BE IN BASE RATES?

A Yes.

Q PLEASE IDENTIFY THE COSTS WHICH EMPIRE HAS INCLUDED THAT YOU BELIEVE SHOULD BE EXCLUDED.

A In its proposed FAC base, Empire has included fixed gas demand charges as well as fuel handling costs. As indicated in response to Praxair/Explorer Data Request No. 127, the fixed gas demand charges are $6,071,980. Other charges consist of approximately $1,735,000 of fuel handling costs and a credit for revenues from the sale of fly ash in the amount of approximately $29,000. For the reasons noted above, these amounts should not be included in the base of the fuel clause, and should not be tracked through the fuel adjustment. Rather, these costs are appropriately included in Empire's base rates.

There Should Be Limitations On What New Cost Elements Can Be Included In The FAC

Q ARE THERE ANY OTHER LIMITATIONS THAT SHOULD BE OBSERVED ON COSTS THAT MAY BE INCLUDED IN THE FAC?

A Yes. Empire participates in the Southwest Power Pool (SPP). The SPP is not structured as formally as the Midwest Independent System Operator (MISO), or a formal regional transmission organization (RTO), and the costs that generally are being assessed to participants in the marketplace are the energy costs themselves plus a revenue neutrality uplift (RNU) charge. The RNU basically consists of energy imbalance charges and credits and adjustments relating to scheduling and self-provided losses. The SPP currently does not have the myriad of charges that are present in MISO. What the structure of the SPP market may be in the future, however, is not known.

Q GIVEN THESE FACTORS, SHOULD THERE BE ANY LIMITATION ON SPP CHARGES THAT MAY BE INCLUDED IN EMPIRE'S FAC?

A Yes. It would be reasonable to limit the charges that may be passed through Empire's FAC to those that are currently being charged in the SPP market. These are identified, among other places, in the February 21, 2008 "SPP Metrics Report," at page 24.

Q WHY DO YOU PROPOSE LIMITING THE CHARGES TO THOSE CURRENTLY BEING APPLIED IN THE SPP MARKET?

A As we know from our experience with MISO, a myriad of additional charges that bring significant expenses may evolve if the market formalizes and takes on more roles. A determination as to which additional charges, if any, should receive FAC treatment cannot be determined until the nature of those charges is known. Accordingly, it would be reasonable to limit Empire's FAC to inclusion of only those charges (and revenues) that currently are being applied in the SPP market. If the nature of the charges being applied changes, and Empire wishes to modify its FAC, then it can file a new rate proceeding to allow the parties to examine the totality of its operations and consider the nature of the charges that are being applied in the market and their suitability for inclusion in the FAC.

The Cost Of Emission Allowances Should Not Be Flowed Through The FAC

Q HAS EMPIRE PROPOSED TO INCLUDE IN ITS FAC, FOR BASE AND FOR TRACKING PURPOSES, COSTS ASSOCIATED WITH SO_2 ALLOWANCES?

A Yes, it has.

Q DO YOU BELIEVE THESE COSTS SHOULD BE INCLUDED?

A No, I do not. These costs are clearly environmental in nature and are more appropriately tracked through an ECRM. Empire may be able to request an ECRM in a future case.

Q ISN'T IT TRUE THAT THE COMMISSION EXPLICITLY ALLOWED AQUILA TO TRACK THESE COSTS THROUGH ITS FAC?

A Yes, it is. However, I am advised by counsel that the Aquila decision is on appeal. Setting that aside, I believe there are two distinguishing factors. First, in the Aquila rate case no party opposed the inclusion of these costs and, second, at the time the Aquila FAC was approved, the ECRM was not in place. Since SO_2 and similar emission-related costs are really environmental in nature, I believe it is important that if these costs are to be recovered outside of base rates that they be included in the ECRM surcharge, and not in the FAC. It is important that they be recovered through the ECRM because the ECRM has a "cap" on the recovery of environmental costs. If these costs are instead recovered through the FAC, then the cap would be, in effect, "bypassed" and customers would pay more than they should.

Q HAVE YOU DEVELOPED A SCHEDULE TO SHOW THE DERIVATION OF WHAT YOU BELIEVE WOULD BE AN APPROPRIATE BASE FOR THE FAC IN THIS CASE?

A Yes. This is presented in Schedule 3. Schedule 3 begins with the total company and jurisdictional amounts from Mr. Keith's Schedule WSK-2. From these amounts, I first subtract the fixed gas demand charges and the fuel handling costs and remove the revenue credit from the sale of fly ash.

Line 8 shows the additional credit to reflect the margin from off-system sales that Empire has proposed as a part of its case. Subsequent lines show the development of the per unit base per kilowatthour for the FAC. As shown on line 11 of column 2, this equals $28.13 per MWh, or 2.813¢/kWh for Missouri jurisdictional customers.

Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A Yes, it does.

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The Empire District Electric Company

Impact on Company Return on Equity From Change in Recovery of Total Fuel Costs
(Company Proposed Method)

Line	Description	Company Requested Missouri Jurisdictional (1)		Scenario #1 (2)	Scenario #2 (3)	Scenario #3 (4)
1	Total Missouri-Retail Fuel & PP [1]			$ 142,191,310	$ 142,191,310	$ 142,191,310
2	Less: Purchased Power Demand [1]			$ 13,384,576	$ 13,384,576	$ 13,384,576
3	Cost of Energy Requested (L1 - L2)			$ 128,806,734	$ 128,806,734	$ 128,806,734
4	Assumed Percent Change in Fuel & PP			**5.0%**	**10.0%**	**15.0%**
5	Amount Change in Fuel & PP (L3 x L4)			$ 6,440,337	$ 12,880,673	$ 19,321,010
6	Customer Responsibility (95% of L5)			$ 6,118,320	$ 12,236,640	$ 18,354,960
7	Company Responsibility (5% of L5)			$ 322,017	$ 644,034	$ 966,051
8	Income Tax Gross Up Factor [2]			1.62308	1.62308	1.62308
9	Change in Company's Operating Income (L7 / L8)			$ 198,399	$ 396,797	$ 595,196
10	Operating Income After Fuel & PP Impact ($68,622,744 less adjustment in L9)	**$ 68,622,744**	3	**$ 68,424,345**	**$ 68,225,947**	**$ 68,027,548**
11	Jurisdictional Rate Base	$ 733,148,974	3	$ 733,148,974	$ 733,148,974	$ 733,148,974
12	Rate of Return (L10 / L11)	9.36%	3	9.33%	9.31%	9.28%
13	Calculated Return on Equity	**11.60%**	4	**11.54%**	**11.49%**	**11.44%**
14	Basis Point Reduction			**6**	**11**	**16**

Source:
[1] Schedule WSK-2
[2] Direct Testimony of W. Scott Keith, Section G, Schedule 3, Page 1 of 3
[3] Direct Testimony of W. Scott Keith, Section D, Schedule 1
[4] Direct Testimony of W. Scott Keith, Section H, Schedule 1 (Confidential)

The Empire District Electric Company

Proposed Sharing Structure
($ Millions)

Change in Net Cost Level from Base *	Amount in Band	Sharing Percent		Maximum Sharing Dollars in Band		Cumulative Sharing Dollars		Cumulative Impact on Return on Equity
		Customer	Stock-holder	Customer	Stock-holder	Customer	Stock-holder	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
> $13.2		**100%**	**0%**	All	None	$10.2 + [1]	$3.0	50 Basis Points
$13.2 – **$7.2**	**$6.0**	**80%**	**20%**	$4.8	$1.2	$10.2	$3.0	50 Basis Points
$7.2 – **$1.2**	**$6.0**	**90%**	**10%**	$5.4	$0.6	$5.4	$1.8	30 Basis Points
$1.2 – **BASE**	**$1.2**	**0%**	**100%**	$0.0	$1.2	$0.0	$1.2	20 Basis Points
BASE – **($1.2)**	**($1.2)**	**0%**	**100%**	$0.0	($1.2)	$0.0	($1.2)	20 Basis Points
($1.2) – **($7.2)**	**($6.0)**	**90%**	**10%**	($5.4)	($0.6)	($5.4)	($1.8)	30 Basis Points
($7.2) – **($13.2)**	**($6.0)**	**80%**	**20%**	($4.8)	($1.2)	($10.2)	($3.0)	50 Basis Points
> ($13.2)		**100%**	**0%**	All	None	($10.2) + [2]	($3.0)	50 Basis Points

Notes:

[1] Customers are responsible for $10.2 million plus any additional costs above $13.2 million.

[2] Customers receive $10.2 million plus any additional savings above $13.2 million.

*Fuel and purchased power costs minus off-system sales revenue

The Empire District Electric Company

Impact on Company Return on Equity From Change in Recovery of Total Fuel Costs
(Based on Proposed Sharing Structure)

Line	Description	Company Requested Missouri Jurisdictional		Scenario #1	Scenario #2	Scenario #3
		(1)		(2)	(3)	(4)
1	Total Missouri-Retail Fuel & PP [1]			$ 142,191,310	$ 142,191,310	$ 142,191,310
2	Less: Purchased Power Demand [1]			$ 13,384,576	$ 13,384,576	$ 13,384,576
3	Cost of Energy Requested (L1 - L2)			$ 128,806,734	$ 128,806,734	$ 128,806,734
4	Amount Change in Fuel & PP [2]			$ 1,200,000	$ 7,200,000	$ 13,200,000
5	Company Cumulative Responsibility [2]			$ 1,200,000	$ 1,800,000	$ 3,000,000
6	Income Tax Gross Up Factor [3]			1.62308	1.62308	1.62308
7	Change in Company's Operating Income (L5 / L6)			$ 739,335	$ 1,109,003	$ 1,848,338
8	Operating Income After Fuel & PP Impact ($68,622,744 less adjustment in L7)	**$ 68,622,744**	4	**$ 67,883,409**	**$ 67,513,741**	**$ 66,774,406**
9	Jurisdictional Rate Base	$ 733,148,974	4	$ 733,148,974	$ 733,148,974	$ 733,148,974
10	Rate of Return (L8 / L9)	9.36%	4	9.26%	9.21%	9.11%
11	Calculated Return on Equity	**11.60%**	5	**11.40%**	**11.30%**	**11.10%**
12	Basis Point Reduction			**20**	**30**	**50**

Source:
[1] Schedule WSK-2
[2] MEB Schedule 2, Page 1 of 2
[3] Direct Testimony of W. Scott Keith, Section G, Schedule 3, Page 1 of 3
[4] Direct Testimony of W. Scott Keith, Section D, Schedule 1
[5] Direct Testimony of W. Scott Keith, Section H, Schedule 1 (Confidential)

The Empire District Electric Company

Adjustments to Recovery of Costs to Be Included In the Proposed Fuel Adjustment Clause

Line	Description	Total Company Amount '($000) (1)	MO Retail Amount '($000) (2)
1	Empire's Proposed Total Fuel & Purchased Power [1]	$ 172,032	$ 142,191
2	Less: Purchased Power Demand [1]	16,194	13,385
3	Empire's Proposed Fuel Clause Base	$ 155,839	$ 128,807
	Additional Adjustments to Fuel Clause Base:		
4	Less: Fixed Gas Demand Charge [2]	$ 6,072	$ 5,019
5	Less: Fuel Handling Charge [2]	1,735	1,434
6	Less: Revenue from sale of Fly Ash [2]	(29)	(24)
7	Less: SO2 Emission Expense [3]	-	-
8	Less: Off-System Sales Margin [4]	5,721	4,573
9	Revised Fuel Clause Base	**$ 142,339**	**$ 117,805**
10	Sales-MWh [1]	5,067,316	4,188,334
11	Base Cost of Energy per Mwhr Sold	**$ 28.0897**	**$ 28.1269**

Source:

[1] Direct Testimony of W. Scott Keith, Schedule WSK-2

[2] Empire response to Praxair/Explorer DR 127

[3] Based on a review of FERC Account 509 it appears that Empire has not included costs associated with SO2 Emissions in this proceeding.

[4] Direct Testimony of W. Scott Keith, Section M, Schedule 2, Page 8 of 8

	Total Company	MO Retail
Revenues	$15,528	$12,684
Expenses	(9,807)	(8,111)
Net Margin	$5,721	$4,573