

1 prior to joining WETT working as a Senior Project Manager for Pike Energy Solutions,  
2 Inc. ("Pike"). I managed engineering, procurement, and construction ("EPC") contracts  
3 and led EPC contract negotiations and project development processes for transmission  
4 lines and substations during that time. I also worked at the American Transmission  
5 Company in Wisconsin as a Major Projects Manager where I managed a \$263,000,000  
6 portfolio of 345 kV transmission projects consisting of over 100 miles of transmission  
7 lines and six substations. In this position, I had oversight responsibilities for project  
8 schedules and budgets, land acquisition activity, including testimony at condemnation  
9 proceedings, engineering, procurement, and construction contracting. Previous to that, I  
10 worked at Renewable Energy Systems in Abilene, Texas as a Construction Manager for a  
11 200 megawatt wind farm and three years at the Lower Colorado River Authority as a  
12 Senior Project Manager where I managed a \$120,000,000 portfolio of transmission  
13 projects in South and West Texas. From 1996 to 2000, I worked as a manufacturing  
14 Process Engineer at International Business Machines in Minnesota. I also served in the  
15 U.S. Marine Corps Reserve from 1988 to 1994. My resume is attached as Exhibit BAB-  
16 1.

17 **Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY TO THE PUC?**

18 A. No.

19 **II. PURPOSE OF TESTIMONY**

20 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

21 A. The purpose of my direct testimony is to (1) provide an overview of WETT's  
22 projects and associated costs; (2) explain how WETT managed and continues to manage  
23 and oversee the EPC of its physical plant, including contract administration, and sponsor

WETT's EPC invoices; (3) describe WETT's affiliate contracts and non-affiliate contracts with third-party vendors; (4) present WETT's land acquisition costs; and (5) present WETT's maintenance expenses.

**Q. ARE YOU SPONSORING ANY EXHIBITS IN CONNECTION WITH YOUR TESTIMONY?**

A. Yes. I sponsor the exhibits listed in the table of contents of this testimony.

**Q. WERE YOUR TESTIMONY AND THE EXHIBITS ATTACHED THERETO PREPARED BY YOU OR UNDER YOUR DIRECT SUPERVISION?**

A. Yes.

### **III. OVERVIEW OF CREZ PROJECTS**

**Q. CAN YOU GENERALLY DESCRIBE WETT'S CREZ PROJECTS?**

A. As explained in the direct testimony of Mr. Morton, WETT was selected to construct approximately 374 miles of CREZ transmission lines and five substations in West Texas. This includes seven distinct lines WETT calls "Segments" separated into three convenience and necessity ("CCN") proceedings before the PUC. In addition to the projects explicitly awarded in Docket Nos. 35665 and 37902, WETT obtained approval from ERCOT to construct a sixth CREZ related<sup>1</sup> switching station, the Faraday Switching

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<sup>1</sup> WETT was specifically assigned seven transmission lines and five switching stations in Docket No. 35665. In addition, WETT is also constructing the Faraday Switching Station ("Faraday") with the approval of ERCOT. Faraday is relatively small (an approximately \$8.1 million project without AFUDC or other overhead costs) and was approved as part of a plan to alleviate foreseeable congestion in the Lamesa region attributed to generation from the Coyote Run, Airtricity Lamesa, Bull Creek, and Gunsight Mountain wind plants. Although Faraday was being evaluated by ERCOT's Regional Planning Group prior to the PUC's approval of the CREZ transmission plan, ERCOT determined that it should be postponed until CREZ transmission plans were finalized; once that occurred, the Lamesa area upgrades were integrated with CREZ area facilities. See Exhibit WM-2 to Wayne Morton's testimony, ERCOT Independent Review - Lamesa Area Upgrades Version 1.0. Faraday is being constructed as part of WETT's CREZ facilities during WETT's second phase of construction. Ordering Paragraph 32 (relating to ERCOT Flexibility) of the Final Order in Docket 37902 (the CREZ TSP Selection Remand Order) provides: "To the extent that a proposed modification is to a project that does not require a CCN, ERCOT is authorized to allow the TSP to implement those minor modifications, such as adding substations, using existing transmission infrastructure

1 Station. The aforementioned projects are referred herein collectively as the "CREZ  
2 Projects."

3 A map of the general location of the CREZ Projects is attached to my testimony  
4 as Exhibit BAB-2. The map identifies other utilities' switching stations where WETT's  
5 lines will interconnect. Finally, the exhibit indicates the anticipated energization dates  
6 for WETT's CREZ Projects. CCN1 contains Segment 1 and the Cottonwood Switching  
7 Station. CCN2 contains Segments 2, 3, and 4, the Long Draw Switching Station, and the  
8 Grelton Switching Station. CCN3 contains Segments 5, 6, and 7, the Sand Bluff  
9 Switching Station, and the Bearkat Switching Station. The Faraday Station is located on  
10 Segment 2. I refer to CCN1 and CCN2 as "Phase I" and CCN3 as "Phase II" throughout  
11 my testimony.

12 **Q. HAVE CONSTRUCTION ACTIVITIES BEGUN ON THE CREZ PROJECTS?**

13 A. Yes. WETT has purchased land for all six switching stations and has begun  
14 construction on five stations. WETT has also secured approximately 99% of easements  
15 required for the CREZ project and begun construction on six lines.

16 **Q. TO DATE, IS WETT MEETING KEY CONSTRUCTION MILESTONES**  
17 **NECESSARY TO STAY ON SCHEDULE?**

18 A. Yes. Engineering, procurement, and construction has been initiated; ROW  
19 acquisition is almost complete, and overall construction contracting for the CREZ  
20 Projects is approximately 75% complete. The EPC Contract also allows for adjustments  
21 to the construction schedule under certain limited circumstances.

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for interconnection of generation, and similar minor modifications." Faraday is accordingly viewed as minor modification to WETT's CREZ projects that does not require a CCN.

#### **IV. OVERVIEW OF EPC COSTS**

**Q. WHAT IS “EPC”?**

A. As I said before, “EPC” stands for engineering, procurement, and construction. When building major infrastructure, it is fairly common for the owner of a project to contract with another entity to perform EPC functions. Contracts in which the general contractor will perform or oversee all EPC functions are sometimes referred to as design-build or turnkey contracts. EPC contracts are advantageous for owners: having a single general contractor for all of these functions offers significant project management efficiencies while offering cost savings by allowing competitive bidding of subcontracts for labor and materials.

**Q. WHAT ARE WETT’S OVERALL EPC COSTS?**

A. WETT’s EPC contract with I-USA (the “EPC Contract”), as amended, provides for the following project costs, broken down by facility:

	<b>Actual Expenditures as of June 30, 2012</b>	<b>Projected Contract Total Cost as of June 30, 2012</b>
Cottonwood to Dermott Transmission Facilities	\$45,588,742	\$110,715,000
Cottonwood Substation Facilities	\$6,754,242	\$22,738,000
Scurry County South to Long Draw Transmission Facilities	\$17,543,464	\$93,537,000
Long Draw to Grelton Transmission Facilities	\$15,665,767	\$66,294,000
Grelton to Odessa Transmission Facilities	\$18,017,061	\$71,668,000
Long Draw Substation	\$2,515,776	\$11,345,000
Grelton Substation	\$2,048,806	\$6,909,000
Grelton Cap Bank	\$0	\$3,020,000
Long Draw to Sand Bluff Transmission Facilities	\$19,394,818	\$93,243,000
Sand Bluff to Divide Transmission Facilities	\$6,650,347	\$59,071,000

	Actual Expenditures as of June 30, 2012	Projected Contract Total Cost as of June 30, 2012
Sand Bluff to Bearkat Transmission Facilities	\$7,660,345	\$43,572,000
Sand Bluff Station Facilities	\$1,262,287	\$8,242,000
Bearkat Station Facilities	\$653,454	\$4,146,000
Faraday Station Facilities	\$313,948	\$8,223,000
<b>Total</b>	<b>\$144,069,057</b>	<b>\$602,723,000</b>

These figures are calculated using actual expenditures as of June 30, 2012 and projected EPC related costs. They include labor and material of I-USA and subcontractors but do not include overall project development costs, AFUDC, right of way acquisition costs, WETT overhead costs, and non-I-USA subcontracts.

While I have provided projected EPC costs and all EPC costs incurred as of June 30, 2012 for context, WETT is only requesting that actual expenditures associated with Phase I be included in rate base in this proceeding. Phase I EPC costs as of June 30, 2012 are approximately \$108,133,858. WETT will ask that Phase II EPC costs be incorporated into rate base in future proceedings.

#### **V. WETT'S CONTRACT WITH AFFILIATE I-USA FOR EPC FUNCTIONS**

**Q. WHO IS WETT'S GENERAL EPC CONTRACTOR?**

A. WETT's general EPC contractor is Isolux Ingeniería USA, LLC ("I-USA").

**Q. IS I-USA AN AFFILIATE OF ONE OF WETT'S PARENT COMPANIES?**

A. Yes.

**Q. HOW DID I-USA COME TO BE CHOSEN AS THE EPC CONTRACTOR?**

A. As explained in the direct testimony of Mr. Morton, WETT was selected to construct the CREZ Projects in Docket No. 35665. WETT stated in Docket No. 35665 that it intended to use Isolux Ingeniería, a subsidiary of its ultimate parent, Grupo Isolux

1 Corsán ("Grupo Isolux"), for the EPC of any lines awarded to WETT. In July of 2009,  
2 WETT secured approval of its Code of Conduct governing WETT's relationship with its  
3 affiliates. Negotiations with I-USA, a subsidiary of Isolux Ingeniería, began in earnest  
4 after WETT obtained a limited waiver with respect to WETT's Code of Conduct in  
5 November 2010. Wayne Morton oversaw those negotiations assisted by Science  
6 Applications International Corporation ("SAIC," formerly R. W. Beck, Inc.), and he  
7 provides more information in his testimony on the negotiation of the EPC Contract.<sup>2</sup>  
8 Daryl Pullin of SAIC also provides testimony on WETT's behalf regarding EPC Contract  
9 negotiations.

10 **Q. CAN YOU DESCRIBE WETT'S CONTRACTS WITH I-USA?**

11 A. WETT and I-USA have two contracts. The first contract, the Consultant Service  
12 Agreement ("CSA"), was executed to permit I-USA to begin necessary preliminary  
13 engineering and design work while the two companies negotiated the EPC Contract.  
14 WETT negotiated this contract with SAIC's assistance. WETT's use of the CSA is  
15 discussed in greater detail in Mr. Pullin's testimony.

16 The second contract, the EPC Contract, is a sole-source, open book EPC contract  
17 in which I-USA agreed to design, source, and build WETT's CREZ Projects. The current  
18 maximum project amount is approximately \$602,723,000. This amount includes cost  
19 adjustments resulting from two change orders that have been executed to date. The EPC  
20 Contract allows for changes in the scope of the project due to certain limited  
21 circumstances such as change orders requested by WETT or equitable adjustment events  
22 submitted by I-USA for WETT approval. These detailed provisions allow WETT or I-

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<sup>2</sup> The amended EPC Contract between WETT and I-USA is attached to the direct testimony of Daryl Pullin as a confidential exhibit.

1 USA to alter the scope for unanticipated work. To date, two change orders have been  
2 executed. One change order authorized the Faraday Switching Station, and the other  
3 authorized the use of monopoles in lieu of lattice towers in several areas as required by  
4 the PUC's final orders in WETT's CCN proceedings. Subsequent change orders or  
5 equitable adjustment events may affect the maximum project amount and schedule as  
6 reasonably anticipated and managed by the processes laid out in the EPC Contract.

7 I describe the EPC Contract in more detail below. Mr. Thomas Flaherty also  
8 analyzes the terms of the EPC contract and compares them to industry standards in his  
9 direct testimony.

10 **Q. CAN YOU MORE FULLY DESCRIBE THE EPC CONTRACT WITH I-USA?**

11 A. WETT entered into a comprehensive EPC Contract with I-USA, under which I-  
12 USA is responsible for designing, procuring, constructing, interconnecting, testing and  
13 commissioning all of WETT's transmission lines and switching stations on a turnkey  
14 basis. The goods and services provided by I-USA and its subcontractors include all labor  
15 and materials associated with the construction of the CREZ Projects assigned to WETT  
16 by the Commission. The EPC Contract describes EPC functions to be undertaken by I-  
17 USA, establishes budgets, and identifies processes for changes and how actual costs are  
18 to be paid. The EPC Contract requires I-USA to design and engineer the transmission  
19 infrastructure for the CREZ Projects awarded to WETT, procure necessary materials and  
20 equipment, construct the lines and substations, and complete the work in accordance with  
21 pertinent legislation, regulations, and professional standards. I-USA must also support  
22 WETT in obtaining relevant permits, obtain construction permits, oversee subcontractors,  
23 coordinate with WETT's contractors and consultants, and test and commission the

transmission infrastructure. I-USA ensures the work is performed by qualified subcontractors retained after a competitive bidding process. WETT has the ability to review bids, participate in the recommendation of subcontractors, and has ultimate authority to decide which subcontractors are utilized. I-USA will be paid for its services at cost plus 4% fee.

**Q. BASED UPON YOUR PROFESSIONAL EXPERIENCE, ARE THE TERMS OF WETT'S EPC CONTRACT WITH I-USA REASONABLE AND PRUDENT?**

A. Yes. Based on my experience and according to two independent third parties WETT retained to examine the EPC Contract, SAIC and Booz & Company Inc., the EPC Contract is reasonable and prudent in regard to the terms and conditions contained therein. These aspects of the EPC Contract, including assessments as to the reasonableness and prudence of the agreement, are more fully discussed in the testimony of Mr. Pullin (SAIC) and Mr. Flaherty (Booz & Company).

**VI. NON-AFFILIATE AGREEMENTS AND EXPENSES**

**Q. DOES WETT HAVE CONTRACTS WITH THIRD-PARTY VENDORS RELATED TO THE CONSTRUCTION OF ITS CREZ PROJECTS?**

A. Yes, it does. Those contracts include the following:

Vendor	Work Performed	Vendor Selection Process
KP Environmental, LLC ("KPE")	Environmental permitting and consulting	Selective review of various providers.
Surveying and Mapping, Inc. ("SAM")	Land and easement surveys	Competitive bidding.
Integra Realty Resources, Inc. ("IRR")	Real Estate Acquisition	Selective review after competitive bidding.
PB Americas (PwrSolution, Inc)	System Planning	Informal selective review process including consideration



Vendor	Work Performed	Vendor Selection Process
		of vendors used by similarly situated utilities.
Pike Energy Solutions, Inc.	Owners Engineering, Specification Development, evaluating whether WETT should construct its own system operations center; and assisting WETT in drafting the RFPs for various maintenance contracts	Request for Proposal ("RFP") to multiple providers of services with a competitive review of proposed services.
KEMA, Inc.	Preliminary feasibility study for the operations control center	Selective review of various providers.
SUN Technical Services, Inc. ("SUN")	Advising on engineering design and project costs	Selective review of various providers
SAIC	EPC drafting, negotiating, and contract/project management assistance	Competitive Bidding.
Independent 1099 contractors	Provide construction monitoring services	Selective review of various providers.

**Q. ARE THESE CONTRACTS NECESSARY IN ORDER FOR WETT TO PRUDENTLY MANAGE AND TIMELY COMPLETE ITS CREZ TRANSMISSION PROJECTS?**

**A.** Yes. All of the services performed by these companies are essential inputs that are needed to complete the CREZ Projects. WETT management has made the decision to operate the company during construction in a manner that would likely approximate necessary staffing levels after completing the project rather than temporarily increasing staffing levels during construction and subsequently reducing the number of employees once the CREZ Projects are placed in service. In order to attempt to maintain its post-construction base level staffing, WETT has elected to engage these companies for the above-noted tasks.

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**Q. ARE THE FEES CHARGED BY THESE COMPANIES REASONABLE AND NECESSARY?**

A. Yes. All of these companies are third-party vendors that have negotiated their contracts with WETT at arm's length. Most of the vendors were engaged after a competitive bidding process such as SAM, Pike, and SAIC. Others were engaged by finding a highly qualified and available service provider and negotiating to market competitive rates.

The fees billed to WETT for their respective services reflect the necessary work to complete the CREZ Projects. WETT could not complete construction of the CREZ Projects as ordered by the PUC without the expertise and services of these third parties.

The costs incurred under these agreements have been provided to Dr. Fairchild and are included as recoverable costs as part of WETT's revenue requirement.

**Q. ARE THE THIRD PARTIES YOU LISTED ABOVE THE ONLY THIRD PARTIES INVOLVED IN WETT'S EPC WORK?**

A. Above I provide a comprehensive list of unaffiliated entities directly contracted by WETT to perform EPC-related work. However, other entities may be indirectly involved as well. For example, Black & Veatch, an engineering firm, was hired by the project financing lenders to provide additional oversight of the EPC project. Although WETT did not directly engage Black & Veatch, WETT was required to pay for its services in order to secure necessary financing. Accordingly, the costs of these consulting services are included in rate base for this case. I-USA has also hired

1 subcontractors for EPC work, generally through competitive bidding. Those costs are  
2 included in the EPC costs discussed above.

### 3 **VII. DESIGN SPECIFICATIONS AND EQUIPMENT**

#### 4 **Q. WHAT DESIGN SPECIFICATIONS DID WETT USE FOR THIS PROJECT?**

5 A. WETT, with the support of Pike, prepared transmission component specifications  
6 for the steel lattice towers and steel monopole structures, glass insulators, optical ground  
7 wire, and conductor. In addition, WETT and Pike prepared detailed scopes of work for  
8 the switching stations and transmission lines for the EPC Contract incorporating  
9 requirements from the Institute of Electrical and Electronic Engineers ("IEEE"), National  
10 Electric Safety Code ("NESC"), American National Standards Institute ("ANSI"), and  
11 other applicable industry standards.

#### 12 **Q. PLEASE DESCRIBE THE PHYSICAL COMPONENTS OF THE SWITCHING** 13 **STATIONS.**

14 A. The Cottonwood switching station is located on approximately 157 acres of  
15 property purchased by WETT. Initially at Cottonwood, five 345 kV bays will be  
16 constructed. Station equipment to be installed will include 15-345 kV circuit breakers for  
17 protection of the new lines, as well as 34-345 kV switches, six ground switches, coupling  
18 capacitor voltage transformers, shunt reactors, steel structures, foundations, insulators,  
19 and a control building to accommodate the protective relay panels and control equipment.  
20 Each station bay will connect to station busses via a high reliability breaker-and-a-half  
21 design (one of the two station configurations required by ERCOT in the CTO Study as  
22 necessary for proper functioning of CREZ facilities).

1           The Long Draw switching station is located on approximately 67 acres of  
2           property purchased by WETT. Initially, three 345 kV bays will be constructed. Station  
3           equipment to be installed will include seven 345 kV circuit breakers, 18-345 kV  
4           switches, four ground switches, coupling capacitor voltage transformers, steel structures,  
5           foundations, insulators, and a control building to accommodate the protective relay  
6           panels and control equipment. Each station bay will connect to station busses via a  
7           breaker-and-a-half design.

8           The Grelton switching station is located on approximately 50 acres of property  
9           purchased by WETT. Initially, three 345 kV bays will be constructed. Station equipment  
10          to be installed will include three 345 kV circuit breakers, 12-345 kV switches, two  
11          ground switches, a shunt capacitor bank, coupling capacitor voltage transformers, steel  
12          structures, foundations, insulators, and a control building to accommodate the protective  
13          relay panels and control equipment. Line termination equipment, station bays, busses,  
14          and other station equipment will initially be arranged in a ring-bus configuration: the  
15          other configuration required by ERCOT in the CTO study. Ultimately, this station will  
16          also use the breaker-and-half design.

17          The Sand Bluff switching station is located on approximately 57 acres of property  
18          purchased by WETT. Initially, two 345 kV bays will be constructed. Station equipment  
19          to be installed will include three 345 kV circuit breakers, 10-345 kV switches, three  
20          ground switches, coupling capacitor voltage transformers, steel structures, foundations,  
21          insulators, and a control building to accommodate the protective relay panels and control  
22          equipment. Line termination equipment, station bays, busses, and other station

1 equipment will initially be arranged in a ring-bus configuration. Ultimately, this station  
2 will also use the breaker-and-half design.

3 The Bearkat switching station is located on approximately 69 acres of property  
4 purchased by WETT. Initially, one 345 kV bay will be constructed. Station equipment  
5 to be installed will include one 345 kV circuit breaker, five 345 kV switches, one ground  
6 switch, coupling capacitor voltage transformers, steel structures, foundations, insulators,  
7 and a control building to accommodate the protective relay panels and control equipment.  
8 Station equipment will initially be arranged in a ring-bus configuration. Ultimately, this  
9 station will also use the breaker-and-half design.

10 The Faraday switching station is located on approximately 25 acres of property  
11 purchased by WETT. Initially, two 345 kV bays will be constructed. Station equipment  
12 to be installed will include three 345 kV circuit breakers, nine 345 kV switches, three  
13 ground switches, coupling capacitor voltage transformers, steel structures, foundations,  
14 insulators, and a control building to accommodate the protective relay panels and control  
15 equipment. Station equipment will initially be arranged in a ring-bus configuration.  
16 Ultimately, this station will also use the breaker-and-half design. For those double circuit  
17 capable lines initially supporting only one circuit, stations will be designed to  
18 accommodate the eventual addition of a second 345 kV circuit.

19 WETT switching station locations include parcels of land that are bigger than the  
20 current switching station footprints. A station footprint typically includes additional  
21 space necessary for access, drainage, material lay-down and storage, access roads, line  
22 connections, grounding, and future expansions such as 138 kV yards. The project team  
23 made an effort to use the smallest available parcels while meeting overall siting

objectives. However, due to the large parcel sizes typically found in West Texas, the stations are situated on parcels larger than strictly needed. Simply put, land is comparatively inexpensive in remote rural areas as opposed to land closer to major urban areas, and thus trades in larger parcels. Furthermore, subdividing parcels to make them proportional in size to the station footprints is problematic for several reasons: (1) landowners are typically reluctant to subdivide for a substation facility, (2) the cost per acre for smaller parcels is likely to be higher negating any potential savings, and (3) additional costs will be incurred to legally subdivide the properties. As a result, the project team determined that subdividing properties to purchase land sizes commensurate with the station layout would not result in cost savings.

**Q. PLEASE DESCRIBE THE PHYSICAL COMPONENTS OF THE TRANSMISSION LINES.**

A. WETT's transmission system will consist of 374 miles of 345kV double circuit capable 2x1590 ACSR transmission lines supported by primarily lattice towers on Segments 1,2,3,4,5, and 7 and steel monopole structures (as directed or permitted by PUC) on Segment 6. Structures will be supported by concrete pier foundations. Initially, both circuits will be installed on Segments 1 and 2 while only one circuit will be installed on Segments 3 through 7. Segments 1, 2, and 7 will support two OPGW circuits while segments 3, 4, and 5 will support one OPGW circuit and one static wire; Segment 6 will support one OPGW circuit only.

**Q. ARE CAPITAL SPARES INCLUDED IN THE FACILITIES DESCRIBED ABOVE? IF SO, WHY?**

1 A. Yes, a prudent amount of capital spares are included to be able to quickly respond  
2 to equipment failures and promptly restore facilities to operation. WETT must keep on  
3 hand a certain level of inventory of switching station and transmission line capital spares  
4 to repair and/or replace equipment on an as-needed basis. Therefore, included in  
5 WETT's capital estimates are long lead capital spare equipment and miscellaneous spare  
6 parts for the WETT switching station and transmission line facilities. WETT relied on  
7 Pike to determine the switching station spare requirements. In addition, various spare  
8 parts were ordered by I-USA for the circuit breakers (including a spare breaker  
9 mechanism at each substation), pole assemblies, grounding systems, relay and protection  
10 systems, and telecommunication and control systems. For transmission lines, WETT  
11 required I-USA to determine and procure a reasonable amount of spares associated with  
12 tempered glass insulators, arrestors, hardware, OPGW, and conductor to be stored at a  
13 centrally located warehouse. Additionally, I-USA has identified the Lindsey Emergency  
14 Structure to be utilized in the event of a structure failure. The Lindsey Emergency  
15 Structure prevents the need for WETT to maintain a full inventory of spare structures for  
16 its system. This tower will serve as a temporary emergency solution while the permanent  
17 replacement structure is ordered and fabricated. Having these spare parts on hand is  
18 necessary for WETT to quickly respond to equipment failures and promptly restore  
19 facilities to operation.

20 **Q. WHAT SAFETY-RELATED REQUIREMENTS DID WETT INCLUDE IN THE**  
21 **DESIGN OF THE PROJECT?**

22 A. Safety is a very important consideration in the design, construction, and operation  
23 of transmission facilities. Safety was emphasized during the preparation of all design

1 specifications incorporating requirements of Occupational Safety and Health  
2 Administration, NESC, and other applicable industry standards. Transmission grounding  
3 systems were sized to ensure that current and future available fault current can be safely  
4 transmitted to ground under short circuit conditions. Switching station designs  
5 incorporate security features for the protection of WETT's cyber assets, switchyards, and  
6 control house facilities.

7 WETT assembled a team of experienced design, procurement, and construction  
8 personnel to develop the design specifications and statement of work ensuring that safety-  
9 related requirements were addressed without adding unnecessary cost.

10 **Q. WHAT RELIABILITY CONSIDERATIONS DID WETT EVALUATE WITH**  
11 **RESPECT TO ITS PROJECT?**

12 A. WETT, along with Pike, evaluated reliability considerations such as station post  
13 insulator and component bushing leakage distance for contamination performance, surge  
14 arrester maximum continuous operating voltage rating, ground grid and bus design  
15 available short circuit withstand ratings, and substation lightning shielding performance.  
16 In addition, WETT and Pike evaluated the electrical and physical configurations of  
17 switching stations and redundancy of transmission protection systems and substation low-  
18 voltage station service systems. WETT also complied with all ERCOT voltage and  
19 system reactive requirements as well as coordinated with neighboring transmission  
20 utilities regarding coordinated relay settings and shared communication loops. WETT  
21 contracted with PwrSolutions, Inc. for the development and completion of various  
22 electrical system studies related to the WETT transmission system. The results of the  
23 studies were incorporated into the major component specifications and the EPC Contract.



1 Based upon the results of the engineering studies completed, I-USA designed the  
2 transmission line facilities to meet or exceed minimum requirements for various  
3 engineering parameters such as insulation level, surge arrester sizing, phase spacing, and  
4 conductor configuration (among other parameters) to ensure safe and reliable operation  
5 of the facilities. WETT required I-USA to design the facilities according to ANSI,  
6 American Society of Mechanical Engineers (ASME), American Society of Civil  
7 Engineers (ASCE), American Society for Testing Materials (ASTM), IEEE, National  
8 Electrical Manufacturers Association (NEMA), American Concrete Institute (ACI),  
9 American Institute of Steel Construction (AISC), NESC, and other applicable industry  
10 standards.

#### 11 **VIII. EPC PROJECT MANAGEMENT**

12 **Q. HOW DOES WETT MONITOR I-USA'S COMPLIANCE WITH, AND**  
13 **PERFORMANCE UNDER, THE EPC CONTRACT?**

14 A. Monitoring I-USA's compliance with the EPC Contract is a large part of my job  
15 and that of my staff. The performance of I-USA (including cost control) is also  
16 monitored by SAIC working closely with WETT. SAIC was retained to assist with EPC  
17 contracting and management of the EPC Contract. Because of WETT's staffing model,  
18 SAIC's services would be needed regardless of the entity selected to perform the EPC  
19 services. SAIC's extensive electric utility industry, engineering, and contract  
20 management experience enable effective review of I-USA's performance. As part of the  
21 assistance provided with general management of the EPC Contract, SAIC reviews and  
22 monitors all costs to determine whether they are permissible per requirements of the EPC  
23 contract.

1           The EPC Contract includes various administrative mechanisms, contractual  
2           protections, and controls to ensure and verify performance. For example, I-USA is  
3           required to perform according to schedule and budgetary requirements per the EPC  
4           contract. Furthermore, changes in scope by either party require written requests with  
5           significant supporting documentation demonstrating the projected cost and schedule  
6           impacts of the proposed change. Contractual cost controls under the EPC Contract are  
7           discussed in greater detail in Mr. Pullin's testimony. WETT actively monitors all aspects  
8           of the CREZ Projects through established periodic reports from I-USA and other  
9           contractors and through regularly scheduled meetings with I-USA on a daily, weekly, and  
10          monthly basis. Furthermore, WETT reviews and approves qualifications, references, and  
11          supporting bids of subcontractors hired by I-USA.

12          WETT monitors EPC project progression with on-site construction monitors, in-  
13          person field visits, and site inspections. WETT also uses a variety of tools to evaluate  
14          and control EPC project progress including a highly detailed schedule with a  
15          comprehensive and detailed written list of tasks needed to complete the project,  
16          procurement progress reports, and multiple daily and weekly construction reports.  
17          WETT uses this flow of information to review, monitor, and control the project budget  
18          and schedule.

19          In performing all these contract administration functions, WETT works closely  
20          with and relies on the expertise of SAIC to provide independent third-party review and  
21          evaluation.

1   **Q.   HOW DOES WETT KEEP ITS BOARD AND SENIOR MANAGEMENT**  
2       **UPDATED ON THE COST AND SCHEDULE INFORMATION IN A TIMELY**  
3       **MANNER?**

4   A.       To ensure the Board is thoroughly informed, my staff and I make recurring  
5       monthly presentations at WETT's Board of Managers meetings; I also have a recurring  
6       weekly telephone conference with the Board. These formal communications are  
7       supplemented by informal calls or meetings as needed. The Board of Managers of  
8       WETT oversees the CREZ Projects and provides input, direction, and guidance to WETT  
9       personnel.

10   **Q.   WHAT IS YOUR AND YOUR STAFF'S ROLE?**

11   A.       I am responsible for overseeing the CREZ Projects to ensure the timely  
12       construction and energizing of the line and for ensuring all expenditures are necessary  
13       and prudent. Along with other WETT personnel, I monitor EPC expenditures to ensure  
14       invoices are within the expected range, work billed has been performed, and construction  
15       is progressing as planned. I sponsor summaries of these invoices attached to my  
16       testimony as confidential Exhibit BAB-3. The invoices are also included in my work  
17       papers. Members of my staff and I also make site inspections to secure more detailed  
18       information about progress on various aspects of the CREZ Projects. On a contract  
19       administration/management level, typical accounting internal controls and safeguards  
20       have been put in place so that no invoice from I-USA (or anyone else) is paid until it has  
21       been verified that the invoice matches the expected range outlined in the EPC Contract  
22       and that the work billed was actually performed. Concurrently, WETT monitors the  
23       CREZ Projects to ensure they will be completed on schedule.

1           Complementing WETT's role in project management and oversight are SAIC and  
2 another independent engineering firm, Black & Veatch, hired by the project financing  
3 lenders to provide additional oversight of the project. WETT and SAIC meet monthly  
4 with I-USA to review project progress and ensure that key deadlines and milestones set  
5 forth in the EPC Contract are met and to identify and address any potential issues that  
6 may arise. WETT personnel use these meetings, reports, and control systems to  
7 communicate and coordinate with I-USA and its subcontractors and to ensure that WETT  
8 has timely information regarding the CREZ Projects enabling the ability to react quickly  
9 to keep the project on schedule and construction costs under control.

10           Finally, WETT uses several third-party contractors to ensure that WETT is able to  
11 maintain proper oversight of the CREZ Projects. These contractors, which I mentioned  
12 above, include KPE for environmental permitting and consulting, SAM for land and  
13 easement surveys, Pike for owner's engineering services, and SUN initially for advice on  
14 engineering design and project costs and later as a construction site monitor.

15 **Q. WHAT IS SAIC'S ROLE?**

16 A.           SAIC serves as a formal, independent advisor to WETT in evaluating the  
17 prudence and reasonableness of project management. The testimony of Mr. Pullin also  
18 discusses the nature and scope of SAIC's involvement in WETT's CREZ Projects.

19           As previously mentioned, SAIC provided assistance drafting and negotiating the  
20 EPC Contract, formulating EPC contracting strategy, and creating a construction project  
21 schedule. SAIC also provided independent third-party oversight and advice regarding  
22 WETT's interactions with I-USA to ensure that actions taken by WETT are reasonable  
23 and prudent. SAIC continues to advise WETT on construction activities including

1 monitoring I-USA's compliance with the EPC Contract and verification of construction  
2 expenditures

3 SAIC personnel are involved in monitoring and oversight of the EPC process.  
4 SAIC personnel make periodic visits to the field and I-USA offices to verify and monitor  
5 expenditures for engineering services provided by I-USA and its subcontractors and to  
6 ensure the procurement and construction process is administered as required by the EPC  
7 contract. SAIC also advises WETT on change orders and similar events to ensure  
8 contract modification requests are processed per the EPC contract. SAIC is involved in  
9 the monthly I-USA and WETT management meetings and project status reporting. SAIC  
10 is also available to attend the monthly meetings of WETT's Board of Managers as needed  
11 to address any questions the Board might have regarding the CREZ Projects.

12 **Q. HOW ARE COSTS CONTROLLED?**

13 A. Subject to any properly authorized and executed amendments or change orders,  
14 the EPC Contract itself states the maximum contract price of the CREZ Projects. WETT  
15 personnel, with the assistance of SAIC, monitor all aspects of the EPC process to ensure  
16 compliance with contract requirements. Invoices are reviewed to ensure that no  
17 payments are made unless they accurately reflect the materials delivered or necessary  
18 work performed. WETT, again with SAIC's assistance, confirms that the work billed for  
19 is needed and has been performed in accordance with the specifications and technical  
20 requirements set forth in the EPC Contract. Invoices are not approved to be paid unless  
21 the work has been performed according to contract specifications. WETT employees  
22 have also developed a budget management process that includes reviewing subcontractor  
23 and supplier proposals and comparing proposal costs against project budgets as well as

1 reviewing proposed changes to project estimates and project cash flow forecasts on a  
2 monthly basis.

3 **Q. DO YOU BELIEVE WETT'S PROJECT MANAGEMENT PROCESS AND**  
4 **PROCEDURES PROVIDE ADEQUATE OVERSIGHT?**

5 A. Yes. WETT has been actively engaged in project-related decision-making since  
6 the inception of the CREZ Projects. WETT's project oversight structure has provided an  
7 effective means by which to monitor the activities undertaken by I-USA and its  
8 subcontractors. The Project Management team, headed by me, has oversight  
9 responsibility for project safety, cost, schedule, and quality performance. In addition,  
10 WETT employs a variety of reporting, interface, and communication processes to  
11 facilitate the execution of its project management responsibilities. These processes  
12 include recurring reports, formal and informal meetings, and specific project control  
13 systems. WETT utilizes these processes and procedures to carefully monitor project  
14 progress and exercise appropriate oversight by requiring I-USA and third-party providers  
15 to adhere to EPC contract requirements. Combining these elements with the independent  
16 evaluation and advisory activities from SAIC, WETT has maintained effective project  
17 management oversight to ensure that reasonable and prudent decisions are made.

18 **IX. LAND ACQUISITION COSTS**

19 **Q. PLEASE DESCRIBE WETT'S LAND ACQUISITION COSTS.**

20 A. WETT is projected to incur land acquisition costs of approximately \$44,125,000.  
21 This cost includes attorney and consultant fees of third party real estate firms for  
22 easement negotiation and eminent domain proceedings, surveys, and permitting. These  
23 costs are detailed as follows:

1

## WETT LAND ACQUISITION COSTS

	<b>Actual Costs Incurred as of June 30, 2012</b>	<b>Additional Projected Costs</b>	<b>Estimated Total</b>
Substations	\$821,130	\$-	\$821,130
CCN1 (76 miles)	\$9,179,756	\$450,244	\$9,648,000
CCN2 (158 miles)	\$17,608,089	\$713,511	\$18,321,600
CCN3 (140 miles)	\$14,540,522	\$794,478	\$15,335,000
<b>Total</b>	<b>\$42,167,497</b>	<b>\$1,958,233</b>	<b>\$44,125,730</b>

2

3 The chart above reflects overall projected easement acquisition costs of  
4 approximately \$117,983 per mile (\$44,125,730/374 miles).

5 As with EPC costs, I provide the total land acquisition costs here for context.  
6 WETT is only requesting that land acquisition costs associated with Phase I (including  
7 Cottonwood, Long Draw, Grelton, and segments 1, 2, 3, and 4) totaling \$27,256,286 be  
8 recovered at this time. WETT will request recovery of Phase II land acquisition costs in  
9 future proceedings.

10 **Q. PLEASE BRIEFLY DESCRIBE WETT'S APPROACH TO LAND**  
11 **ACQUISITION.**

12 **A.** The goal of WETT's ROW acquisition process is to be as amenable as possible to  
13 landowners while obtaining necessary land rights at fair, market-based prices.

14 WETT's CREZ Projects required obtaining approximately 374 miles of ROW in  
15 approximately 20 months. To successfully obtain the large amount of ROW, WETT has  
16 used qualified third parties as well as internal resources. WETT employs a Real Estate  
17 Manager and Project Managers who coordinate the management of survey crews, ROW  
18 agents, and attorneys. SAM performs surveys, which are used to locate and describe

1 WETT's easements. IRR's appraisers and ROW agents appraise properties, negotiate  
2 with landowners for easement purchases, and testify on WETT's behalf when  
3 condemnation is necessary. IRR also provides weekly status updates to enable WETT to  
4 monitor the land acquisition process. Outside counsel Naman, Howell, Smith & Lee,  
5 PLLC represents WETT in condemnation cases along with various other firms in West  
6 Texas who serve as local counsel where appropriate.

7 WETT was able to obtain the above results despite a change in law regarding the  
8 acquisition of property that occurred in September 2011. Specifically, implementation of  
9 Senate Bill 18 impacted many pre-condemnation requirements necessary in Texas. The  
10 relevant costs reflects savings in legal and consulting costs due to WETT's low  
11 condemnation rate as well as reasonable amounts paid to landowners for easements.  
12 Additionally, a high percentage of negotiated easement agreements with affected  
13 landowners helped WETT to meet certain milestones in its construction schedule.

14 **Q. ARE WETT'S LAND ACQUISITION COSTS PRUDENT, REASONABLE, AND**  
15 **NECESSARY?**

16 A. Yes. Based on WETT's land acquisition cost per mile and its success in  
17 negotiating agreements for approximately 88% of the easements, I believe WETT's land  
18 acquisition costs were reasonably incurred and necessary to construct the CREZ Projects.

19 **X. MAINTENANCE EXPENSES**

20 **Q. WOULD YOU PLEASE GENERALLY DESCRIBE WHAT ACTIVITIES ARE**  
21 **INCLUDED IN "MAINTENANCE" SERVICES?**

22 A. Maintenance services generally can be grouped into three categories: (1)  
23 vegetation management, (2) scheduled maintenance, and (3) emergency restorative



1 services. Vegetation management involves the clearing and maintenance of the grounds  
2 along transmission easements and substation properties. Scheduled maintenance involves  
3 the periodic inspection and repair of transmission line and substation equipment.  
4 Scheduled maintenance typically involves pre-planned outages in coordination with  
5 ERCOT to perform inspections and make necessary repairs. Emergency restorative  
6 services involve unscheduled outage events and possible damage to the transmission or  
7 substation equipment. Emergency restorative functions require immediate action from  
8 resources located fairly close to WETT's transmission facilities.

9 **Q. HOW IS WETT GOING TO PERFORM THE MAINTENANCE FUNCTIONS**  
10 **YOU JUST DESCRIBED?**

11 A. WETT plans on using a combination of outside vendors and in-house personnel to  
12 perform the majority of its maintenance services. WETT has issued RFPs for most  
13 maintenance functions and is currently considering bids from qualified contractors.

14 **Q. HOW WILL WETT IN-HOUSE PERSONNEL MANAGE MAINTENANCE**  
15 **FUNCTIONS?**

16 A. I will be primarily responsible for maintenance functions. Maintenance activities  
17 include controlling vegetation to prevent disturbances to the system and to maintain  
18 access to our facilities, periodic inspections of the facilities, scheduled maintenance to  
19 equipment to maintain a high level of availability, and management of emergency  
20 events. WETT determined that there are a number of qualified providers of maintenance  
21 services with labor, equipment, and facilities readily available and currently providing  
22 services to various utilities. Furthermore, WETT worked with Pike to develop a facilities  
23 maintenance program. The maintenance program will be managed by a core internal

1 management group located in Austin with physical coverage being provided by a small  
2 team of qualified WETT technicians and vendors located near physical assets.

3 **Q. HOW DID WETT DECIDE TO OUTSOURCE MAINTENANCE FUNCTIONS,**  
4 **AND HOW DID IT DRAFT THE REQUESTS FOR PROPOSAL TO SECURE**  
5 **THIRD PARTY MAINTENANCE PROVIDERS?**

6 A. WETT engaged two engineering firms through competitive bidding, KEMA, Inc.  
7 (“KEMA”) and Pike, to assist with this decision.

8 Pike provided relevant analysis and recommendations to WETT to evaluate the  
9 options of directly hiring personnel versus selecting outside providers to perform  
10 maintenance functions. WETT chose to primarily use qualified third-party vendors to  
11 perform both scheduled (preventative) maintenance and emergency restorative  
12 maintenance for substations and transmission lines. This decision was based on Pike’s  
13 analysis showing this option to be less expensive than hiring personnel to perform such  
14 tasks in house. Scheduled maintenance typically occurs in either annual or multi-year  
15 intervals and requires specific skills that may not readily translate to other tasks or  
16 operations performed by WETT internal staff on a regular basis. Accordingly, WETT  
17 concluded that employing outside providers for the maintenance functions described  
18 above would give WETT access to top-level expertise and economies of scale while  
19 keeping staff lean and overhead costs low.

20 Based on the decision to contract out these services, Pike assisted WETT in the  
21 drafting of RFPs, and WETT used the RFPs to gather bids from qualified maintenance  
22 providers to perform vegetation management, scheduled maintenance, and emergency  
23 restorative services. The RFPs included requirements for substation maintenance and

1 restoration, including inspection of the following components: breakers, motor operated  
2 disconnect switches, reactors, capacitors, surge arresters, transformers, insulators,  
3 conductors, structures, fittings, lightning and grounding systems, etc.

4 **Q. ARE WETT'S MAINTENANCE EXPENSES KNOWN AND MEASURABLE?**

5 A. Yes. WETT must incur certain maintenance expenses in order to operate its  
6 transmission facilities in accordance with applicable standards. These expenses will  
7 occur while the rates set in this docket are in effect. The maintenance expense numbers  
8 are based on contracts or bids from third-party vendors or are based on historical  
9 experience of third-party experts who have performed such work for other electric  
10 utilities. Furthermore, WETT will hire a Field Maintenance Supervisor who will serve as  
11 a first responder and coordinate activities of WETT's third-party contractors during  
12 emergency restorative maintenance. WETT will also hire a Substation Technician who  
13 will coordinate maintenance activities in WETT's switching substations. Services  
14 provided by these positions are required for WETT to provide reliable electric  
15 transmission service. The cost for these positions is known and measurable as the  
16 salaries of these positions have been determined by WETT and are known at this time.  
17 Some maintenance costs will be incurred based on a time and materials basis; these costs  
18 have been annualized based on experience of other utilities and information provided via  
19 the RFP process by third-party vendors performing such services. Given that WETT is a  
20 new entrant and has limited historical data specifically related to maintenance, I believe it  
21 is reasonable to rely on the experience of other utilities and third-party vendors to arrive  
22 at an annual amount to be included. As a result, the maintenance expenses presented by  
23 WETT are reasonably certain.

1 **Q. ARE MAINTENANCE EXPENSES INCLUDED IN WETT'S HISTORICAL**  
2 **DATA?**

3 A. No. WETT did not have these expenses during its historical year. WETT's  
4 requested maintenance expenses are known and measurable changes to WETT's  
5 historical expenses and are derived from the RFP responses it received from third-party  
6 providers after a competitive bidding process or on the analysis of third-party experts  
7 who have performed such work for other electric utilities. In particular, the known and  
8 measurable expenses for substation maintenance are based on a bid received after the  
9 RFP process. WETT has finalized a contract with the selected substation maintenance  
10 provider. These known and measurable maintenance expenses are included in the  
11 accounting testimony of Dr. Fairchild.

12 **Q. PLEASE DESCRIBE WETT'S MAINTENANCE EXPENSES.**

13 A. As I noted above, maintenance includes scheduled maintenance, vegetation  
14 management, and emergency restorative services.

15 Working with Pike, WETT developed budgets for substation maintenance  
16 covering scheduled maintenance and emergency restorative maintenance. Scheduled  
17 maintenance for substations has a five-year contracted maintenance cycle with some  
18 functions performed annually and others performed at various intervals such as every five  
19 years. Emergency restorative maintenance will be 18% of annual maintenance.  
20 Transmission line maintenance typically runs in two, three, and ten year cycles and  
21 includes visual inspections, aerial/infrared inspections, vegetation management, and  
22 preventative maintenance. Vegetation management will be performed on a five year

1 cycle. Scheduled maintenance inspections and scheduled preventative maintenance  
2 activities are based on an initial three year and subsequent ten year maintenance cycles.

3 WETT has not requested expenses related to certain maintenance functions with a  
4 longer maintenance cycle in this rate case. For example, vegetation management is on a  
5 five year cycle; vegetation management costs are not included in the totals below.

6 Annual maintenance expenses for Phase I total \$785,260. Annual maintenance  
7 expenses for both Phases total \$1,133,676.

8 **Q. HAS WETT COMPARED THE LEVEL OF ITS PROPOSED MAINTENANCE**  
9 **EXPENDITURES TO OTHER UTILITIES IN TEXAS?**

10 A. Yes. WETT has benchmarked its proposed maintenance expenses to a state-wide  
11 average of 2011 FERC Form 1 filing maintenance expenses for AEP Texas Central  
12 Company ("AEP TCC"), Southwestern Electric Power Company ("SWEPCO"), Entergy  
13 Texas, Inc. ("Entergy"), CenterPoint Energy Houston Electric, LLC ("CenterPoint"),  
14 Oncor Electric Delivery Company LLC ("Oncor"), and Southwestern Public Service  
15 Company ("SPS"). WETT's per-circuit-mile maintenance expense is \$2,267 per mile  
16 (\$1,133,676/500 circuit miles). This is comparable to the state-wide average of \$2,311  
17 per circuit mile for the six Texas utilities listed above.

18 **Q. IS WETT REQUESTING ALL ITS MAINTENANCE EXPENSES BE INCLUDED**  
19 **IN BASE RATES AT THIS TIME?**

20 A. No. At this time, WETT is requesting only maintenance expenses associated with  
21 Phase I. However, in this proceeding, WETT asks that the Commission approve an  
22 increase in its revenue requirement reflecting the additional maintenance expenses  
23 associated with Phase II. These expenses are currently known and measurable and will

1 become effective when those assets are capable of providing service. This process is  
2 reflected in Mr. Morton's and Dr. Fairchild's explanations of WETT's revenue  
3 requirement.

4 **Q. HAS WETT COMPARED THE LEVEL OF ITS PROPOSED O&M**  
5 **EXPENDITURES TO OTHER UTILITIES IN TEXAS?**

6 A. Yes. WETT has also benchmarked its proposed overall O&M expenses to a state-  
7 wide average for AEP TCC, SWEPCO, Entergy, CenterPoint, Oncor, and SPS. WETT's  
8 per-circuit-mile O&M expense is \$3,477 for Phase I and \$4,173 for Phase II. This is  
9 lower than the state-wide average of \$5,425 per circuit mile for the six Texas utilities  
10 listed above.

11 **XI. SUMMARY AND CONCLUSION**

12 **Q. WOULD YOU PLEASE SUMMARIZE YOUR TESTIMONY FOR US?**

13 A. My testimony can be summarized as follows:

- 14 • The costs incurred during the CREZ Projects and performance under the EPC  
15 Contract are prudent, reasonable, and necessary. I sponsor the invoices for such  
16 costs.
  - 17 ○ WETT—as it indicated it would do in the TSP selection docket (35665)—  
18 engaged its affiliate, I-USA, to perform the EPC functions associated with  
19 building the lines WETT was awarded in the CREZ TSP selection docket.
  - 20 ○ WETT's EPC Contract with I-USA was reviewed and analyzed by two  
21 independent leaders in the industry, Booz & Company and SAIC, and was  
22 found by both to be reasonable and prudent.
- 23 • WETT and SAIC have established formal and informal communications plans  
24 and reporting requirements, construction inspection, and budget monitoring  
25 processes to ensure I-USA's performance under the EPC Contract. The costs  
26 incurred by WETT under the EPC Contract are reasonable and necessary for the  
27 timely completion of the CREZ Projects.
- 28 • The costs incurred by WETT for services of third-party, non-affiliate vendors and  
29 for day-to-day operating expenses are reasonable and necessary for the timely  
30 completion of the CREZ Projects.

- 1 • WETT's land acquisition costs for right of way average just under \$118,000 per  
2 mile. This low aggregate cost includes market based payments to land owners,  
3 attorneys' fees and consultant fees of third party real estate firms for easement  
4 negotiation and eminent domain proceedings, surveys, and permitting.
- 5 • WETT's maintenance expenses are known and measurable as they are based on  
6 responses to WETT's RFP's and analysis of third-party experts. WETT's  
7 maintenance expenses are expected to be \$785,260 for Phase I, and \$1,133,676  
8 for all of the CREZ Projects. In this regard, WETT is requesting the Commission  
9 to approve two rates, one to become effective when WETT's Phase I facilities are  
10 capable of providing service and the other when its Phase II facilities are capable  
11 of providing service. The increase in the revenue requirement for Phase II reflects  
12 the additional maintenance expense (and other additional expenses addressed by  
13 Dr. Fairchild, such as A&G expenses) associated with Phase II. These expenses  
14 are currently known and measurable, and will become effective when that Phase  
15 is completed and capable of providing service.

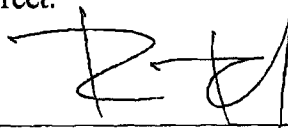
16 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

17 **A.** Yes. However, I reserve the right to make changes or corrections as necessary.

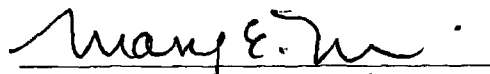
STATE OF TEXAS       §  
                                  §  
COUNTY OF TRAVIS §

**BEFORE ME**, the undersigned authority, on this day personally appeared Bradley A. Ballard, who, having been placed under oath by me, did depose as follows:

My name is Bradley A. Ballard. I am of legal age and a resident of the State of Texas. The foregoing direct testimony and the attached exhibits offered by me are true and correct, and the opinions stated therein are accurate, true and correct.

  
\_\_\_\_\_  
Bradley A. Ballard

**SUBSCRIBED AND SWORN TO BEFORE ME** by the said Bradley A. Ballard this  
22<sup>nd</sup> day of August, 2012.

  
\_\_\_\_\_  
Notary Public, State of Texas



Commission 12880762-0



**BRADLEY A. BALLARD, P.E., PMP**

1711 S. RAINBOW RANCH RD. • WIMBERLEY, TX 78676  
 PHONE: (512) 516-9192 • E-MAIL: BBALLARD23@AIM.COM

**PROFESSIONAL EXPERIENCE**

---

**2011 - Present    Wind Energy Transmission Texas, LLC    Austin, TX**

2012 – present    Asset Management Director

- Lead and manage teams of Project Managers, Land Manager, Analysts, Contractors and external consultants who are responsible for the completion of the WETT CREZ transmission system
- Responsible for maintaining and managing WETT's transmission system upon commencement of operations.
- Direct and oversee all activities performed by the project teams, including the completion of design, construction, project commissioning phases, and economic control.
- Responsible for ensuring that the CREZ projects are completed on time and on budget and meet all regulatory requirements.
- Motivates and leads experienced teams of project managers, professional engineers, and consultants to ensure that all major project milestones are delivered successfully. Orchestrate communications and coordination across various external consultants.
- Works with financial analysts and other business support groups.
- Works with management team in the development of business plans and budgets.
- Defines clearly the objectives of asset management team to ensure that they are well aligned with WETT's business and project plan.
- Establishes and manages schedules, costs/resources, budgets and technical objectives required to meet projected outcomes.
- Maintain coordination and communication with the construction group throughout the construction and project commissioning phases.
- Lead transition of projects from the construction group to the operations phase and direct implementation of WETT's maintenance and asset management programs.
- Responsible for detailed weekly, monthly, and quarterly reporting to various groups with and outside WETT
- Maintains active participation with all key interconnection and regulatory stakeholders.

**2011-2012            Project Manager**

- Manage right-of-way acquisition, permitting, detailed route design, and construction quality assurance for a \$336 M portfolio of CREZ related transmission projects consisting of 215 miles of 345 kV transmission lines and three 345 kV switching stations.
- Work with WETT real estate manager, real estate consultants, project survey team, and transmission line engineers to secure required easements. Project team has successfully secured 215 miles of right-of-way in 18 months.
- Coordinate activities associated with detailed route design including acquisition of LIDAR and field survey data as well as development and review of PLS-CADD models.
- Work with environmental consultants and manage interface with regulatory agencies to obtain required project permits. These agencies include U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, Texas Parks and Wildlife, Texas Historical Commission, and Texas Department of Transportation.



**BRADLEY A. BALLARD, P.E., PMP**

1711 S. RAINBOW RANCH RD. • WIMBERLEY, TX 78676  
PHONE: (512) 516-9192 • E-MAIL: BBALLARD23@AIM.COM

**2005 - 2006    Renewable Energy Systems                      Abilene, TX**

Construction Manager

- Managed a \$10.8 M EPC contract for wind turbine foundations on a 200 MW wind farm.
- Developed, implemented, and managed the quality control plan for foundation construction.
- Developed and maintained the master project schedule for the engineering, procurement, and construction phases of a 200 MW wind farm.

**2002 - 2005    Lower Colorado River Authority                      Austin, TX**

Senior Project Manager

- Managed a \$120 M portfolio of transmission projects consisting of 207 miles of transmission lines and two substations in South and West Texas and ensured that projects were delivered on schedule, under budget, and per stakeholder specifications. Projects were managed via Joint Development Agreement with American Electric Power.

**2000 - 2002    The University of Texas at Austin                      Austin, TX**

Graduate Research Assistant

- Performed an IT systems integration analysis for three utilities in the ERCOT system by assessing work flow processes and software applications used to support the engineering, procurement, and construction operations for transmission projects.

**1996 - 2000    International Business Machines                      Rochester, MN**

Manufacturing Process Engineer

- Designed, maintained, and optimized manufacturing processes to enhance product quality and increase product throughput for eight RS6000 product lines. Production volumes for each product line ranged from 30,000 to 100,000 units per year.
- Communicated and implemented engineering and process changes with a global engineering staff at several international locations.

**1988 - 1994    U.S. Marine Corps Reserve                      San Antonio, TX**

**EDUCATION**

---

**2001                      The University of Texas at Austin**

M.S. Civil Engineering, Construction Engineering & Project Management

**1995                      The University of Texas at Austin**

B.S. Mechanical Engineering

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# Exhibits of Bradley A. Ballard

Filed Under Seal

Confidential Material

Document name

Pages

**Exhibit BAB-3** EPC Invoice Summaries

1-116

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PUC DOCKET NO. 40606

APPLICATION OF WIND ENERGY	§	BEFORE THE
TRANSMISSION TEXAS, LLC	§	
FOR AUTHORITY TO	§	PUBLIC UTILITY COMMISSION
ESTABLISH INITIAL RATES	§	
AND TARIFFS	§	OF TEXAS

DIRECT TESTIMONY OF

BRUCE H. FAIRCHILD

ON BEHALF OF

WIND ENERGY TRANSMISSION TEXAS, LLC

AUGUST 2012

**TABLE OF CONTENTS TO THE DIRECT TESTIMONY OF BRUCE FAIRCHILD,  
WITNESS FOR WIND ENERGY TRANSMISSION TEXAS, LLC**

EXECUTIVE SUMMARY .....	1
I. INTRODUCTION .....	3
II. PURPOSE OF TESTIMONY .....	4
III. SUMMARY OF TESTIMONY .....	5
IV. BOOKS AND RECORDS .....	7
V. BACKGROUND .....	7
VI. REVENUE REQUIREMENTS .....	9
A. RATE BASE .....	9
B. OPERATING EXPENSES .....	13
C. TAXES OTHER THAN INCOME .....	18
C. DEPRECIATION AND AMORTIZATION EXPENSE .....	20
D. RETURN ON INVESTMENT .....	21
D. FEDERAL INCOME TAXES .....	24
VII. RATE DESIGN .....	26

**LIST OF EXHIBITS**

EXHIBIT BHF-1	Resume of Bruce H. Fairchild
EXHIBIT BHF-2	List of Prior Testimony
EXHIBIT BHF-3	List of Schedules and Sponsor and/or Co-Sponsor
EXHIBIT BHF-4	Calculation of Cost of Debt
EXHIBIT BHF-5	Wholesale Transmission Service Tariff

## EXECUTIVE SUMMARY

1 Dr. Fairchild testifies that Wind Energy Transmission Texas, LLC (“WETT”)’s  
2 books and records are maintained consistent with the Federal Energy Regulatory  
3 Commission’s Uniform System of Accounts. He also explains that WETT is requesting  
4 the Commission approve two rates, one to become effective when WETT’s CCN1-2  
5 facilities are capable of providing service and the other when its CCN3 facilities are  
6 capable of providing service.<sup>1</sup>

7 Dr. Fairchild then develops WETT’s requested revenue requirements for its  
8 preferred procedural approach of \$31,194,856 for CCN1-2 and \$34,332,483 for CCN3,  
9 and revenue requirements for its alternative procedural approach of \$38,251,264 for  
10 CCN1-2 and \$41,378,891 for CCN3. These revenue requirements are based on a  
11 historical year ended June 30, 2012, adjusted for known and measurable changes, and a  
12 rate base of \$183,153,520 for WETT’s preferred procedural approach and a rate base of  
13 \$252,653,123 for WETT’s alternative procedural approach. All four revenue  
14 requirements are based on an overall rate of return of 7.73%, which is calculated using  
15 a capital structure of 60% debt and 40% equity, a cost of debt of 5.624%, and an ROE  
16 of 10.9%. The difference between the respective CCN1-2 and CCN3 revenue  
17 requirements is the level of maintenance expenses, administrative and general  
18 expenses, and taxes other than income, which increase when CCN3 facilities are  
19 complete and capable of providing service.

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<sup>1</sup> WETT’s facilities were approved in three certificate of convenience and necessity (“CCN”) proceedings in P.U.C. Docket Nos. 38295, 38484, and 38825, and are referred to as CCN1, CCN2, and CCN3 respectively. Other witnesses refer to CCN1 and CCN2 as Phase I and CCN3 as Phase II.

1           Finally, Dr. Fairchild calculates WETT's requested annual wholesale transmission  
2 rates under WETT's preferred procedural approach of \$0.47998 per kW and \$0.52810  
3 per kW for CCN1-2 and CCN3, respectively. He also calculates WETT's requested  
4 annual wholesale transmission rates under WETT's alternative approach of \$0.58855  
5 per kW and \$0.63667 per kW for CCN1-2 and CCN3, respectively. He sponsors  
6 WETT's proposed wholesale transmission service ("WTS") tariffs and explains  
7 WETT's proposed treatment and recovery of rate case expenses.

1 **I. INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME, POSITION, BUSINESS ADDRESS, AND**  
3 **PLACE OF EMPLOYMENT.**

4 A. My name is Bruce H. Fairchild. I am a principal in Financial Concepts and  
5 Applications, Inc. ("FINCAP"), a firm engaged in financial, economic, and policy  
6 consulting to business and government. My business address is 3907 Red River,  
7 Austin, Texas 78751.

8 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING?**

9 A. I am testifying on behalf of Wind Energy Transmission Texas, LLC  
10 ("WETT").

11 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND**  
12 **PROFESSIONAL EXPERIENCE.**

13 A. I hold a BBA degree from Southern Methodist University and MBA and PhD  
14 degrees from the University of Texas at Austin. I am also a Certified Public  
15 Accountant. My previous employment includes working in the Controller's  
16 Department at Sears, Roebuck and Company and serving as Assistant Director of  
17 Economic Research at the Public Utility Commission of Texas ("PUC" or  
18 "Commission"). I have also been on the business school faculties at the University of  
19 Colorado at Boulder and the University of Texas at Austin, where I taught  
20 undergraduate and graduate courses in finance and accounting.

1   **Q.    BRIEFLY DESCRIBE YOUR EXPERIENCE IN UTILITY-RELATED**  
2   **MATTERS.**

3   A.           While at the PUC, I assisted in managing a division comprised of  
4               approximately twenty-five professionals responsible for financial analysis, cost  
5               allocation and rate design, economic and financial research, and data processing  
6               systems. I testified on behalf of the PUC staff in numerous cases involving most  
7               major investor-owned and cooperative electric, telephone, and water/sewer utilities in  
8               the state regarding a variety of financial, accounting, and economic issues. Since  
9               forming FINCAP in 1979, I have participated in a wide range of analytical  
10              assignments involving utility-related matters on behalf of utilities, industrial  
11              consumers, municipalities, and regulatory commissions. I have also prepared and  
12              presented expert testimony before a number of regulatory authorities addressing  
13              revenue requirements, cost allocation, and rate design issues for gas/oil, electric,  
14              telephone, and water/sewer utilities. I have been a frequent speaker at regulatory  
15              conferences and seminars and have published research concerning various regulatory  
16              issues. A resume that contains the details of my experience and qualifications is  
17              attached as Exhibit BHF-1, with Exhibit BHF-2 listing my prior testimony before  
18              regulatory agencies since leaving the PUC.

19                                   **II. PURPOSE OF TESTIMONY**

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

21   A.           My principal purpose is to develop WETT's revenue requirements. In  
22               addition, I will address issues related to WETT's accounting, cost of debt, and rate  
23               design.

1 Q. ARE YOU SPONSORING ANY SCHEDULES AND EXHIBITS IN  
2 CONNECTION WITH YOUR TESTIMONY?

3 A. Yes. I sponsor or co-sponsor the schedules listed in Exhibit BHF-3 attached to  
4 my testimony, as well as the exhibits listed in the table of contents of my testimony.

5 Q. WAS YOUR TESTIMONY AND THE EXHIBITS ATTACHED THERETO  
6 PREPARED BY YOU?

7 A. Yes.

8 **III. SUMMARY OF TESTIMONY**

9 Q. WHAT ARE WETT'S REQUESTED REVENUE REQUIREMENTS?

10 A. Under its preferred procedural approach, WETT is requesting the following  
11 two revenue requirements:

CCN1-2	\$ 31,194,856
CCN3	\$ 34,322,483

12 Both of these revenue requirements use the same rate base, calculated from WETT's  
13 plant investment at June 30, 2012, adjusted for known and measurable changes, with  
14 the difference between them being the level of Maintenance expenses, Administrative  
15 and General ("A&G") expenses, and taxes other than income. As explained  
16 elsewhere, values established in this case will be used in interim transmission cost of  
17 service ("TCOS") filings to adjust rates to reflect additional capital investment and  
18 the in-service dates of WETT's facilities.

19 If WETT's preferred procedural approach is not approved by the Commission,  
20 then WETT asks in the alternative that its investment in CCN3 facilities at June 30,  
21 2012, which is currently included in Account 107-Construction Work in Progress

1 ("CWIP"), be included in rate base at this time. Under this alternative procedural  
2 approach, WETT's requested revenue requirements are:

3 CCN1-2 \$38,251,264

4 CCN3 \$41,378,891

5 **Q. WHAT COST OF DEBT DO YOU RECOMMEND?**

6 A. I recommend that a cost of debt of 5.624% be used to calculate WETT's  
7 overall rate of return.

8 **Q. HOW DOES WETT PROPOSE TO CALCULATE ITS COSTS OF**  
9 **PROVIDING SERVICE?**

10 A. Under WETT's preferred procedural approach, it is requesting annual  
11 wholesale transmission rates for CCN1-2 of \$0.47998 per kW and for CCN3 of  
12 \$0.52810 per kW, each of which would become effective when the respective  
13 facilities are capable of providing service. Under WETT's alternative procedural  
14 approach, it is requesting annual wholesale transmission rates for CCN1-2 of  
15 \$0.58855 per kW and for CCN3 of \$0.63667 per kW, each to become effective when  
16 the respective facilities are capable of providing service. These rates would be  
17 charged pursuant to a wholesale transmission tariff patterned after others previously  
18 approved by the Commission and compliant with the provisions of P.U.C.  
19 Substantive Rule 25.192. WETT is requesting that rate case expenses be severed into  
20 a separate docket and recovered through a rate case expense surcharge determined  
21 appropriate by the Commission.



1 **IV. BOOKS AND RECORDS**

2 **Q. ARE YOU FAMILIAR WITH HOW WETT MAINTAINS ITS BOOKS AND**  
3 **RECORDS?**

4 A. Yes. WETT's books and records are maintained consistent with the Federal  
5 Energy Regulatory Commission's ("FERC") Uniform System of Accounts  
6 ("USOA").

7 **Q. HAVE WETT'S BOOKS BEEN AUDITED BY AN INDEPENDENT**  
8 **ACCOUNTING FIRM?**

9 A. Yes. Ernst & Young audited WETT's books and records for the year ended  
10 December 31, 2011 and the period September 11, 2008 (inception) to December 31,  
11 2010. In both instances, Ernst & Young issued an "unqualified" or "clean" opinion  
12 on WETT's financial statements.

13 **V. BACKGROUND**

14 **Q. HOW DOES YOUR TESTIMONY RELATE TO THE TESTIMONY**  
15 **OF OTHER WITNESSES?**

16 A. Although I sponsor or co-sponsor virtually all of the accounting schedules,  
17 most of the numbers used in the calculations are drawn from and supported by other  
18 WETT witnesses. WETT witness Wayne Morton identifies those witnesses and their  
19 respective responsibilities in his direct testimony.

20 **Q. WHAT HISTORICAL YEAR WAS USED AS THE BASIS FOR**  
21 **CALCULATING WETT'S REVENUE REQUIREMENTS?**

22 A. As stated earlier, both revenue requirements are based on WETT's actual  
23 capital investment as of June 30, 2012, adjusted for known and measurable changes.

1 A&G expenses are based on an analysis of WETT's expenditures over the twelve  
2 months ended June 30, 2012, adjusted for known and measurable changes. Because  
3 all of WETT's facilities are under construction, WETT did not incur a great deal of  
4 Operations expenses or meaningful Maintenance expenses, ad valorem taxes, Texas  
5 franchise tax, depreciation expenses, or federal income taxes during the historical  
6 year ended June 30, 2012, so these amounts are by necessity based predominately on  
7 known and measurable changes.

8 **Q. WHY HAVE YOU DEVELOPED TWO REVENUE REQUIREMENTS?**

9 A. WETT is proposing to include in rates only the operating expenses associated  
10 with facilities that are capable of providing service. So that the rates implemented  
11 when the facilities referred to as CCN1-2 and CCN3 are capable of providing service  
12 reflect the operating expenses associated with those facilities, WETT is requesting  
13 that two rates, each incorporating different levels of Maintenance expense, A&G  
14 expense, and taxes other than income, be approved under each alternative procedural  
15 approach. Similar approvals are not required for rate base-related costs because, even  
16 though this case only reflects WETT's investment through June 30, 2102, the costs  
17 associated with additional investment can be incorporated into rates through the  
18 interim TCOS filing process.

19 **Q. HAS WETT INCLUDED ANY EXPENSES IN REVENUE REQUIREMENTS**  
20 **THAT ARE REQUIRED TO BE EXCLUDED?**

21 A. No. Consistent with Commission Rule 25.231 requiring that expenses for  
22 legislative advocacy and similar types of activities be excluded, no amounts related to  
23 these items have been included in the revenue requirements. Likewise, an analysis of