

NP

Exhibit No.

Issue: Energy Center Costs, Fuel and  
Purchased Power Expenses, IEC

Witness: Brad Beecher

Type of Exhibit: Surrebuttal Testimony

Sponsoring Party: Empire District

Case No. ER-2004-0570

Date Testimony Prepared: November 22, 2004

Before the Public Service Commission  
of the State of Missouri

**FILED<sup>3</sup>**

DEC 28 2004

Missouri Public  
Service Commission

**Surrebuttal Testimony**

**Of**

**Bradley P. Beecher**

**November 22, 2004**

Exhibit No. 7 NP  
Case No(s). ER-2004-0570  
Date 12-06-04 Rptr 45

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BRADLEY P BEECHER  
SURREBUTTAL TESTIMONY NP

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OF  
BRADLEY P. BEECHER  
THE EMPIRE DISTRICT ELECTRIC COMPANY  
BEFORE THE  
MISSOURI PUBLIC SERVICE COMMISSION

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**SURREBUTTAL TESTIMONY  
OF  
BRADLEY P. BEECHER  
ON BEHALF OF  
THE EMPIRE DISTRICT ELECTRIC COMPANY  
BEFORE THE  
MISSOURI PUBLIC SERVICE COMMISSION  
CASE NO. ER-2004-0570**

1       **Introduction**

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

3       A. Bradley P. Beecher. My business address is 602 Joplin Street, Joplin, Missouri.

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

5       A. The Empire District Electric Company ("Empire" or "Company"), I am Vice  
6       President of Energy Supply.

7       **Q. ARE YOU THE SAME BRAD P. BEECHER WHO PREVIOUSLY FILED**  
8       **DIRECT AND REBUTTAL TESTIMONY IN THIS CASE BEFORE THE**  
9       **MISSOURI PUBLIC SERVICE COMMISSION ("COMMISSION") ON**  
10       **BEHALF OF THE COMPANY?**

11       A. Yes.

12       **Q. WHAT IS THE PURPOSE OF THIS TESTIMONY?**

13       A. The purpose of this surrebuttal testimony is to respond to the positions taken in the  
14       rebuttal testimony of Office of Public Counsel ("OPC") witness Ted Robertson  
15       concerning the proposed disallowance of a portion of the project costs related to the  
16       construction of the Energy Center Units 3 & 4. I will also address Empire's  
17       position on the proposed price for natural gas and overall treatment of fuel and  
18       purchased power expenses in response to the rebuttal testimony of OPC witness  
19       James A. Busch.

20

21       **I. ENERGY CENTER UNITS 3 AND 4**

22       **Q. PLEASE BRIEFLY DESCRIBE OPC'S TED ROBERTSON'S POSITION IN**  
23       **REBUTTAL TESTIMONY AS YOU CURRENTLY UNDERSTAND IT.**

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1 A. OPC witness Ted Robertson alleges that Empire was "obviously wasteful" in  
2 completing Energy Center Units 3 and 4 as it relates to the scope of work  
3 surrounding Patch Construction.

4 **Q. DID YOU ADDRESS THE PATCH ISSUE IN REBUTTAL TESTIMONY?**

5 A. Yes. Please refer to my rebuttal testimony as I rebutted the direct testimony of Staff  
6 witness David Elliott and Roberta McKiddy concerning the same issue.

7 **Q. WHAT FACTORS DID EMPIRE CONSIDER WHEN DETERMINING**  
8 **WHETHER TO PROCEED WITH PATCH OR MOVING ON TO**  
9 **ANOTHER VENDOR?**

10 A. There were several issues Empire was dealing with around the time it was deemed  
11 that Patch could not obtain a performance bond.

12 1. Empire needed at least one of the new units on line to meet the 12%  
13 minimum Southwest Power Pool ("SPP") capacity margin requirement  
14 before June 1, 2003.

15 2. Given that Patch could not obtain a performance bond, what was the most  
16 cost effective way to complete the project for our customers?

17 3. Given the Staff position in Case No. ER-2001-299, what was the most  
18 effective way to minimize risk to our shareholders?

19 To further expand on item 1, SPP requires every load serving entity to maintain  
20 installed capacity equal to 12% in excess of its seasonal peak. Without the addition  
21 of Energy Center 3 Empire would have been 47 MW short of the 12% capacity  
22 margin requirement in 2003. There is no monetary penalty for not maintaining the  
23 contractually agreed upon capacity margin. Empire, however, takes its power pool  
24 obligations seriously. It is each member of the SPP's responsibility to maintain  
25 electric reliability for our customers. Mismanagement by any one member of SPP  
26 can jeopardize the entire system, resulting in unfortunate events like the blackout in  
27 August of 2003. A change in contractors at this late date was sure to delay the  
28 schedule and probably not allow us to meet SPP's requirements.

29 Item 2 required us to assess the potential costs to complete the project without  
30 Patch. We knew that if we replaced Patch, the next bidder was a higher cost. We  
31 also knew that if we replaced Patch there would be additional expense for re-work

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1 and transition. On the other hand, we believed that if we managed Patch's financial  
2 involvement in the job, there was an opportunity to complete Patch's scope at the  
3 contract value and finish the project on schedule.

4 As for item 3, Staff's recent position on rate treatment of Empire's State Line  
5 Combined Cycle ("SLCC") Unit in 2001 (Case No. ER-2001-299) weighed in our  
6 decision process. In the SLCC case, Empire had deemed a contractor, Fru-Con,  
7 was in default of the contract and replaced them with another contractor at a higher  
8 cost. The replacement of Fru-Con with another contractor at a higher cost was the  
9 major basis cited by the Staff in their plant disallowance position in the previous  
10 case. If we replaced Patch with another bidder, we would have not only  
11 jeopardized meeting our SPP requirement, but we would have been repeating that  
12 which Staff judged as non-prudent in the SLCC case. By this point, we also knew  
13 that the Patch entities were not financially strong. If Empire continued with Patch  
14 we had to limit their financial involvement.

15 No one has challenged the prudence of the initial selection of Patch. Based on what  
16 Empire knew at the time, including a balance of all of the concerns outlined, led us  
17 to believe that executing Amendment 01 with Patch provided for the best balance of  
18 all concerned.

19 **Q. DOES OPC WITNESS ROBERTSON CONSIDER ALL OF THE OTHER**  
20 **ISSUES?**

21 A. No, he doesn't consider the other important and significant issues that Empire was  
22 facing at the time. He only considers the Patch Performance Bond issue.

23 **Q. PLEASE EXPLAIN.**

24 A. He picks a line item out of the budget and deems that Empire was wasteful on that  
25 one item. OPC witness Robertson says in his Rebuttal Testimony, page 6, lines 9-  
26 11, "It is the Public Counsel's belief that Company's failure to enforce the original  
27 contract requirement for Patch to post a performance bond caused it to be "on the  
28 hook" for the financial responsibility to complete the project." As pointed out on  
29 page 21 of my rebuttal testimony, Empire bettered its budget in several areas and  
30 was given no credit by OPC as to those line items. Also, it should be remembered

1 that Patch was unable to secure a performance bond, so it was impossible for  
2 Empire to enforce that contract provision.

3 **Q. DOES OPC WITNESS TED ROBERTSON EVER MENTION EMPIRE'S**  
4 **"DEFINITIVE ESTIMATE" IN HIS REBUTTAL TESTIMONY WHEN**  
5 **SPEAKING OF PROPOSED DISSALLOWANCE?**

6 A. No. Just like Staff witnesses David Elliott and Roberta McKiddy, OPC witness Ted  
7 Robertson takes a line item that was over budget and does not give Empire credit  
8 for line items under budget. In other words, he ignores Empire's definitive estimate.

9 **Q. DOES EMPIRE BELIEVE IT MADE PRUDENT DECISIONS DURING ITS**  
10 **CONSTRUCTION OF THE ENERGY CENTER UNITS 3 AND 4?**

11 A. Yes. Empire believes that after looking at all of the issues, the Commission will  
12 agree that Empire made prudent decisions during the construction of Energy Center  
13 Units 3 and 4.

14 **Q. DOES EMPIRE HAVE ANY OTHER COMMENTS REGARDING THIS**  
15 **ISSUE?**

16 A. We completed the project at only \*\*\$\_\_\_\_\_\*\* over our Board approved \$55  
17 million definitive estimate. We completed the project on schedule which allowed  
18 us to maintain the capacity margin requirements required by SPP. OPC is trying to  
19 enforce some type of "perfect construction" standard applied to over budget line  
20 items but ignoring under budget line items. This standard is virtually unattainable  
21 when applied on an after-the-fact basis. We ask that the Commission consider all of  
22 the relevant factors, put itself in Empire's position, and find that Empire made  
23 prudent decisions based on all factors we considered at the time.

24  
25 **II. NATURAL GAS PRICE AND OVERALL TREATMENT OF FUEL AND**  
26 **PURCHASE POWER EXPENSES**

27 **Q. DOES EMPIRE AGREE WITH THE UPDATE THAT OPC WITNESS**  
28 **JAMES A. BUSCH MADE TO HIS NATURAL GAS PRICE?**

29 A. Empire agrees with the correction OPC witness Busch made due to an error in his  
30 formula of his original recommendation. The correction makes the OPC natural gas  
31 price 4.68 \$/MMBtu. However, Mr. Busch is still utilizing NYMEX futures prices

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1 for 2005 and 2006 as of September 16, 2004. As I stated in my rebuttal testimony,  
2 the natural gas market has changed dramatically since the time direct testimony was  
3 filed. Using NYMEX future prices as of November 17, 2004, Empire calculates  
4 that Mr. Busch's method would yield a natural gas price of about 5.37 \$/MMBtu.

5 **Q. DO YOU AGREE WITH THE OPC POSITON THAT FUEL AND**  
6 **PURCHASED POWER EXPENSE SHOULD BE TREATED IN THE**  
7 **TRADITIONAL MANNER OF USING ONLY ONE NATURAL GAS PRICE**  
8 **AND NOT USING AN INTERM ENERGY CHARGE ("IEC")**  
9 **MECHANISM?**

10 A. The traditional method should only be used to the extent that the Commission  
11 would allow Empire the opportunity to collect the Company's actual prudently  
12 incurred fuel and purchased power expenses. In other words, if the traditional  
13 method is used, costs included in rates should reflect reality.

14 **Q. TO WHAT LEVEL OF TOTAL COMPANY ON-SYSTEM FUEL AND**  
15 **PURCHASED POWER EXPENSE ARE YOU REFERRING?**

16 A. Based on NYMEX natural gas prices as of November 17, 2004, the total Company  
17 on-system fuel and purchased power expense of \$137,548,710 or 27.01 \$/MWh is  
18 appropriate for setting base rates in this case. The run summary is attached as  
19 Surrebuttal Schedule BPB-8.

20 **Q. IS THIS THE SAME VALUE RECOMMENDED IN YOUR REBUTTAL**  
21 **TESTIMONY?**

22 A. No. The change is due to the volatile nature of natural gas prices. In my rebuttal  
23 testimony I supported \$140,840,180 or 27.66 \$/MWh for base rates. This level was  
24 based on spot natural gas at the average NYMEX futures prices for 2005 and 2006  
25 as of October 27, 2004. This price was 7.50 \$/MMBtu. This resulted in a total  
26 natural gas price (i.e. combined with the 2005 hedged position) of 6.02 \$/MMBtu.

27 As of November 17, 2004, the NYMEX futures prices for this same period is now  
28 about 6.79 \$/MMBtu. In the new model run 6.79 \$/MMBtu was used for the spot  
29 natural gas price as opposed to 7.50 \$/MMBtu in rebuttal, resulting in a total natural  
30 gas price of 5.69 \$/MMBtu compared to Mr. Busch's value of 4.68 \$/MMBtu.  
31 When the difference of 1.01 \$/MMBtu is applied to an expected burn range of



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1       8,000,000 to 10,000,000 MMBtu a before tax expense shortfall of \$8 – 10 million  
2       dollars will occur. OPC's proposal is clearly too low to allow Empire to recover it's  
3       prudently incurred fuel and purchased power expenses.

4       **Q. DOES EMPIRE SUPPORT AN ALTERNATE METHOD OF COST**  
5       **RECOVERY IF THE COMMISSION BELIEVES THAT A LEVEL OF**  
6       **\$137,548,710 WITH A NATURAL GAS PRICE OF 5.69 \$/MMBTU IS NOT**  
7       **APPROPRIATE AT THIS TIME TO USE FOR SETTING BASE RATES IN**  
8       **THIS CASE?**

9       A. Yes. Empire supports a properly crafted IEC as an alternate method as I stated in  
10       my rebuttal testimony. The Company continues to support an IEC in the \$20  
11       million range with a term of 5 years as indicated in Empire's direct case and tariffs.  
12       Although the Company continues to support an IEC with a term of 5 years, Empire  
13       would be willing to accept an IEC with a 3 year term. However, anything shorter  
14       than a 3 year term would not be acceptable. Empire believes that anything under 3  
15       years would affect stability for our customers as well as our stockholders and the  
16       rating agencies. If the IEC is constructed with a 1 year term, Empire would have to  
17       file another rate case immediately. Likewise, if a 2 year IEC results, Empire would  
18       need to file another case in only 13 months.

19       **Q. WHAT FLOOR AND CEILING DOES THE COMPANY SUPPORT FOR**  
20       **AN IEC?**

21       A. The Company supports a \$20 million IEC in the range \$120 million to \$140  
22       million. This represents natural gas prices in the range of roughly 4.00 to 6.00  
23       \$/MMBtu. The \$140 million ceiling with 6.00 \$/MMBtu natural gas is consistent  
24       with where natural gas futures were as of October 27, 2004, the time I prepared my  
25       rebuttal testimony.

26       **Q. HOW DOES THIS COMPARE TO STAFF'S FILED POSITION?**

27       A. In direct testimony Staff supported an IEC with a 2-year term in the range  
28       \$107,436,748 to 130,888,272 which represented natural gas prices in the range 3.20  
29       to 5.62 \$/MMBtu. Staff failed to update the natural gas prices in their rebuttal  
30       testimony. However, as I pointed out in my rebuttal testimony, Staff's direct  
31       testimony did not include \$2.4 million for firm natural gas transportation and

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1       roughly \$1.3 million for transportation losses and commodity charges. Empire  
2       believes that Staff has agreed to include these expenses. This would make Staff's  
3       range roughly \$111 million to \$135 million. This compares to the Company's  
4       position of \$120 million to \$140 million.

5       **Q. DO YOU HAVE ANY COMMENTS REGARDING MR. BUSCH'S**  
6       **STATEMENTS CONCERNING THE LAWFULNESS OF THE IEC?**

7       A.   OPC's position appears to be that an IEC is lawful only if OPC agrees to it.  
8       However, I fail to understand how the agreement of OPC in a stipulation affects the  
9       law. If the Commission determines that an IEC is lawful under Missouri law, it  
10      may utilize an IEC in this case as it has in a previous Empire case (Case No. ER-  
11      2001-299) and a recent Aquila Inc. case (Case No. ER-2004-0034), regardless of  
12      OPC's opinion. In the event that the Commission determines an IEC is unlawful or  
13      would lead to unnecessary and possibly time-consuming controversy in the courts,  
14      the Commission should allow total Company on-system fuel and purchased power  
15      expense of \$137,548,710 in Empire's base rates.

16      **Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

17      A.   Yes it does.

18

**Surrebuttal Schedule BPB-8**  
**Avg Gas Price 5.69 \$/MMBtu**

|                           | <u>GWH</u> | <u>F &amp; PP Cost</u><br><u>(\$000's)</u> |               | <u>Starts</u>                       | <u>GBTU</u>        |           | <u>Avg HR</u><br><u>Excl Starts</u> |
|---------------------------|------------|--|---------------|-------------------------------------|--------------------|-----------|-------------------------------------|
|                           |            | <u>Incl Start</u>                          | <u>\$/MWH</u> |                                     | <u>Excl Starts</u> |           |                                     |
| Asbury 1                  | 1,298.10   | 15,780.60                                  | 12.16         | 12                                  | 14,526             |           | 11,191                              |
| Asbury 2                  | 25.30      | 498.00                                     | 19.68         | 33                                  | 461                |           | 18,217                              |
| Total Asbury              | 1,323.40   | 16,278.60                                  | 12.30         | 45                                  | 14,987             |           | 11,325                              |
| Iatan 1                   | 583.20     | 3,902.70                                   | 6.69          | 14                                  | 5,847              |           | 10,026                              |
| Riverton 7                | 192.30     | 3,203.30                                   | 16.66         | 12                                  | 2,559              |           | 13,308                              |
| Riverton 8                | 292.60     | 4,345.50                                   | 14.85         | 9                                   | 3,516              |           | 12,017                              |
| Riverton 9and10           | 2.30       | 236.00                                     | 102.61        | 5                                   | 41                 |           | 17,826                              |
| Riverton 11               | 0.80       | 80.40                                      | 100.50        | 5                                   | 14                 |           | 17,375                              |
| Total Riverton            | 488.00     | 7,865.20                                   | 16.12         | 31                                  | 6,130              |           | 12,562                              |
| Energy Center 1           | 14.40      | 1,359.70                                   | 94.42         | 14                                  | 237                |           | 16,451                              |
| Energy Center 2           | 8.10       | 762.20                                     | 94.10         | 9                                   | 133                |           | 16,383                              |
| Energy Center 3           | 32.90      | 2,111.00                                   | 64.16         | 106                                 | 371                |           | 11,277                              |
| Energy Center 4           | 17.70      | 1,132.00                                   | 63.95         | 59                                  | 199                |           | 11,243                              |
| Total EC                  | 73.10      | 5,364.90                                   | 73.39         | 188                                 | 940                |           | 12,854                              |
| State Line 1              | 68.10      | 5,284.20                                   | 77.59         | 21                                  | 925                |           | 13,589                              |
| SLCC 1x1                  | 1,072.30   | 46,073.40                                  | 42.97         | 29                                  | 8,089              |           | 7,543                               |
| SLCC 2x1                  | 53.00      | 2,202.70                                   | 41.56         | 19                                  | 381                |           | 7,194                               |
| Total SL                  | 1,193.40   | 53,560.30                                  | 44.88         | 69                                  | 9,395              |           | 7,873                               |
| Gas Turb (incl Starts)    | 1,269.60   | 59,241.60                                  | 46.66         | 267                                 | 10,411             |           | 8,200                               |
| Total Thermal             | 3,661.10   | 86,971.70                                  | 23.76         |                                     | 37,300             |           | 10,188                              |
| Ozark Beach               | 59.20      |  |               |                                     |                    |           |                                     |
| Total EDE (less fixed)    | 3,720.30   | 86,971.70                                  | 23.38         |                                     |                    |           |                                     |
| WR-JP                     | 1,053.30   | 14,392.00                                  | 13.66         |                                     |                    |           |                                     |
| Spot Purch                | 318.60     | 11,098.00                                  | 34.83         |                                     |                    |           |                                     |
| Total Purch               | 1,371.90   | 25,490.00                                  | 18.58         | 26.9%                               | PP % of NSI        |           |                                     |
| Total Model               | 5,092.20   | <u>112,461.70</u>                          | 22.09         |                                     | SLCC 1x1 Hrs       | Hrs       |                                     |
|                           |            |  |               |                                     | SLCC 2x1 Hrs       |           | 5,969                               |
| PP Demand Charge          |            | 16,194                                     |               |                                     |                    |           | 3,079                               |
| Undist-Oth-Train          |            | 1,639.04                                   |               |                                     | MCF Gas            | 10,217.17 |                                     |
|                           |            |  |               |                                     | Heat Cont Gas      | 1.019     |                                     |
|                           |            |  |               |                                     | Avg Gas Cost       | 5.69      | \$/mmbtu                            |
| Gas Fixed FT (test year)  |            | 3,285.04                                   |               |                                     |                    |           |                                     |
| Gas Fixed FT (additional) |            | 2,400.00                                   |               |                                     |                    |           |                                     |
| Gas Dmd Commodity Chg     |            | 200.94                                     |               |                                     |                    |           |                                     |
| Gas Dmd Losses Chg        |            | 1,368.47                                   | 240.50        | additional GBTUs for losses (2.31%) |                    |           |                                     |
| Total Gas DMD             |            | 7,254.45                                   |               |                                     |                    |           |                                     |
| Total FPP NSI             | 5,092.20   | <u>137,548.71</u>                          | 27.01         |                                     |                    |           |                                     |

AFFIDAVIT

STATE OF MISSOURI )  
 ) ss  
COUNTY OF JASPER )

On the 22nd day of November, 2004, before me appeared Brad P. Beecher, to me personally known, who, being by me first duly sworn, states that he is the Vice President – Energy Supply of The Empire District Electric Company and acknowledged that he has read the above and foregoing document and believes that the statements therein are true and correct to the best of his information, knowledge and belief.

Brad P. Beecher

Brad P. Beecher

Subscribed and sworn to before me this 22nd day of November, 2004

Patricia A. Settle

Pat Settle, Notary Public

