

Exhibit No.:
Witness: Maurice Brubaker
Type of Exhibit: Surrebuttal and
Cross-Surrebuttal Testimony
Issues: Rate Design; Fuel and
Purchased Power Expense
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) **Case No. ER-2006-0315**
increasing rates for electric)
service provided to customers)
in the Missouri service area of the)
Company)

Surrebuttal and Cross-Surrebuttal Testimony of

**Maurice Brubaker
on Rate Design;
Fuel and Purchased Power Expense**

On Behalf of

**Explorer Pipeline Company
and
Praxair, Inc.**

August 18, 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
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Company)
)
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)
)
)

Case No. ER-2006-0315

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


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.

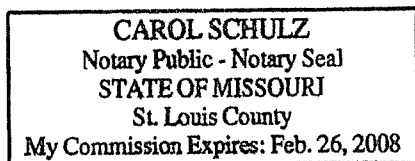
2. Attached hereto and made a part hereof for all purposes is my surrebuttal and cross-surrebuttal testimony on rate design; fuel and purchased power expense issues which was prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2006-0315.

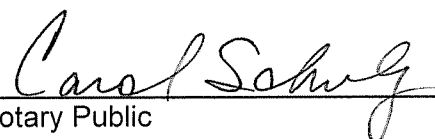
3. I hereby swear and affirm that the testimony is true and correct and that it shows the matters and things it purports to show.



Maurice Brubaker

Subscribed and sworn to before this 17th day of August, 2006.





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
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Surrebuttal and Cross-Surrebuttal Testimony of Maurice Brubaker

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

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

4 **Q HAVE YOU SUBMITTED OTHER TESTIMONY IN THIS PROCEEDING?**

5 A Yes. On June 23, 2006 I submitted direct testimony on revenue requirement issues,
6 on June 30, 2006 I submitted direct testimony addressing the issue of rate design,
7 and on July 28, 2006 I submitted rebuttal testimony on the subjects of rate design;
8 fuel and purchased power expense.

9 **Q ARE YOUR QUALIFICATIONS SET FORTH IN YOUR JUNE 23 TESTIMONY?**

10 A Yes.

11 **Q WHAT IS THE SUBJECT OF THIS TESTIMONY?**

12 A This testimony addresses three sets of issues. The first is the allocation issue
13 pertaining to how to distribute any increase or decrease in revenue requirements
14 among customer classes and rate schedules. The second involves the treatment of

1 fuel and purchased power expense claimed by Empire in its rebuttal testimony. As a
2 part of this section of my testimony, I also respond to Empire's statements concerning
3 the unwinding of a futures contract for natural gas. The third address the Regulatory
4 Plan amortizations, and how they should be viewed and used.

5 **Summary**

6 **Q PLEASE SUMMARIZE YOUR TESTIMONY.**

7 **A** My testimony may be summarized as follows:

- 8 1. Praxair's revenue to be used in determining Empire's revenues and as a basis
9 for the allocation of any increase is \$2,110,000. This is equal to the revenues
10 that were actually paid to Empire under Praxair's interruptible rate, with \$1.10 per
11 kW-month of the interruptible credit added back (Case No. ER-2004-0570). The
12 proposal of OPC and Staff to completely ignore Praxair's interruptibility and use,
13 as a basis for revenue allocation, Praxair's revenue as if it were entirely firm, is
14 inappropriate.
- 15 2. Use of any revenue for Praxair in excess of \$2,110,000 would result in an over-
16 allocation of any increase to Praxair.
- 17 3. No portion of any increase in this case should be as a result of increases in fuel
18 and purchased power costs. Rather, the IEC should continue for its three-year
19 term.
- 20 4. Should Empire be permitted unilaterally to withdraw from the IEC, a number of
21 adjustments needs to be made to Empire's proposed natural gas prices:
 - 22 a. Empire's proposal to use futures prices for 2007 should be rejected. Recent
23 experience shows that futures prices have tended to materially overstate the
24 actual realized prices in the delivery months.
 - 25 b. A more reasonable approach to establishing the gas price component would
26 be to utilize the actual delivered prices for January through August of 2006
27 and to utilize the future prices for the balance of 2006.
- 28 5. Should Empire be permitted unilaterally to abandon the three-year IEC, then the
29 benefit of unwinding a gas hedge position should be credited to retail customers
30 in this proceeding.
- 31 6. Empire should not be permitted to disavow use of the amortization features from
32 the Stipulation and Agreement that established the Regulatory Plan in Case
33 No. EO-2005-0263. These amortizations are available, and the Stipulation and
34 Agreement which provides for them, is fully in effect.

- 1 7. It is understandable that Empire would not want to use the amortizations in this
2 case since they have an impact on rates in the future when the amortizations are
3 deducted from rate base.
- 4 8. The whole purpose of the amortization aspect of the Regulatory Plan was to
5 provide Empire with cash flow necessary to meet financial metrics and maintain
6 its financial integrity during the effectiveness of this Regulatory Plan.
- 7 9. If the Commission continues the IEC in effect, the amortizations will provide
8 Empire with adequate financial metrics, as intended by the Regulatory Plan.
- 9 10. If the IEC is continued in effect, and amortizations are utilized as needed, rates
10 paid by customers will (according to Staff calculations) be lower than if the IEC is
11 terminated as Empire has requested. At worst, even if income taxes must be
12 provided on the amortizations, customers' rates would be no higher.

13 **Revenue Allocation**

14 **Q HAVE YOU REVIEWED THE REBUTTAL TESTIMONY OF STAFF WITNESSES**
15 **WITH RESPECT TO THE TREATMENT OF CERTAIN REVENUE CREDITS THAT**
16 **ARE PROVIDED TO PRAXAIR AND EXPLORER PIPELINE COMPANY?**

17 **A** Yes. This is addressed in the rebuttal testimony of Staff witnesses Pyatte and Wells.

18 **Q WHAT IS THE ISSUE?**

19 **A** Relying on a Stipulation and Agreement from Case No. ER-2004-0570, these
20 witnesses point out that in determining Empire's revenue requirement there are
21 certain revenue credits that Empire has agreed to absorb and not charge to
22 ratepayers. They also note that the Stipulation and Agreement provided that these
23 credits should not affect the allocation of any change in revenues among customer
24 classes.

1 **Q WHAT ARE THESE PARTICULAR CREDITS?**

2 A In the case of Praxair, there is an additional \$1.10 per kW-month credit applied to
3 Praxair's interruptible load, and in the case of Explorer Pipeline Company there is a
4 rate credit amounting to \$40,000 per year that was implemented in order to settle an
5 issue involving the implementation of the IEC.

6 **Q DO YOU AGREE THAT EMPIRE SHOULD ABSORB THESE COSTS AND THAT**
7 **THESE CREDITS SHOULD NOT AFFECT THE ALLOCATION OF THE REVENUE**
8 **INCREASE AMONG CUSTOMER CLASSES?**

9 A Yes, I do.

10 **Q WHAT, THEN, IS THE ISSUE?**

11 A Let me address Explorer Pipeline first. Explorer has three accounts on the Large
12 Power rate. There is no specific adjustment with respect to the distribution of the
13 revenue increase that affects only Explorer Pipeline Company. The revenues from
14 the Large Power rate are simply established at a level that equals actual Large Power
15 rate revenue plus the approximately \$40,000 credit.

16 In the case of Praxair, the situation is somewhat different. Praxair is the only
17 member of its class (the Special Contract – Praxair class). Praxair receives a credit
18 for subjecting a substantial proportion of its load to interruption by Empire. The credit
19 which Praxair receives is \$4.86 per kW-month. This is the amount that is in the tariff
20 and the amount that has been agreed to as a result of stipulations in several
21 successive cases. What is at issue is \$1.10 per kW of this \$4.86 credit. There is no
22 dispute about \$3.76 per kW-month of this credit. This credit is reflected in the rates
23 and revenues and it is only the additional \$1.10 per kW-month that is at issue, as

1 explained more fully in the testimony of OPC witness Meisenheimer that is referenced
2 by Staff witness Wells.

3 **Q HAVE STAFF AND OPC CORRECTLY STATED THE REVENUES FOR PRAXAIR?**

4 A No, they have not. As explained in my rebuttal testimony, both Staff and OPC have
5 substituted a revenue level for Praxair that is neither factual nor reflective of its
6 commitment to interrupt. That is, instead of simply adding back the \$1.10 per
7 kW-month "special" credit to the actual revenues that Praxair pays to Empire, Staff
8 and OPC have added back the entire \$4.86 per kW-month interruptible credit. As I
9 explained in my rebuttal testimony, this has the effect of completely ignoring Praxair's
10 interruptible characteristic, and disproportionately allocating any change in revenues
11 to Praxair.

12 **Q REFERRING TO SCHEDULE CW-1 (REVISION 1) ATTACHED TO THE**
13 **REBUTTAL TESTIMONY OF STAFF WITNESS WELLS, WHAT REVENUE IS**
14 **USED FOR PRAXAIR?**

15 A Mr. Wells uses \$2,452,000 as Praxair's present revenue. This is essentially the same
16 as the \$2,436,000 amount which Staff and OPC used in their direct case.

17 **Q HAVE YOU CALCULATED PRAXAIR'S COSTS UNDER ITS SPECIAL CONTRACT**
18 **AND DETERMINED WHAT THE APPROPRIATE "PRESENT REVENUES"**
19 **SHOULD BE FOR PURPOSES OF REVENUE ALLOCATION AND RATE DESIGN?**

20 A Yes. Please refer to Schedule 1, Surrebuttal. This shows Praxair's consumption for
21 the year ended December 2005, which is the update period that is being utilized.
22 Line 13 of this schedule shows Praxair's total revenues before interruptible credit at
23 \$2,453,000, virtually identical to Staff's \$2,452,000 value.

1 **Q WHAT ELSE IS SHOWN ON SCHEDULE 1?**

2 A Line 14 shows the deduction of the \$4.86 per kW-month credit that Praxair actually
3 receives for being interruptible. This amount is \$443,000. Subtracting this from the
4 revenue that Praxair would pay if it were totally firm produces the actual revenue of
5 \$2,010,000 as shown on line 15.

6 **Q WHAT IS THE IMPACT OF ADDING BACK THE \$1.10 PER KW-MONTH SPECIAL**
7 **CREDIT?**

8 A This is shown on line 16, and adds back \$100,320 per year. As shown on line 17,
9 Praxair's annual revenues with a credit of just \$3.76 per kW-month is \$2,110,000.

10 As I understand it, the only dispute on this issue is the treatment of the \$1.10
11 per kW-month additional credit shown on line 16. This is the credit focused upon by
12 both Staff and OPC in their stated disagreement with my calculations.

13 **Q HAVE STAFF AND OPC CORRECTLY REPRESENTED PRAXAIR'S REVENUE**
14 **FOR PURPOSES OF REVENUE ALLOCATION AND RATE DESIGN?**

15 A No. While their testimony talks about not recognizing the additional \$1.10 per
16 kW-month in interruptible credits, their actual calculations and statements of Praxair's
17 revenues actually ignore the entire \$4.86 per kW-month interruptible credit. In other
18 words, while they properly add back \$1.10 per kW of the credit, they improperly also
19 add back the remainder, \$3.76 per kW-month of the credit. Hence, they erroneously
20 represent Praxair's revenues at approximately \$2,452,000. As shown on line 17 of
21 my Schedule 1, the appropriate present revenue number for Praxair with the \$3.76
22 per kW-month interruptible credit recognized is \$2,110,000, and not \$2,452,000. In
23 order to properly distribute any across-the-board change in revenues, it is appropriate
24 to use the \$2,110,000 number for Praxair. The \$2,452,000 number, which completely

1 ignores Praxair's interruptible load, would overstate the allocation of any increase to
2 Praxair, as described more fully at pages 4 and 5 of my rebuttal testimony.

3 **Fuel Costs**

4 **Q HAVE YOU REVIEWED THE REBUTTAL TESTIMONY OF EMPIRE WITNESS**
5 **TARTER?**

6 A Yes, I have. In his rebuttal testimony, Mr. Tarter corrects some errors, adopts some
7 elements of the MPSC Staff presentation and changes his approach to determining
8 the appropriate natural gas prices for inclusion in the revenue requirement.

9 **Q WHAT CHANGE DID MR. TARTER MAKE WITH RESPECT TO THE NATURAL**
10 **GAS PRICES?**

11 A In his initial testimony, Mr. Tarter used forecasted prices for calendar year 2006 for
12 pricing the unhedged portion of Empire's estimated gas needs. In his rebuttal
13 testimony, he now switches to a forecast for calendar year 2007.

14 He expresses disagreement with my approach which was to use actual gas
15 prices for the first six months of the year, and the forward prices adjusted for
16 Southern Star basis for the balance of 2006.

17 **Q WHAT ARE YOU PROPOSING TO USE FOR GAS PRICES IN YOUR**
18 **SURREBUTTAL TESTIMONY?**

19 A I am proposing to use updated actual information through August of 2006, and
20 estimated prices for the remaining months of 2006.

1 **Q IF THE RATES APPROVED IN THIS CASE ARE EXPECTED TO BE IN EFFECT IN**
2 **2007, WHY IS IT APPROPRIATE TO USE 2006 PRICES RATHER THAN 2007**
3 **FUTURES PRICES FOR EMPIRE'S UNHEDGED NATURAL GAS?**

4 A Recently, natural gas futures prices have been elevated because of a large "fear
5 factor", which is present for a number of reasons including the memory of recent
6 Hurricanes Katrina and Rita in 2005, as well as the instability in the oil-producing
7 regions in the Middle East.

8 As a result of these factors, what we have seen lately is that the futures prices
9 consistently overstate the prices actually experienced in the delivery months.

10 **Q HAVE YOU PREPARED ANY ILLUSTRATION OF THIS BEHAVIOR?**

11 A Schedule 2, Surrebuttal shows a comparison between NYMEX futures prices at
12 various points in time and actual settlement prices for the months of January through
13 August 2006. The dates of the NYMEX futures price observations were July 29,
14 2005; August 31, 2005; September 30, 2005; October 31, 2005; November 30, 2005;
15 and December 15, 2005. With the exception of one month and one futures price
16 forecast the actual settled prices came in considerably lower than the observed
17 futures prices at each of the reference dates.

18 This analysis clearly indicates the potential for overstatement of gas prices
19 when the forecast period is significantly forward from the date of the forecast.

20 **Q WHAT IS YOUR RECOMMENDATION IN LIGHT OF THESE MARKET**
21 **CONDITIONS?**

22 A As I look at Schedule 2, Surrebuttal, and consider the volatility of the market and the
23 presence of the "fear factor", I would be extremely reluctant to utilize futures prices for

1 2007 at this point in time. The risk of overstating gas prices is, in my opinion,
2 extremely high.

3 **Q WHAT IS YOUR RECOMMENDATION?**

4 A I recommend the same approach that I did in my direct testimony. That approach
5 was to utilize actual realized prices to date in calendar year 2006, and to utilize the
6 futures prices, adjusted for Southern Star deliveries, for the balance of calendar year
7 2006. In my opinion, this is a more reasonable approach than relying entirely upon
8 the futures prices for all of calendar year 2007.

9 **Q WOULD YOU UPDATE YOUR PRICES IN DOING SO?**

10 A I would update to reflect actual prices for July and August, but for the balance of the
11 year I would continue to use the same prices that I used in my direct testimony.

12 **Q WHY WOULD YOU NOT UPDATE THE PRICES FOR THE REMAINING MONTHS**
13 **OF 2006?**

14 A Since the filing of my direct testimony on this subject, futures prices for the balance of
15 the year have been both higher and lower than they were at that point in time.
16 Accordingly, I see no reason to change the forecast prices for the balance of 2006.

1 **Q IN LIGHT OF THE CORRECTIONS AND OTHER MODIFICATIONS THAT EMPIRE**
2 **MADE IN ITS PRODUCTION MODEL, WHICH RESULTED IN SIGNIFICANTLY**
3 **MORE GAS BEING BURNED, HAVE YOU PREPARED AN UPDATE OF YOUR**
4 **GAS PRICE ANALYSIS?**

5 A Yes. Schedule 3, Surrebuttal uses the predicted gas burns from Empire's updated
6 production costing model, its hedged gas position and an update for the unhedged
7 gas volumes.

8 **Q WHAT WAS THE BASIS FOR THE PRICING OF THE UNHEDGED GAS**
9 **VOLUMES?**

10 A As discussed above, I utilized the actual settle prices for January through August of
11 2006, and the same prices for the balance of the months as I used in my direct
12 testimony.

13 **Q HAVE YOU QUANTIFIED THE IMPACT THAT THIS FORECAST HAS ON THE**
14 **OVERALL CLAIMED FUEL AND VARIABLE PURCHASED POWER COST UNDER**
15 **THE SCENARIO WHEREIN EMPIRE WOULD BE PERMITTED UNILATERALLY**
16 **TO ABANDON ITS CURRENT THREE-YEAR INTERIM ENERGY CHARGE (IEC)?**

17 A Yes. Surrebuttal Schedule 4 is an update of Schedule 3 that was attached to my
18 direct testimony. It is based on the parameters described above. As shown on line 6
19 of Column 2, the reduction to Empire's claimed fuel and purchased power costs
20 would be \$9.9 million if, contrary to the position of the Industrials, Empire would be
21 permitted unilaterally to abandon its current three-year IEC.

1 **Q ARE YOU RECOMMENDING ABANDONMENT OF THE THREE-YEAR IEC?**

2 A No. It continues to be our position that the IEC should remain in effect through the
3 end of the three-year term, and that no part of any rate change in this case should be
4 as a result of changes in the price levels of fuel and purchased power.

5 **Q RETURNING FOR A MOMENT TO THE PRICES FOR NATURAL GAS IN 2007,**
6 **YOU MENTIONED THAT EMPIRE USED THE NYMEX FUTURES PRICES. ARE**
7 **THESE THE ONLY AVAILABLE INDICATORS OF 2007 GAS PRICES?**

8 A No. Many private parties, and the Energy Information Administration (EIA) of the
9 United States Department of Energy, make estimates of gas prices.

10 **Q HAVE YOU COMPARED THE EIA PRICE FORECAST FOR 2007 WITH THE**
11 **NYMEX PRICES USED BY MR. TARTER?**

12 A Yes. This comparison appears on Schedule 5 surrebuttal. The EIA data was taken
13 from the EIA publication, *Short-Term Energy Outlook*, dated August 8, 2006, and is
14 EIA's most current forecast. As shown on page 2 of Schedule 5, the difference
15 between the futures prices and the EIA forecast is considerable. In four of the
16 months, the EIA forecast is more than 15% below the futures prices, and in two other
17 months the difference is more than 10%. On average, the difference is 11.4%.

1 **Natural Gas Hedges**

2 **Q WHAT POSITION DOES EMPIRE TAKE WITH RESPECT TO YOUR PROPOSAL**
3 **THAT THE \$5 MILLION GAIN WHICH WAS REALIZED FROM THE UNWINDING**
4 **OF A HEDGE POSITION SHOULD BE USED FOR THE BENEFIT OF**
5 **CUSTOMERS?**

6 A Empire disagrees with my approach. Rather than credit the benefit to customers,
7 Empire wants to retain it for the benefit of stockholders.

8 **Q IF EMPIRE CONTINUES TO OPERATE UNDER THE THREE-YEAR IEC, ARE YOU**
9 **RECOMMENDING THAT THE GAIN BE RECOGNIZED IN THIS PROCEEDING?**

10 A No. If Empire continues to operate under the three-year IEC, then it is likely that the
11 issue would not be presented until later, when Empire will have to replace this gas.

12 However, if Empire is permitted unilaterally to abandon the IEC, the issue is
13 presented now because Empire has removed the benefit of the gain from its test year
14 gas expenses. In order to preserve the benefit for customers, it is therefore
15 imperative that the gain be recognized in this proceeding as an offset to gas costs.

16 **Regulatory Plan and Amortizations**

17 **Q HAVE YOU REVIEWED THE REBUTTAL TESTIMONY OF EMPIRE WITNESSES**
18 **GIPSON AND FETTER?**

19 A Yes. Both witnesses discuss the regulatory amortization mechanism that resulted
20 from the Regulatory Plan implemented for Empire in Case No. EO-2005-0263.

1 **Q WHAT IS YOUR UNDERSTANDING OF EMPIRE’S POSITION REGARDING THE**
2 **AMORTIZATION MECHANISM AS IT APPLIES TO THE CURRENT**
3 **PROCEEDING?**

4 A Initially, Empire appears to applaud the development of the amortization mechanism.
5 Witness Fetter notes at page 2 of his rebuttal testimony that the amortization
6 mechanism is “...an innovative component that has been viewed positively by the
7 financial community...” He notes that this amortization mechanism was “...designed
8 to provide a degree of protection for both Empire District customers and investors
9 from a potentially financially-injurious credit rating downgrade.” While applauding the
10 development of the amortization mechanism and noting how it provides protection for
11 the Company investors, Empire nonetheless objects to its use in the current
12 proceeding.

13 **Q WHAT IS THE BASIS FOR EMPIRE’S OBJECTION TO THE USE OF**
14 **REGULATORY AMORTIZATIONS IN THE CURRENT CASE?**

15 A As reflected at page 2 of Witness Gipson’s rebuttal testimony, Empire claims that the
16 “...amortization mechanism was designed to maintain certain S&P ratios during the
17 construction of Iatan 2.” Claiming that “...no substantial construction...” on Iatan 2 is
18 underway, Empire postulates that the amortization mechanism has not yet
19 commenced.

20 **Q DO YOU AGREE WITH MR. GIPSON’S ASSESSMENT REGARDING THE**
21 **COMMENCEMENT OF THE REGULATORY AMORTIZATION MECHANISM?**

22 A No. The Stipulation and Agreement approved by the Commission in Case
23 No. EO-2005-0263 provides specific guidance on the effective date of the regulatory

1 amortizations, the term for the use of those regulatory amortizations, and the
2 rationale underlying their use during that time.

3 Section 3(l), page 34, of the Stipulation and Agreement clearly indicates the
4 effective date for the commencement of any regulatory amortizations as well as the
5 ultimate term of the Regulatory Plan. Specifically, that Section provides:

6 This Agreement (once approved by the Commission) will be deemed
7 to have become effective as of the date the Order of the Commission
8 approving this Agreement becomes effective, and will expire on the
9 effective date of the initial rates that reflect inclusion of the Iatan 2
10 investment, except where otherwise specified in this Agreement.

11 Recognizing that the effective date of the Commission's Order approving the
12 Stipulation and Agreement was August 12, 2005, it is indisputable that the Regulatory
13 Plan and the attendant regulatory amortizations are effective.

14 **Q DO YOU AGREE WITH MR. GIPSON'S ATTEMPTS TO TIE THE REGULATORY**
15 **AMORTIZATIONS EXCLUSIVELY TO THE CONSTRUCTION OF IATAN 2?**

16 **A** No. The rationale for the development of the Regulatory Plan goes beyond the
17 construction of Iatan 2. Clearly, while Iatan 2 was a principal factor in the need for
18 the Regulatory Plan, the plan also addresses expenditures related to: (1)
19 environmental investments in Iatan 1; (2) a 155 MW gas-fired peaking generating unit
20 to be located at the Riverton site; (3) installation of SCR equipment at the Asbury
21 coal-fired generating station; and (4) the development of affordability, demand
22 response and energy efficiency programs.

23 It is my understanding that while "substantial construction" is not underway
24 with regard to Iatan 2, construction is underway regarding the gas-fired generating
25 unit to be located at Riverton as well as the installation of the Asbury SCR equipment.
26 Clearly, the rationale for the plan involved much more than just the construction of
27 Iatan 2.

1 **Q DO THE REGULATORY AMORTIZATIONS PROVIDE BENEFITS FOR BOTH**
2 **SHAREHOLDERS AND CUSTOMERS?**

3 A Yes. Shareholders benefit from the fact that Empire receives revenues and
4 associated cash flow to which it otherwise would not be entitled under a strict revenue
5 requirement analysis. That said, shareholders do not receive these increased
6 revenues free and clear from customers without any strings attached. Rather, while
7 customers pay increased rates now, they receive recognition of these increased rates
8 in future years in the form of an amortization reserve. Recognizing that this
9 amortization reserve is an offset to rate base, the Company will have a lower rate
10 base in the future and, all else being equal, the future rates will be lower than they
11 otherwise would have been without the amortization reserve.

12 In effect, the amortization formulas put a floor under the rate increase on the
13 basis of coverage ratios, rather than cost of service. To illustrate with simple
14 numbers, if the increase necessary to meet the financial ratios is \$10 million, the
15 amount of the amortization will be the difference between the \$10 million and the
16 increase calculated under traditional cost of service formulas. For example, if the
17 traditional cost of service formula calculates an increase of \$8 million, amortizations
18 will be \$2 million. On the other hand, if the traditional cost of service formula
19 indicates an increase of \$4 million, the amortizations will be \$6 million.

20 **Q GIVEN THESE RELATIONSHIPS, HOW DOES THE DIVISION BETWEEN THE**
21 **COST OF SERVICE RELATED INCREASE AND THE INCREASE IN**
22 **AMORTIZATIONS AFFECT EMPIRE AND FUTURE RATES?**

23 A Since amortizations become an offset to rate base in the future, and reduce future
24 revenue requirements, Empire would prefer to have a larger proportion of the
25 increase in the form of traditional cost of service revenue requirements and less as an

1 amortization since the higher cost of service based increase produces the same
2 revenue, but does not result in any (or as much) future rate base offset.

3 **Q DOES EMPIRE ARGUE FOR THE COMMISSION TO SHIFT REVENUES OUT OF**
4 **THE REGULATORY AMORTIZATIONS AND INTO THE FORM OF A STRICT**
5 **COST OF SERVICE INCREASE?**

6 A Yes. The whole point of Mr. Gipson's testimony disavowing the use of the regulatory
7 amortization mechanism is to avoid recognizing any rate increase as a result of
8 regulatory amortizations and instead have that entire increase be recognized as a
9 cost of service increase.

10 **Q CAN YOU EXPLAIN WHETHER THERE IS A RELATIONSHIP BETWEEN THE**
11 **REGULATORY AMORTIZATION ISSUE AND THE CONTINUATION OF THE IEC?**

12 A Yes. This is very important. Praxair / Explorer continue to assert that the three -year
13 IEC agreed to by Empire and approved by the Commission in Case
14 No. ER-2004-0570 should continue in place. Empire asserts that leaving the IEC in
15 place would result in the under-collection of fuel and purchased power expenses.
16 Under a classic cost of service analysis, to the extent that Empire could not manage
17 its fuel and purchased power costs under the IEC ceiling, it is true that Empire would
18 not have received complete recovery of all of its fuel and purchased power expense.
19 Given the Regulatory Plan and the associated regulatory amortizations, however, the
20 paradigm of a classic cost of service analysis is no longer in place.

21 Rather, given the amortization mechanism, the amount of the ultimate
22 increase in this case is essentially governed by the financial metrics. The major issue
23 is the proportion of the increase to be collected by means of the regulatory
24 amortization. Staff Witness Oligschlaeger makes the calculations under the IEC

1 termination and IEC continuation scenarios in his supplemental direct testimony. His
2 calculations generally show that if it is assumed that income taxes have to be
3 provided on the amortizations, customers will pay essentially the same rates under
4 either scenario. However, he also shows that if income taxes do not have to be
5 provided on the amortization amounts (which I understand to be Staff's position) then
6 the rates that customers pay will be lower with the continuation of the IEC than with
7 its termination.

8 **Q DOES THIS CONCLUDE YOUR SURREBUTTAL AND CROSS-SURREBUTTAL**
9 **TESTIMONY?**

10 **A** Yes, it does.

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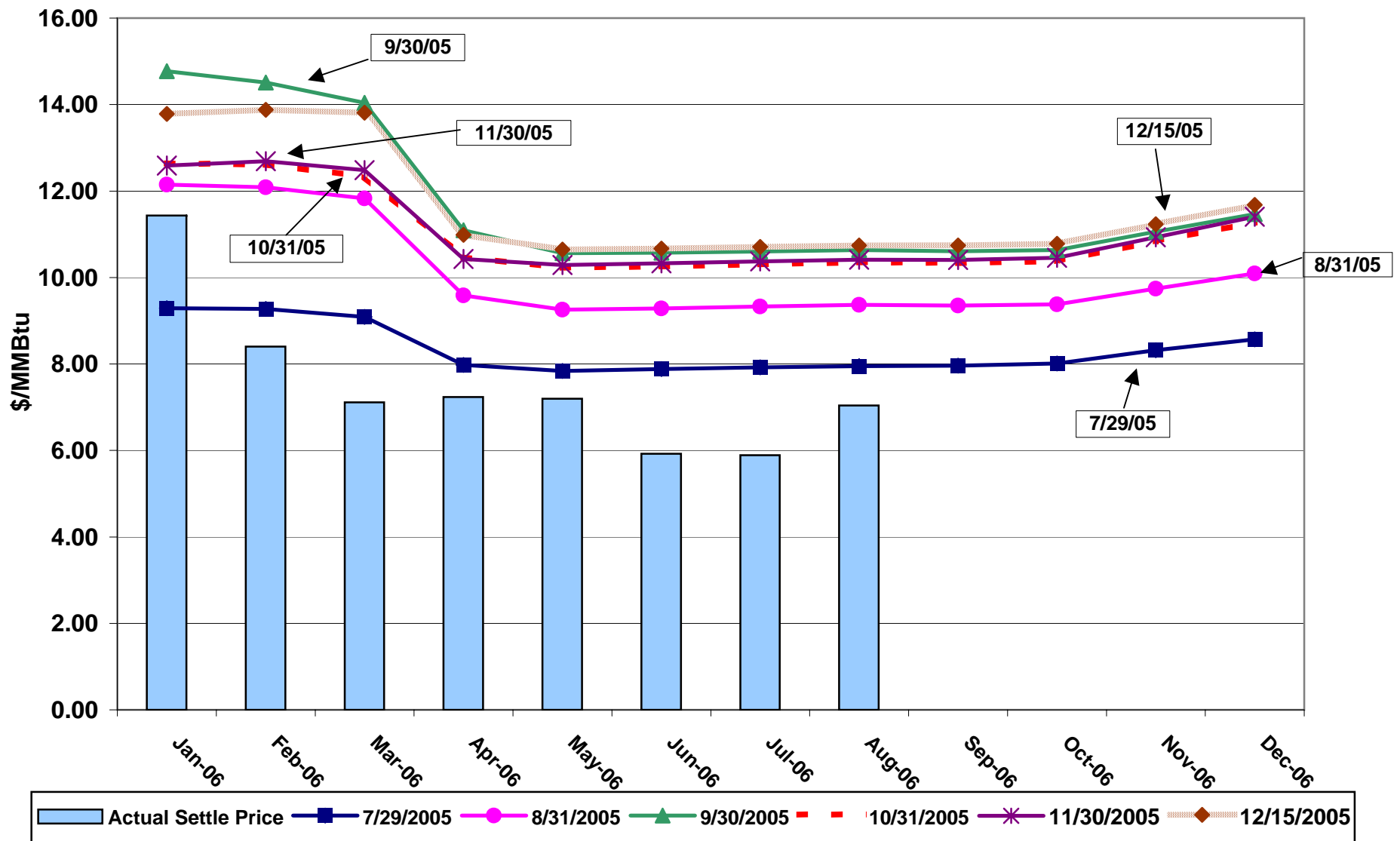
THE EMPIRE DISTRICT ELECTRIC COMPANY
MO PSC Case No. ER-2006-0315

Special Contract
Present Revenues Based on
Units for the Year Ended December 2005

<u>Line</u>	<u>Description</u>	<u>Billing Units</u>	<u>Present Rates</u>	<u>Cost at Present Rates</u>
		(1)	(2)	(3)
1	Customer Charge			
2	Excess Facilities Charge			
	Billing On Peak Demands:			
3	Summer (JJAS)			
4	Winter			
5	Total			
6	Substation Facilities on Min kW			
	Energy:			
7	Summer On Peak kWh			
8	Summer Shoulder kWh			
9	Summer Off Peak kWh			
10	Winter On Peak kWh			
11	Winter Off Peak kWh			
12	Total kWh			
13	Subtotal before Interruptible Credit			\$ 2,453,094
14	Interruptible Credit	91,200.0	\$ (4.86)	<u>(443,232)</u>
15	Total			\$ 2,009,862
16	Adjust Interruptible Credit to \$3.76	91,200.0	\$ 1.10	<u>100,320</u>
17	Total Bill with \$3.76 Credit (\$343,000)			\$ 2,110,182

THE EMPIRE DISTRICT ELECTRIC COMPANY

COMPARISON OF NYMEX NATURAL GAS FUTURES PRICES FOR 2006 WITH ACTUAL 2006 NYMEX MONTHLY SETTLEMENT PRICES



THE EMPIRE DISTRICT ELECTRIC COMPANY

COMPARISON OF NYMEX NATURAL GAS FUTURES PRICES FOR 2006
WITH ACTUAL 2006 MONTHLY SETTLEMENT PRICES \$/MMBtu

Month	07/29/05 NYMEX Price Projection ¹	Actual Monthly Settle Price	Difference Between Actual & Projected	% Increase or Decrease From Projected	08/31/05 NYMEX Price Projection ²	Actual Monthly Index Prices	Difference Between Actual & Projected	% Increase or Decrease From Projected	09/30/05 NYMEX Forward Price ³	Actual Monthly Index Prices	Difference Between Actual & Projected	% Increase or Decrease From Projected
Jan-06	9.290	11.431	2.141	23.0%	12.147	11.431	-0.716	-5.9%	14.771	11.431	-3.340	-22.6%
Feb-06	9.275	8.400	-0.875	-9.4%	12.087	8.400	-3.687	-30.5%	14.511	8.400	-6.111	-42.1%
Mar-06	9.090	7.112	-1.978	-21.8%	11.827	7.112	-4.715	-39.9%	14.041	7.112	-6.929	-49.3%
Apr-06	7.980	7.233	-0.747	-9.4%	9.587	7.233	-2.354	-24.6%	11.091	7.233	-3.858	-34.8%
May-06	7.840	7.198	-0.642	-8.2%	9.257	7.198	-2.059	-22.2%	10.561	7.198	-3.363	-31.8%
Jun-06	7.885	5.925	-1.960	-24.9%	9.286	5.925	-3.361	-36.2%	10.573	5.925	-4.648	-44.0%
Jul-06	7.920	5.887	-2.033	-25.7%	9.327	5.887	-3.440	-36.9%	10.603	5.887	-4.716	-44.5%
Aug-06	7.950	7.042	-0.908	-11.4%	9.369	7.042	-2.327	-24.8%	10.634	7.042	-3.592	-33.8%
Sep-06	7.960				9.349				10.608			
Oct-06	8.010				9.379				10.635			
Nov-06	8.320				9.744				11.060			
Dec-06	8.570				10.094				11.465			

Source:

¹ July 29, 2005 Henry Hub 2006 futures price projection

² August 31, 2005 Henry Hub 2006 futures price projection

³ September 30, 2005 Henry Hub 2006 futures price projection

THE EMPIRE DISTRICT ELECTRIC COMPANY

COMPARISON OF NYMEX NATURAL GAS FUTURES PRICES FOR 2006 WITH ACTUAL 2006 MONTHLY SETTLEMENT PRICES \$/MMBtu

Month	10/31/05 NYMEX Price Projection ¹	Actual Monthly Settle Price	Difference Between Actual & Projected	% Increase or Decrease From Projected	11/30/05 NYMEX Price Projection ²	Actual Monthly Index Prices	Difference Between Actual & Projected	% Increase or Decrease From Projected	12/15/05 NYMEX Price Projection ³	Actual Monthly Index Prices	Difference Between Actual & Projected	% Increase or Decrease From Projected
Jan-06	12.641	11.431	-1.210	-9.6%	12.587	11.431	-1.156	-9.2%	13.781	11.431	-2.350	-17.1%
Feb-06	12.611	8.400	-4.211	-33.4%	12.687	8.400	-4.287	-33.8%	13.880	8.400	-5.480	-39.5%
Mar-06	12.336	7.112	-5.224	-42.3%	12.481	7.112	-5.369	-43.0%	13.810	7.112	-6.698	-48.5%
Apr-06	10.466	7.233	-3.233	-30.9%	10.431	7.233	-3.198	-30.7%	10.985	7.233	-3.752	-34.2%
May-06	10.226	7.198	-3.028	-29.6%	10.291	7.198	-3.093	-30.1%	10.645	7.198	-3.447	-32.4%
Jun-06	10.256	5.925	-4.331	-42.2%	10.326	5.925	-4.401	-42.6%	10.670	5.925	-4.745	-44.5%
Jul-06	10.304	5.887	-4.417	-42.9%	10.371	5.887	-4.484	-43.2%	10.705	5.887	-4.818	-45.0%
Aug-06	10.349	7.042	-3.307	-32.0%	10.411	7.042	-3.369	-32.4%	10.740	7.042	-3.698	-34.4%
Sep-06	10.331				10.408				10.740			
Oct-06	10.376				10.456				10.782			
Nov-06	10.836				10.931				11.232			
Dec-06	11.276				11.406				11.677			

Source:

¹ October 31, 2005 Henry Hub 2006 futures price projection

² November 30, 2005 Henry Hub 2006 futures price projection

³ December 15, 2005 Henry Hub 2006 futures price projection

THE EMPIRE DISTRICT ELECTRIC COMPANY

UPDATED NATURAL GAS PRICING ANALYSIS

Line	Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Analysis Based on Zero Gas Hedged:														
1	Forecasted Gas Usage (DTh) ¹													
2	S. Star Gas Price (\$/MMBtu) ²													
3	Forecasted Gas Expense													
Analysis Based on Actual Hedged Gas:														
4	Total Gas Hedged (DTh) ³													
5	Strike Price ³													
6	Cost of Forward Hedged Gas													
7	Amount Of Gas Unhedged (DTh)													
8	S. Star Gas Price (\$/MMBtu) ²													
9	Cost of Unhedged Gas													
10	Forecasted Gas Exp. (Incl Hedges)													
11	Average Cost of Gas													
12	Company Forecasted Gas Expense (Incl Hedges) - July 10, 2006 Forward Prices ⁴													
13	Benefit/(Loss) of Hedging Program													
14	Summary:													
15	Forecasted Gas Usage (DTh)													
16	Policy Minimum hedged DTh - 60%													
17	Policy Maximum hedged DTh - 80%													
18	Amount Actually Hedged For 2006													
	Percent of Forecasted Usage													

Sources:

¹ Applying 2006 monthly usage pattern to Empire revised natural gas usage of . Source of projected 2006 monthly usage is Data response to Praxair/Explorer Date Request No. 204 - Model Input Information is not labeled as highly confidential

² Jan. 2006 - July 2006 are actual S. Star Monthly Index Prices, August 2006 price is actual Panhandle Eastern Monthly Index Price since S. Star Price was not quoted for August, and S. Star Monthly Index price, Prices for Sept. 2006 - Dec. 2006 are Henry Hub Forward Prices on June 13, 2006, Adjusted for Revised S. Star Basis

³ Page 22 of Tarter's direct testimony (highly confidential version)

⁴ Tarter Rebuttal, Schedule TWT-1 (highly confidential version)

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

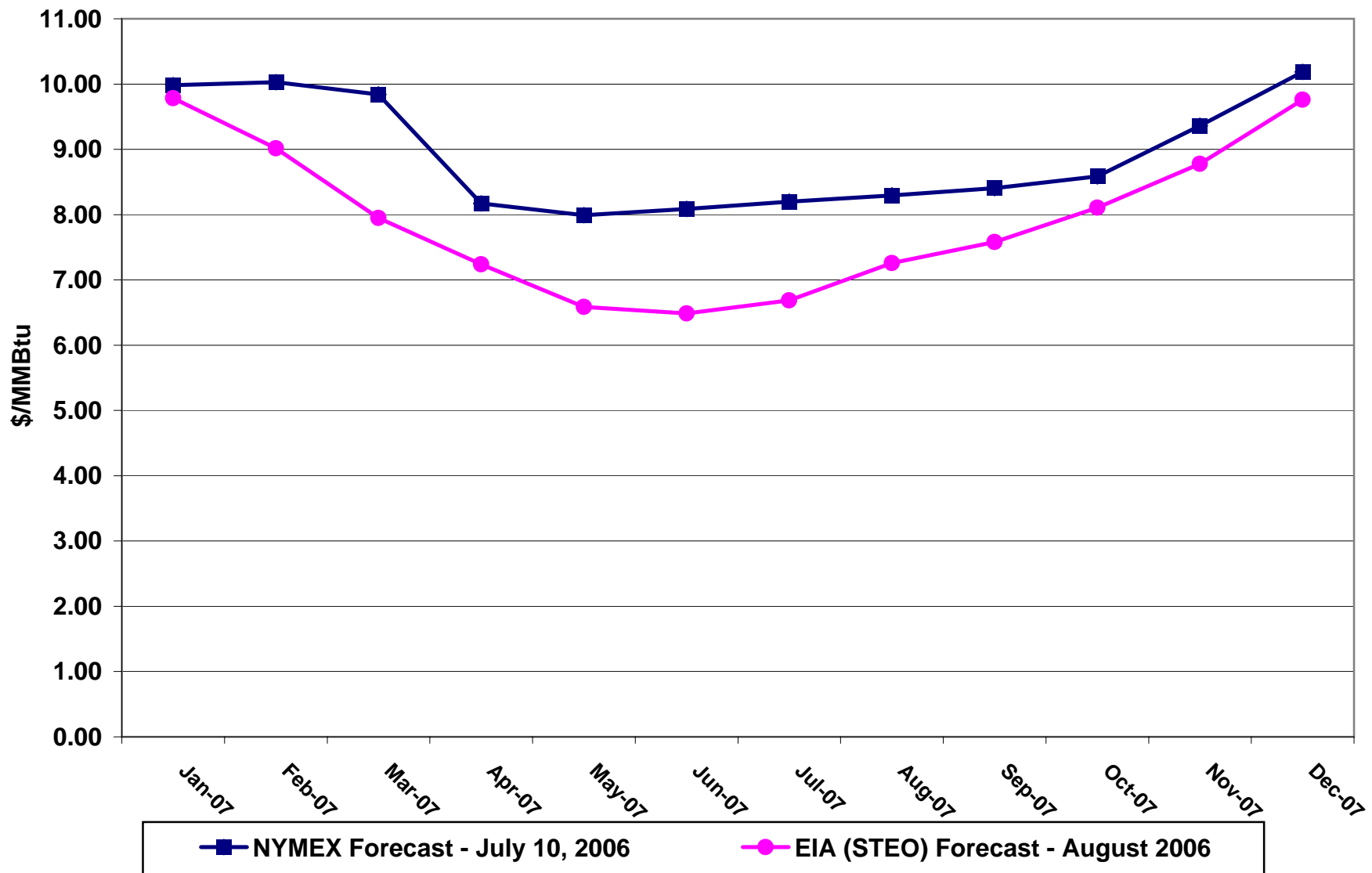
<u>Line</u>	<u>Description</u>	Total Company Amount <u>'(\$000)</u> (1)	MO Retail Amount <u>'(\$000)</u> (2)
1	Empire Claimed Fuel and Variable Purchased Power Costs ¹	_____	_____
	<u>Natural Gas Portion of Above Costs</u>		
2	Empire Claimed Gas Costs Based on July 10, 2006 Forecast of 2007 Gas Price		
3	Revised Gas Costs from Schedule 3		
4	Decrease in Claimed Natural Gas Costs		
	<u>Other Natural Gas Adjustments</u>		
5	Gain from Unwinding Hedge Positions	_____	_____
6	Total Adjustments Made to Empire's Claimed Fuel & Purchased Power Costs	_____	_____

Notes:

¹ Natural gas costs portion of Empire's assumed power costs is based on natural gas forward prices as of July 10, 2006.

THE EMPIRE DISTRICT ELECTRIC COMPANY

COMPARISON OF NYMEX NATURAL GAS PRICE FORECAST FOR 2007 AND EIA'S SHORT-TERM ENERGY OUTLOOK (STEO) NATURAL GAS PRICE FORECAST FOR 2007



EMPIRE DISTRICT ELECTRIC COMPANY

COMPARISON BETWEEN NYMEX NATURAL GAS PRICE FORECAST FOR 2007 AND EIA'S SHORT-TERM ENERGY OUTLOOK (STEO) NATURAL GAS PRICE FORECAST

<u>Month</u>	<u>NYMEX Prices on July 10, 2006 \$/MMBtu</u>	<u>EIA August STEO Outlook \$/MMBtu ¹</u>	<u>Difference Between NYMEX & EIA 2007 Price Projection</u>	<u>Percent Difference</u>
Jan-07	9.983	9.784	(0.199)	-2.0%
Feb-07	10.030	9.016	(1.014)	-10.1%
Mar-07	9.840	7.947	(1.893)	-19.2%
Apr-07	8.170	7.239	(0.931)	-11.4%
May-07	7.990	6.586	(1.404)	-17.6%
Jun-07	8.085	6.485	(1.600)	-19.8%
Jul-07	8.200	6.687	(1.513)	-18.5%
Aug-07	8.295	7.257	(1.038)	-12.5%
Sep-07	8.405	7.579	(0.826)	-9.8%
Oct-07	8.585	8.105	(0.480)	-5.6%
Nov-07	9.360	8.779	(0.581)	-6.2%
Dec-07	10.185	9.760	(0.425)	-4.2%
Average	8.927	7.935	(0.992)	-11.4%

Source:

¹ www.eia.doe.gov, Short-Term Energy Outlook, August 8, 2006 Release