

**BEFORE THE STATE CORPORATION COMMISSION  
OF THE STATE OF KANSAS**

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**REBUTTAL TESTIMONY OF**

**F. DANA CRAWFORD**

**ON BEHALF OF  
KANSAS CITY POWER & LIGHT COMPANY**

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**IN THE MATTER OF THE APPLICATION OF  
KANSAS CITY POWER & LIGHT COMPANY  
TO MODIFY ITS TARIFFS TO CONTINUE THE  
IMPLEMENTATION OF ITS REGULATORY PLAN**

**DOCKET NO. 07-KCPE-905-RTS**

1 **Q: Are you the same F. Dana Crawford who submitted direct testimony in this**  
2 **proceeding?**

3 A: Yes, I am.

4 **Q: What is the purpose of your Rebuttal Testimony?**

5 A: The purpose of my testimony is to rebut the testimony of Kansas Corporation  
6 Commission (“KCC” or the “Commission”) staff witness Justin T. Grady.

7 **Q: Please explain your rebuttal to KCC staff witness Justin T. Grady.**

8 A: First, I will rebut the testimony of Justin T. Grady concerning Production  
9 Maintenance Expense (Adjustment IS-2). Mr. Grady’s first proposed adjustment  
10 concerns the proposed disallowance of the use of the Handy-Whitman Index of Public  
11 Utility Construction Costs. Mr. Grady refers to Staff Data Request No. 216 where  
12 Kansas City Power & Light Company (“KCPL” or the “Company”) responded that  
13 KCPL had not performed any formal comparisons of the Handy-Whitman Index  
14 factors against actual local experience. Although KCPL has not performed formal

1 comparisons, we have conducted informal comparisons of our high-use consumables  
2 such as metals, chemicals/ammonia, gasoline/diesel and contract labor. A recent  
3 internal study (Schedule FDC-9) used a 3-year period June 2004 – June 2006 and  
4 found the following average yearly inflation rates: Gasoline, Diesel = 19.8%, Metals,  
5 materials = 25.1%, Contractors = 5.3%, Chemicals = 12.5%, and Lubricants = 13.3%.  
6 According to Handy-Whitman, the index rate for 2004-2005 was 5.08%. In a more  
7 recent article in Megawatt Daily dated February 2, 2007 (Schedule FDC-10) it is  
8 quoted that 2004 fabricated steel prices have increased 30% to 40% over 2003 prices.  
9 As can be seen from this comparison, the Handy-Whitman index, while being an  
10 industry standard, compares very conservatively to our internal local study and  
11 outside sources. Mr. Grady is proposing the use of a 7-year average “In-Year Costs”  
12 without the use of any inflation index. KCPL believes that inflation over the past 7  
13 years has been significant and while conservative, the Handy-Whitman Index is the  
14 most appropriate industry standard. Consequently, we believe that the appropriate 7-  
15 year average for non-labor steam maintenance, adjusted for inflation and before  
16 application of specific adjustments, should be \$25,681,974 (total company) instead of  
17 Mr. Grady’s 7-year average of \$23,735,448.

18 **Q: Please respond to Mr. Grady’s second proposed adjustment.**

19 A: Mr. Grady’s second proposed adjustment concerns the treatment of Hawthorn  
20 Unit 5’s sectionalized turbine overhaul expenses. At the time of my direct testimony  
21 in this case, actual Hawthorn Unit 5 turbine overhaul costs were not available.  
22 Because the 2007 segment of the turbine overhaul is now complete and the actual

1 non-labor costs were provided to Mr. Grady in response to Staff Data Request No.  
2 153, KCPL agrees with Mr. Grady's adjustment of \$589,518 (total Company.)

3 **Q: Please respond to Mr. Grady's third proposed adjustment.**

4 A: Mr. Grady's third proposed adjustment concerns the operations and maintenance  
5 expenses associated with the Spearville Wind Facility. Mr. Grady refers to KCPL's  
6 Adjustment No. 26a, where \$399,102 was recognized as being already included in the  
7 test year. Mr. Grady states that KCPL incurred \$755,701 of operations and  
8 maintenance expenses in the test year. KCPL's Adjustment 26a is for non-KCPL  
9 labor maintenance. The \$399,102 is the non-KCPL labor maintenance included in the  
10 test year period (see Staff Data Request No. 220). However, subsequent analysis  
11 indicates that the annualized amount of \$1,838,119 was for both operations and  
12 maintenance expenses and that our original comparison to test year amounts was only  
13 to wind-related maintenance expense. If the annualized amount is compared to test  
14 year non-labor amounts for both operations and maintenance expenses, then Mr.  
15 Grady's proposed Kansas jurisdictional test year adjustments of \$97,348 for  
16 operations expense and \$389,394 for maintenance expense are appropriate. (Note  
17 that Mr. Grady expresses these particular adjustments only on a jurisdictional basis  
18 using a Kansas jurisdictional allocation factor of 45.0305%, the same as used in  
19 KCPL's filing. If the adjustments had been expressed on a total Company basis  
20 consistent with the Company's filing, the adjustment to operations and maintenance  
21 expenses would have been \$216,182 and \$864,734, respectively.)

22 **Q: Please respond to Mr. Grady's fourth proposed adjustment.**

1 A: Mr. Grady's fourth proposed adjustment concerns the Hawthorn Unit 6 hot gas path  
2 inspection/overhaul. Mr. Grady is proposing using a 7-year average cost for accounts  
3 551-554 (Mr. Grady stated accounts 552-554 but we assume this was in error). As  
4 stated on page 9 of my Direct Testimony, KCPL added five simple-cycle combustion  
5 turbines ("CTs") (West Gardner 1-4 and Osawatomie 1) in 2003. The maintenance of  
6 these units would fall into accounts 551-554. Since KCPL's acceptance of these units  
7 occurred in mid-year 2003, previous years would not include the costs associated  
8 with the new CT fleet. Additionally, years 2004 and 2005 would include warranty  
9 work and would be expected to be low in relation to a "normal" year. We proposed  
10 using the test year for these accounts with specific adjustments, which included the  
11 Hawthorn Unit 6 hot gas path inspection/overhaul at a normalized amount of  
12 \$116,667 (total Company). We believe this method more clearly represents a  
13 normalized level of costs, before consideration of the combustion inspections  
14 discussed below.

15 **Q: Please respond to Mr. Grady's final proposed adjustment.**

16 A: Mr. Grady's final proposed adjustment concerns combustion inspections on the  
17 simple-cycle CT fleet (Hawthorn Units 7 & 8, West Gardner Units 1-4, and  
18 Osawatomie Unit 1). Although KCPL believes these costs are appropriate,  
19 subsequent to the time of my original filing on this case, we have determined a more  
20 effective process to conduct these overhauls. This process change has resulted in the  
21 likelihood that the majority of these costs will be capitalized under the Company's  
22 capitalization policy and therefore we choose not to rebut Mr. Grady's decision to  
23 exclude KCPL's proposed \$385,000 (total Company) adjustment.

1 Q. Does that conclude your testimony?

2 A. Yes, it does.



## **Inflation Study Summary**

Inflation has continued to climb at unexpected rates. KCPL has seen a variety of products we purchase take an inflation jump in the last few years. The cost of many products we purchase such as metals, chemicals/ammonia, gasoline/diesel and contractor labor have continued to climb at rates we had not anticipated in past budget seasons. Based on recent research we have completed on high-use products identified, in the past year (2005) KCPL has seen approximately 7% inflation overall for these particular products.

Below is an explanation of our inflation analysis.

### ***Inflation Analysis***

We reviewed the top 80% of expenses for 2005 and YTD through June 2006. We researched and analyzed the invoices through the same vendor, comparing each year to determined inflation. In some cases we were able to review items/invoices from 2004 giving us 3 years to determine inflation. Average inflation has been determined at the following rate:

<b>Items Analyzed</b>	<b>Inflation %</b>
Gasoline, Premium, Unleaded, Diesel	19.8%
Metals, materials	25.1%
Contractors	5.3%
Chemicals	12.5%
Lubricants	13.3%

## Megawatt Daily

Friday, February 2, 2007

### Entergy in talks with RFP bidders for supplies

Entergy said Thursday it is negotiating with two unidentified bidders for 1,300 MW of load-following gas-fired capacity and one unidentified bidder to provide between 200 MW and 350 MW of long-term capacity from a solid fuel plant.

The selections were the result of a request for proposals issued in April for 2,000 MW or more if the bids were attractive.

Entergy also has chosen to repower its Little Gypsy Unit 3 near La Place, Louisiana, by adding two coal or coke-fueled circulating fluidized bed boilers to provide about 530 MW. Little Gypsy 3 is now an oil- and gas-fired unit.

The RFP was for 1,000 MW of load-following resources from combined-cycle gas turbine generation and 1,000 MW of base-

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### SPP says balancing market starts smoothly

The Southwest Power Pool formally launched its real-time balancing market Thursday as midnight passed. Coordinating generators in 11 control areas, SPP operated the new market without problems, said Carl Monroe, SPP chief operating officer.

About 40 or 45 people - staff and several others - gathered at midnight in the control center arena in Little Rock, Arkansas, to celebrate the start.

Speaking Thursday afternoon, Monroe said the new system had been operating since 9 pm Wednesday CST, but it only became financially binding at midnight. Parts of the system also had been operating during months of testing, but that was more for operational experience than to discover price patterns.

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### Companies face rising plant construction costs

Having incurred the ire of regulators and consumer advocates in several states for the sticker shock resulting from the high cost of fuel used to generate electricity, power generators now face the prospect of justifying even higher prices that are likely to result from rising construction costs.

The first to feel the shock, though, are power companies that have begun to push their development plans from the planning stage into construction.

In November Duke Energy said it was re-evaluating its plans to build two 800-MW coal-fired plants at its Cliffside station in North Carolina as a result of a 50% increase in estimated construction costs to \$2 billion from \$1 billion.

In December Westar Energy postponed a planned baseload

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### Day-ahead markets for delivery Feb 2 (\$/MWh)

East	Index	Change	Range	Deals	Volume	Avg \$/MWh
<b>On-Peak</b>						
Mass Hub	73.00	-5.60	73.00-73.00	N.A.	N.A.	75.80
N.Y. Zone-G	74.25	-4.15	74.25-74.25	N.A.	N.A.	76.33
N.Y. Zone-J	93.65	5.00	93.65-93.65	N.A.	N.A.	91.15
N.Y. Zone-A	63.25	-4.00	63.25-63.25	N.A.	N.A.	65.25
Ontario*	65.00	-10.00	65.00-65.00	N.A.	N.A.	70.00
PJM West	62.00	-6.60	62.00-62.00	N.A.	N.A.	65.30
Dominion Hub	63.45	-7.45	63.45-63.45	N.A.	N.A.	67.18
VACAR	61.50	-3.00	61.50-61.50	N.A.	N.A.	63.00
Southern, into	56.75	-2.25	56.75-56.75	N.A.	N.A.	57.88
Florida	57.75	-1.50	57.75-57.75	N.A.	N.A.	58.50
TVA, into	57.00	0.75	57.00-57.00	N.A.	N.A.	56.63
<b>Off-Peak</b>						
Mass Hub	62.00	2.20	62.00-62.00	N.A.	N.A.	60.90
PJM West	52.25	-9.75	52.25-52.25	N.A.	N.A.	57.13
Dominion Hub	58.25	-9.00	58.25-58.25	N.A.	N.A.	62.75
VACAR	54.00	-3.00	54.00-54.00	N.A.	N.A.	55.50
Southern, into	44.79	-2.60	44.00-48.00	6	425	46.09
Florida	48.50	-1.50	48.50-48.50	N.A.	N.A.	49.25
TVA, into	48.00	0.50	48.00-48.00	N.A.	N.A.	47.75
<b>Central</b>						
<b>On-Peak</b>						
Michigan Hub	63.65	0.00	63.65-63.65	N.A.	N.A.	63.65
AD Hub	60.25	1.15	60.25-60.25	N.A.	N.A.	59.68
Cinergy Hub	61.75	1.25	61.75-61.75	N.A.	N.A.	61.13
Illinois Hub	59.60	0.90	59.60-59.60	N.A.	N.A.	59.15
NI Hub	60.00	-1.50	60.00-60.00	N.A.	N.A.	60.75
Minnesota Hub	79.85	15.00	79.85-79.85	N.A.	N.A.	72.35
MAPP South	72.00	2.00	72.00-72.00	N.A.	N.A.	71.00
SPP North	70.00	2.00	70.00-70.00	N.A.	N.A.	69.00
Entergy, into	60.54	-1.63	59.00-61.00	9	600	61.36
ERCOT	59.01	1.41	58.00-60.00	119	8,575	58.31
ERCOT, North	60.49	2.53	59.45-61.00	35	2,775	59.23
ERCOT, Houston	60.79	2.37	59.50-62.00	19	1,750	59.61
ERCOT, West	61.25	3.50	61.25-61.25	N.A.	N.A.	59.50
ERCOT, South	58.00	1.62	58.00-58.00	N.A.	N.A.	57.19
<b>Off-Peak</b>						
Michigan Hub	41.10	-5.65	41.10-41.10	N.A.	N.A.	43.93
AD Hub	41.00	-3.00	41.00-41.00	N.A.	N.A.	42.50
Cinergy Hub	40.00	-5.00	40.00-40.00	N.A.	N.A.	42.50
Illinois Hub	37.75	-5.60	37.75-37.75	N.A.	N.A.	40.55
NI Hub	40.00	-2.00	40.00-40.00	N.A.	N.A.	41.00
Minnesota Hub	53.10	2.70	53.10-53.10	N.A.	N.A.	51.75
MAPP South	50.00	5.00	50.00-50.00	N.A.	N.A.	47.50
SPP North	50.00	0.00	50.00-50.00	N.A.	N.A.	50.00
Entergy, into	44.25	-2.75	44.25-44.25	N.A.	N.A.	45.63
ERCOT	50.99	4.17	49.50-51.75	69	4,500	48.91
ERCOT, North	52.14	5.38	50.75-52.75	36	1,875	49.45
ERCOT, Houston	52.39	5.16	52.00-53.00	5	350	49.81
ERCOT, West	52.75	0.50	52.75-52.75	N.A.	N.A.	52.50
ERCOT, South	51.25	4.75	51.25-51.25	N.A.	N.A.	48.88
<b>West†</b>						
<b>On-Peak</b>						
COB	65.66	-2.29	64.25-66.50	11	275	66.42
Mid-C	63.20	-2.67	62.00-64.00	239	6,475	64.09
Palo Verde	62.97	-2.32	62.00-65.00	84	2,350	63.74
Mead	64.46	-2.73	64.00-65.50	8	200	65.37
Mona	63.00	-3.00	63.00-63.00	N.A.	N.A.	64.00
Four Corners	66.61	-0.39	65.50-67.50	19	575	66.74
NP15	67.34	-3.72	64.50-68.25	99	2,700	68.58
SP15	67.40	-3.13	64.00-68.25	285	8,075	68.44
<b>Off-Peak</b>						
COB	60.12	-0.06	59.30-61.00	19	475	60.14
Mid-C	59.28	0.80	58.50-61.00	65	1,975	59.01
Palo Verde	49.62	1.93	48.75-50.50	22	575	48.98
Mead	51.19	0.69	50.50-51.75	8	200	50.96
Mona	50.55	1.55	50.55-50.55	N.A.	N.A.	50.03
Four Corners	51.71	2.92	51.00-52.00	11	425	50.74
NP15	53.19	-0.69	52.00-54.50	89	2,625	53.42
SP15	52.15	-0.31	51.25-53.90	92	3,025	52.25

\*Ontario prices are in Canadian dollars

†West markets are for Friday and Saturday delivery

mostly were identical throughout the market footprint. Only during one period of about 10 minutes did a grid constraint cause some price separation, Monroe said.

The market prices can be viewed on the regional transmission organization's web site, where locational imbalance prices are listed under the "market information" heading.

The next important step will be the first time market participants submit data on their activity, on a five-day lag after each operational day. That data will be used by SPP to determine settlements seven days after the operational day – and participants then will determine whether the system is meeting expectations financially.

Beyond that, there will be more elements put in place over the course of several months. One of the more significant steps will be to determine – at the request of the Federal Energy Regulatory Commission – the extent to which generators outside the real-time market footprint can participate.

"That's what we're working on," Monroe said of the FERC request. "We're not entirely sure yet."

SPP issued a statement saying a cost-benefit analysis by consulting company CRA International estimated that SPP's balancing market impact on the Eastern Interconnection would realize \$1.2 billion in production-cost savings over 10 years, more than half of which would flow to SPP customers.

### Plant construction costs on the rise... from page 1

coal plant, citing sharply higher equipment and construction costs. At the time, James Haines, Westar's CEO, noted that estimates for construction and equipment costs had risen to \$400 million from \$200 million in just 18 months.

It is not just power companies that are feeling the pinch. The cost increases are across the board, spanning the gamut of infrastructure projects, said Jim Scotti, senior vice president and chief procurement officer for Fluor. "It's a suppliers' market," Scotti said in an interview. "We continue to see across-the-board increases in fabricated structural steel and pipe, both welded and seamless."

As an example, he noted that in 2004 the price of fabricated structural steel increased 30% to 40% over 2003 prices. Prices

rose an additional 5% to 15% in 2005-2006, and in 2007, Scotti said, he expects to see another 2% to 5% increase.

In absolute terms, prices for most steel products reached record highs in the third quarter of 2004 because of escalating raw material costs, industry consolidation and overall leaner supply, according to Platts' *Steel Markets Daily*.

But the rising commodity prices are only part of the story, said Scotti. "Probably more important is the stretch in delivery times, and they are going north in 2007." In 2005, delivery times for fabricated structural steel was measured in weeks, running anywhere between eight and 20 weeks. In 2006, delivery of the same product was taking 26 to 40 weeks, he said.

The problem is that the shops that manufacture components, such as fabricated steel, are at 70% to 100% capacity. That will mean that it will take longer to complete projects and, if a project has not yet started, it could cause delays, Scotti said. "The biggest thing we tell customers to mitigate their risk is they need to order equipment earlier in the cycle."

Some industries have already encountered these problems. Delays for the oil, gas and chemical industries could continue into 2009 and 2011, he said.

But the power industry, which is just ramping up for a new cycle of power-plant building, is in the early stages of construction planning, and, therefore, is just beginning to bump up against the higher construction costs and longer lead times. The power industry "will have to get in line," said Scotti.

In an interview, Bill McCollum, group executive and chief regulated generation officer at Duke Energy, said, "We are not changing our timelines." He admitted that if a company were trying to fast-track a project, it could be difficult. But, he added, "If you can lock down commitments, you could get commitments to match your time slot."

On the construction cost front, McCollum said he would manage Duke's costs as best he could, but the bottom line is that there will be a need for more electricity and, consequently, for more generating plants.

One way to manage costs, he said, is to make the company's existing generation fleet more efficient, so that the average price of energy comes down. Nonetheless, said McCollum, it is likely that increases in the costs of fuel, equipment and labor will put upward pressure on electricity prices.