

Issue: RFP Process and Results
Witness: Timothy N. Wilson
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Sponsoring Party: The Empire District
Electric Company
Case No. EO-2018-0092
Date: March 13, 2018

**Before the Public Service Commission
of the State of Missouri**

Surrebuttal Testimony

of

Timothy N. Wilson

March 13, 2018



Liberty Utilities[®]
EMPIRE DISTRICT

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OF
TIMOTHY N. WILSON
THE EMPIRE DISTRICT ELECTRIC COMPANY
BEFORE THE
MISSOURI PUBLIC SERVICE COMMISSION
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1 **I. INTRODUCTION**

2

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

4 A. My name is Timothy N. Wilson and my business address is 602 South Joplin Avenue,
5 Joplin, Missouri, 64801.

6

7 **Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN THIS**
8 **PROCEEDING?**

9 A. Yes. My professional background and qualifications are contained in that prior
10 testimony.

11

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

13 A. I plan to respond to the rebuttal testimony of the following witnesses who addressed
14 Empire’s competitive bidding process associated with the Customer Savings Plan (CSP):

- 15 • Midwest Energy Consumers Group witness Meyer indicated that he did not know
16 what contractors would be constructing the 800 MW of wind associated with the
17 CSP and suggested that responses to the RFP had been received by the time he

1 filed rebuttal testimony. Mr. Meyer described this information as critical to the
2 CSP (Reb., p. 4, 5);

- 3 • Renew Missouri Witness James Owen noted that the “specifics of Empire’s plan
4 to develop 800 MW of wind generation are still in development. . . .” and that
5 Empire was “in the process of evaluating responses to its request for proposal and
6 will update the parties as the site selection continues to progress.” (Reb., p. 4)

7 My surrebuttal testimony responds by providing an update on the status of the RFP and
8 demonstrating how the robustness of the RFP will lead to the selection of wind projects
9 that will not only meet the criteria analyzed in the Generation Fleet Savings Analysis
10 (“GFSA”), but will also exceed that criteria and allow the Company to create customer
11 savings at the higher levels identified in the GFSA.

12
13 **II. THE RFP PROCESS FOR THE WIND PROJECTS**

14
15 **Q. PLEASE PROVIDE A DETAILED OVERVIEW OF THE COMPANY’S RFP**
16 **PROCESS FOR THE WIND PROJECTS.**

17 A. The Company, with the assistance of Burns & McDonnell, an engineering firm,
18 developed an RFP and associated documents to solicit up to 800 MW of wind generation
19 in or near Empire’s service territory. The RFP was distributed on October 16, 2017, to
20 twelve potential bidders, all of which had substantial experience constructing wind
21 generation facilities in the United States. The RFP provided extensive information to
22 bidders about the nature of the Wind Projects that were sought. In particular, bidders
23 were provided the opportunity to bid on two sites that the Company is developing in

1 southwestern Missouri as well as bid any site they had developed that met the Company's
2 criteria, or a combination of both. Bidders could also submit proposals from tax equity
3 partners if they so chose, though this was not a mandatory component of any bid.
4

5 **Q. WHAT WAS BURNS & MCDONNELL'S ROLE IN THE RFP PROCESS FOR**
6 **THE WIND PROJECTS?**

7 A. Burns & McDonnell played a significant role in the RFP process for the Wind Projects.
8 Burns & McDonnell assisted with drafting the RFP and associated documents as well as
9 coordinating the distribution and collection of bids from RFP respondents and subsequent
10 correspondence for additional clarification of bids. They provided a detailed overview of
11 the bids received and evaluated each bid from a technical perspective as well as
12 additional technical transmission risk analysis for each project that was proposed. Their
13 analysis was used in the final scoring of bids and used for the development of overall
14 rankings and eventually the short list of bidders.
15

16 **Q. HAS EMPIRE COMPLETED SIMILAR RFP'S BEFORE?**

17 A. Yes. The Company has completed very similar RFP processes in the past for the Asbury
18 AQCS project and the Riverton 12 conversion from simple cycle to combined cycle
19 project. Both of these projects were full engineering, procurement and construction RFPs
20 and were competitively bid to multiple bidders. In both the AQCS and Riverton projects,
21 the Company hired third parties to assist with developing the RFPs and to assist with
22 coordinating the RFP process as well as with evaluating the technical portions of the bids.
23 Once bids were received a matrix was developed for scoring the bids which ultimately

1 lead to the creation of a short list. From that short list, the Company proceeded with
2 contract negotiations. The approach and process used for the Wind Projects is the same
3 process that was used for the Asbury and Riverton projects.

4
5 **III. THE RFP RESULTS**

6
7 **Q. HOW MANY BIDS DID EMPIRE RECEIVE IN RESPONSE TO ITS RFP?**

8 A. Empire received bids from 10 developers, reflecting 18 sites that were owned by the
9 developers. Six of bidders also bid on the Company's two sites in Missouri.

10
11 **Q. DID ANY OF THE BIDDERS SUBMIT TAX EQUITY FINANCING**
12 **PROPOSALS?**

13 A. One bidder provided a price that was net of tax equity for one facility. Multiple bidders
14 provided letters of understanding and/or letters of interest from tax equity investors.

15
16 **Q. WHAT STEPS DID EMPIRE TAKE TO REVIEW THE BIDS?**

17 A. Once the bids were received, Empire and Burns & McDonnell performed a review of the
18 bid packages for conformity with the bidder instructions. In addition to Empire's internal
19 review, Burns & McDonnell provided a summary of deficiencies for each response to
20 Empire, and together, Empire and Burns & McDonnell compiled questions for each
21 bidder to clarify items of non-conformity. Most bidders were able to respond and/or
22 revise the bids to comply with the RFP; however some projects were not able to conform
23 to the RFP and were disqualified.

1 **Q. HOW MANY PROJECTS REMAINED AFTER NON-CONFORMING BIDS**
2 **WERE DISQUALIFIED?**

3 A. Twenty projects that conformed to the bid instructions remained once this process was
4 complete. Of those twenty projects, eight proposals (from four bidders) were for
5 development on Empire existing sites.

6
7 The evaluation team performed an in-depth review of the conforming project proposals
8 and sent additional questions to the bidders. Burns and McDonnell then performed an
9 independent technical evaluation to identify any relevant technical differences in scope
10 and execution.

11
12 **Q. WHAT PROCESS DID EMPIRE USE TO EVALUATE THESE REMAINING**
13 **PROJECTS?**

14 A. On the technical side, to support an equivalent comparison of these remaining bids, Burns
15 & McDonnell provided relevant ranking adjustments for each proposal to capture
16 applicable differences in scope. Burns and McDonnell then prepared and delivered to
17 Empire a bid tab containing all technical pricing information, technical analysis and
18 rankings, and a summary of project information. This technical evaluation summary
19 sheet served as the base for the evaluation matrix. Empire further refined the ranking
20 categories used in the evaluation matrix to develop the weighting of each category based
21 on criteria set forth in the Instructions to Bidders. These criteria included the following:
22 experience, safety, project performance and cost, financial standing, ability to supply
23 equipment, and commercial terms. Based on these criteria, Burns & McDonnell's

1 technical evaluation summary, and recommendations from Empire, the following four
2 major criterion were established for bid evaluation; (i) Levelized Cost of Energy (LCOE);
3 (ii) basis differential; (iii) transmission basis risk, and; (iv) technical evaluation. The
4 final score was calculated by adding the value of the four major criteria, zero being the
5 best.

6
7 **Q. PLEASE EXPLAIN EACH OF THESE FOUR CRITERION IN DETAIL.**

8 A. Each of the criterion are described in detail below:

9 1) LCOE¹: The *levelized cost of revenue requirement* was calculated using a
10 comprehensive 30-year model that was developed in-house and independently
11 reviewed for accuracy by internal subject matter experts. The model generates a
12 project-specific *levelized cost of revenue requirement* by calculating the total cost of
13 the project over the 30 year period and dividing that by the amount of expected
14 generation. This total cost is the cost of energy delivered to the switchyard of the
15 facility; the cost of transmission to Empire's service territory is included within the
16 basis differential calculation and basis risk evaluation. The model generates this
17 *levelized cost of revenue requirement* based on the assumptions for each specific
18 project, including proposed capital costs, tax equity assumptions, assumed operating
19 and maintenance costs, projected generation performance, and taxes and depreciation.

20 2) Basis Differential: The basis differential value used in each project score is the
21 weighted historical average of basis differential from each project's SPP
22 interconnection node compared to the hourly prices at Empire's load. To establish

¹ The term levelized cost of energy and levelized cost of revenue requirement are used interchangeably.

1 this value, Burns & McDonnell performed a Locational Marginal Pricing (LMP)
2 analysis on each project using historical data from 2015 – 2017 based on bidder
3 provided proxy nodes. The analysis included; 8760 hourly expected generation
4 provided by bidder, SPP provided historical data, Empire’s historical load (MWh and
5 cost). Using this data, Burns & McDonnell provided hourly generation-weighted
6 basis differential for each project. The historical weighted average was calculated as:

$$0.1(\text{Avg 2015 basis}) \times 0.2(\text{Avg 2016 basis}) \times 0.7(\text{Avg 2017 basis}) \\ = \text{Historical Weighted Average}$$

8 3) Transmission Basis Costs: The RFP evaluation team also identified that there is
9 future risk of transmission basis costs. To represent this risk, the standard deviation
10 of yearly averages was used. The standard deviation captures the volatility of the
11 transmission market as a representation of future risk. Burns & McDonnell
12 performed additional analysis for future transmission basis differential at each
13 project, including Burns & McDonnell performed a PROMOD™ nodal analysis for
14 years 2020 and 2025 using the following assumptions: the SPP’s 2017 ITP10 study,
15 Future 3 (no carbon tax), retirement of Asbury, added approved transmission projects
16 from SPP’s 2016 ITPNT, 8760 hourly expected generation provided by bidder. The
17 yearly average for years 2015-2017, 2020, and 2025 were used to calculate the
18 standard deviation used in the final score for each project.

19 4) Technical Evaluation: The technical evaluation included three major categories,
20 transmission (65% or 16.25 points), project performance (25% or 6.25 points), and
21 development status (10% or 2.5 points) for a total of 0-25 points, zero being best.

1 The technical evaluation included the independent evaluation rankings from Burns &
2 McDonnell which included the following:

3

TRANSMISSION	65%
Proximity to Load	80%
Level of Network Upgrades	10%
Interconnection status	10%
DEVELOPMENT STATUS	10%
Exceptions to the Work Specifications	30%
Status of permits, licenses, and governmental approvals, including key environmental permits, studies and surveys	25%
Land control status	30%
Experience of the developer	5%
Safety record of respondent and subcontractors	10%
PROJECT PERFORMANCE	25%
Wind Resource Risk	10%
O&M Scope	30%
Credit of the seller	10%
Tax Equity Partner	30%
Guaranties/Warranties (Power Curve, Availability, Warranty Term)	20%

4
5 **Q. DID THE COMPANY RANK EACH OF THE BIDS RECEIVED BASED UPON**
6 **THE CRITERION IDENTIFIED ABOVE?**

7 A. Yes. The Company evaluated and ranked all bids for each site totaling twenty different
8 projects. As previously mentioned, this included the eight proposals for the Empire
9 developed sites brought by four bidders and twelve other proposed sites.

10
11 **Q. HOW DID THE RFP BIDS COMPARE TO YOUR EXPECTATIONS?**

12 A. The Company expected to receive a good number of viable bids, but our expectations
13 were exceeded. Based upon the thorough analysis performed thus far, the Company has
14 several options to procure up to 800MW of wind that will fall well within the range of the

1 cost scenarios contemplated in the Customer Savings Plan and Generation Fleet Savings
2 Analysis discussed by Company witness McMahan.

3
4 **Q. IS THE COMPANY ALSO WORKING ON THE TAX EQUITY FINANCING**
5 **PORTION OF THE CSP?**

6 A. Yes. Empire Witness Mooney addresses the Company's plans regarding agreements with
7 tax equity partners in his rebuttal testimony.

8
9 **Q. DID EMPIRE MAKE THE RFP DOCUMENTS AND BIDS AVAILABLE TO**
10 **THE PARTIES IN THIS PROCEEDING?**

11 A. Yes. Hard copies of the bid documents were made available to the Staff and the Office of
12 the Public Counsel at our counsel's office in Jefferson City, Missouri, in late January. I
13 understand that OPC personnel have reviewed such documents at the office of Empire's
14 counsel.

15
16 **IV. CONCLUSION**

17
18 **Q. BASED ON THE PROCESS DESCRIBED ABOVE, DO YOU HAVE ANY**
19 **CONCLUDING THOUGHTS REGARDING THE RFP PROCESS?**

20 A. Yes. Empire conducted a competitive and rigorous RFP process to evaluate whether
21 there were any wind projects that would deliver savings to its customers. I am very proud
22 of the process that we completed because we received a significant response to our RFP,
23 which provided for robust competition among projects. We completed an extensive

1 technical evaluation of each project. I am confident that this process will conclude with
2 vigorous contract negotiations that will lead to the acquisition of specific projects that
3 will deliver savings to our customers for decades to come.

4

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

6 A. Yes.

