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**COMMISSION STAFF'S PETITION §
FOR SELECTION OF ENTITIES §
RESPONSIBLE FOR TRANSMISSION §
IMPROVEMENTS NECESSARY TO §
DELIVER RENEWABLE ENERGY §
FROM COMPETITIVE RENEWABLE §
ENERGY ZONES §**

**PUBLIC UTILITY COMMISSION
OF TEXAS**

REBUTTAL TESTIMONY

OF

DAVID C. ANDRUS

ON BEHALF OF THE

CITY OF GARLAND, TEXAS

2008 NOV 14 PM 1:58

NOVEMBER 14, 2008

**REBUTTAL TESTIMONY OF
DAVID C. ANDRUS**

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REBUTTAL TESTIMONY OF
DAVID C. ANDRUS

1

I. INTRODUCTION

2 Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.

3 A. My name is David C. Andrus. My business address is 550 Cochituate Road,
4 Framingham, Massachusetts, 01701.

5 Q. DID YOU FILE DIRECT TESTIMONY IN THIS CASE?

6 A. Yes, I filed testimony on behalf of the City of Garland's electric utility operating as
7 Garland Power & Light ("GP&L") regarding transmission structures design and cost
8 and operation and maintenance ("O&M") costs.

9 Q. PLEASE SUMMARIZE THE PURPOSE OF YOUR REBUTTAL
10 TESTIMONY.

11 A. My Rebuttal Testimony responds to errors and concerns about GP&L's cost estimates
12 raised in the Responsive Testimonies of other parties.

13

II. STRUCTURE COSTS

14 Q. PLEASE SUMMARIZE THE TESTIMONY OF ETT WITNESS STAN
15 KRAUSE REGARDING GP&L'S ESTIMATED STRUCTURE COSTS.

1 A. Mr. Krause contends that GP&L's estimated structure costs include material, labor,
2 insulators and foundations, but may not include engineering, design, and
3 transportation. He further indicates that GP&L did not provide a cost estimate for
4 tangent monopole structure. Finally, Mr. Krause concludes that GP&L's estimates
5 may result in an understated estimate.¹

6 **Q. DO YOU AGREE WITH MR. KRAUSE'S ASSESSMENT OF THE**
7 **DEVELOPMENT OF GP&L'S STRUCTURE COSTS?**

8 A. No, I do not. GP&L developed its estimated structure costs using current market
9 prices for materials and labor, which include the associated costs for engineering,
10 design, and transportation. In GP&L's analysis on structure costs, it was determined
11 that lattice steel structures can be constructed for a lower cost than monopole
12 structures.

13 **Q. PLEASE SUMMARIZE THE TESTIMONY OF ONCOR WITNESS WESLEY**
14 **SPEED REGARDING GP&L'S ESTIMATED STRUCTURE COSTS.**

15 A. Mr. Speed conducted a "line-by-line" analysis of the transmission lines contained in
16 Oncor's CTP Proposal with each competing proposal.² He concludes that customers
17 will save \$36,149,527 by selecting Oncor over GP&L's proposal.³

18 **Q. DO YOU AGREE WITH MR. KRAUSE'S ASSESSMENT OF THE**
19 **DEVELOPMENT OF GP&L'S STRUCTURE COSTS?**

¹ Responsive Testimony of Stan Krause, p. 8, lines 15-17, p. 9, line 4 – p. 10, line 1, p. 13, line 10 – p. 14, line 2.

² Responsive Testimony of Wesley Speed, p. 15, line 32 – p. 18, line 15.

³ Responsive Testimony of Wesley Speed, p. 17, lines 29-30, Exhibits WS-RS-1, 2, and 3.

1 A. No, I do not. GP&L developed its estimated structure costs using current market
2 prices for materials and labor, which include the associated costs for engineering,
3 design, and transportation. CTP Proposal participants, if awarded CREZ transmission
4 construction, will utilize many of the same engineering, procurement, and
5 construction contractors and will send bid packages to many of the same material
6 suppliers. Some economies of scale may exist for participants constructing longer
7 sections of the CREZ transmission facilities, but GP&L believes that the overall
8 differences in costs to build between participants will be small.

9 **Q. PLEASE SUMMARIZE THE TESTIMONY OF ISOLUX WITNESS**
10 **FREDERIC TREFOIS REGARDING GP&L'S ESTIMATED STRUCTURE**
11 **COSTS.**

12 A. While Mr. Trefois does not address GP&L specifically, he concluded that most of the
13 incumbents appear to be missing essential components needed to properly construct
14 the towers set out in their CTP Proposals. He therefore attempted to include the
15 "missing" items to compare the proposals on a consistent basis. Mr. Trefois
16 summarizes his adjusted construction costs in his Exhibit 4.

17 **Q. WOULD YOU COMMENT ON MR. TREFOIS' ASSESSMENT OF GP&L'S**
18 **ESTIMATED CONSTRUCTION COSTS?**

19 A. GP&L has not reviewed Mr. Trefois' underlying adjustments, but notes that all of the
20 so called "missing" items were valued at the amounts included in the Isolux
21 proposal.⁴ In my opinion, this would not be an appropriate adjustment because it
22 ignores differences in construction philosophies, which would have an impact on the

⁴ Responsive Testimony of Frederic Trefois, p. 17, lines 3-7.

1 assumed costs. GP&L developed its estimated structure costs using current market
2 prices for materials and labor, which include the associated costs for engineering,
3 design, and transportation.

4 **Q. DID ANY OTHER PARTY TAKE ISSUE WITH GP&L'S ESTIMATED**
5 **CONSTRUCTION COSTS?**

6 A. Yes. Cross Texas Transmission Witness Lawrence Willick complained that GP&L
7 did not provide cost estimates for different transmission tower alternatives or routing
8 or capital cost estimates.⁵ GP&L did provide cost estimates to the extent it was able
9 given that none of the final routes have yet been determined. GP&L will continue to
10 refine its cost estimates as projects become more defined.

11 **III. O&M COSTS**

12 **Q. PLEASE SUMMARIZE THE TESTIMONY OF ETT WITNESS SCOTT**
13 **MOORE REGARDING GP&L'S ESTIMATED O&M COSTS.**

14 A. Mr. Moore concludes that GP&L's estimated O&M expense per mile is significantly
15 greater than ETT's estimated expense, resulting in a large cost advantage to ETT by
16 supplementing an existing O&M organization.⁶

17 **Q. DO YOU AGREE WITH MR. MOORE'S ASSESSMENT OF THE**
18 **DEVELOPMENT OF GP&L'S O&M COSTS?**

19 A. No, I do not. GP&L based its estimate of the level of incremental O&M costs on the
20 knowledge and experience of operating its existing transmission system, and
21 recognizing that there will be opportunities to share in the cost of operating and

⁵ Responsive Testimony of Lawrence J. Willick, p. 18, lines 13-17.

⁶ Responsive Testimony of Scott P. Moore, p. 10, lines 5-17, p. 12, lines 5-23.

1 maintaining its CREZ Facilities with other TSPs such as TMPA. Other than routine
2 inspections and reporting required by NERC, operation and maintenance costs are
3 driven by environmental factors, which are outside the control of any CREZ
4 participant. CTP Proposal participants, if awarded CREZ transmission construction,
5 will utilize many of the same maintenance contractors. Some economies of scale may
6 exist for participants maintaining longer sections of the CREZ transmission facilities,
7 but GP&L believes that the overall differences in costs to maintain the line sections
8 built between participants will be small.

9 **Q. PLEASE SUMMARIZE THE TESTIMONY OF ONCOR WITNESS**
10 **CHARLES JENKINS REGARDING GP&L'S ESTIMATED O&M COSTS.**

11 A. Mr. Jenkins concludes that Oncor can operate and maintain CREZ Facilities at a
12 lower cost per mile than GP&L, making it the more cost effective provider. He
13 further criticizes GP&L for not having maintenance facilities near the proposed
14 CREZ Facilities.⁷ He concludes that customers will save \$2,341,402 by selecting
15 Oncor over GP&L's proposal.⁸

16 **Q. DO YOU AGREE WITH MR. JENKINS' ASSESSMENT OF THE**
17 **DEVELOPMENT OF GP&L'S O&M COSTS?**

18 A. No, I do not. GP&L based its estimate of the level of incremental O&M costs on the
19 knowledge and experience of operating its existing transmission system, and
20 recognizing that there will be opportunities to share in the cost of operating and
21 maintaining its CREZ Facilities with other TSPs such as TMPA. Other than routine

⁷ Responsive Testimony of Charles W. Jenkins, p. 8, line 28 – p. 10, line 19, p. 24, line 13 – p. 25, line 9.

⁸ Responsive Testimony of Charles W. Jenkins, p. 9, lines 14-15.

1 inspections and reporting required by NERC, operation and maintenance costs are
2 driven by environmental factors, which are outside the control of any CREZ
3 participant. CTP Proposal participants, if awarded CREZ transmission construction,
4 will utilize many of the same maintenance contractors. Some economies of scale may
5 exist for participants maintaining longer sections of the CREZ transmission facilities,
6 but GP&L believes that the overall differences in costs to maintain the line sections
7 built between participants will be small.

8 **Q. PLEASE SUMMARIZE THE TESTIMONY OF ISOLUX WITNESS JEFF**
9 **ROSENTHAL REGARDING GP&L'S ESTIMATED O&M COSTS.**

10 A. While Mr. Rosenthal does not address GP&L specifically, he concluded that there
11 was no consistent basis for comparing estimated O&M costs across the various CTP
12 Proposals. He therefore attempted to "normalize" the estimates based on FERC Form
13 1 filings of the respondents.⁹

14 **Q. WOULD YOU COMMENT ON MR. ROSENTHAL'S ASSESSMENT OF**
15 **GP&L'S ESTIMATED O&M COSTS?**

16 A. GP&L has not reviewed Mr. Rosenthal's underlying adjustments, but even if they are
17 appropriate, his revised O&M cost estimates still makes GP&L's proposal cost
18 competitive.¹⁰

19 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

20 A. Yes.

⁹ Responsive Testimony of Jeff Rosenthal, p. 12, lines 1-16.

¹⁰ Responsive Testimony of Jeff Rosenthal, Exhibit 3.