

1     A.             I have twice been Chair of the Edison Electric Institute (“EEI”) Property  
2             Accounting and Valuation Committee and have been Chairman of EEI’s  
3             Depreciation and Economic Issues Subcommittee. I was the Industry Project  
4             Manager for the EEI/AGA effort around the electric and gas industry adoption of  
5             Federal Accounting Standard (“FAS”) 143 and testified before the Federal Energy  
6             Regulatory Commission (“FERC”) in the hearings leading up to the release of  
7             FERC Order 631. I am a Registered Professional Engineer (“PE”) in the State of  
8             Texas and a Certified Depreciation Professional. I am a Senior Member of the  
9             Institute of Electrical and Electronics Engineers. I am also Past President of the  
10            Society of Depreciation Professionals.

11    **Q.     PLEASE OUTLINE YOUR EXPERIENCE IN THE FIELD OF**  
12            **DEPRECIATION.**

13    A.             Since graduating from college in 1985, I have worked in the area of  
14             depreciation and valuation. I founded Alliance Consulting Group in 2004 and am  
15             responsible for conducting depreciation, valuation, and certain other accounting-  
16             related studies for utilities in various regulated industries. My duties related to  
17             depreciation studies include the assembly and analysis of historical and simulated  
18             data, conducting field reviews, determining service life and net salvage estimates,  
19             calculating annual depreciation, presenting recommended depreciation rates to  
20             utility management for consideration, and supporting such rates before regulatory  
21             bodies.

22             My prior employment from 1985 to 2004 was with Texas Utilities  
23             (“TXU”). During my tenure with TXU, I was responsible for, among other

1 things, conducting valuation and depreciation studies for the domestic TXU  
2 companies. During that time, I also served as Manager of Property Accounting  
3 Services and Records Management in addition to my depreciation responsibilities.

4 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE ANY REGULATORY**  
5 **COMMISSIONS?**

6 A. Yes. I have conducted depreciation studies and filed testimony on  
7 depreciation and valuation issues before the Public Utility Commission of Texas  
8 (“Commission”) in Docket Nos. 11735, 12160, 15195, 16650, 18490, 20285,  
9 22350, 23640, 24040, 32766, 34040, 35763, 35717, 36633, 38147, 38339, 38480,  
10 38929, and 40020. I have appeared before numerous other state and federal  
11 agencies in my 27-year career in performing depreciation studies. Exhibit DAW-  
12 1 lists instances before other regulatory commissions in which I have conducted  
13 depreciation studies, filed written testimony and/or testified.

14 **II. PURPOSE AND SUMMARY OF DIRECT TESTIMONY**

15 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS**  
16 **PROCEEDING?**

17 A. The purpose of my testimony is to:

- 18 • Discuss the recent depreciation study completed for WETT substation,  
19 transmission line, control centers, and general plant assets; and
- 20 • Support and justify the recommended depreciation rates for WETT’s  
21 assets based on the results of the depreciation study.

1    **Q.    DO YOU SPONSOR ANY EXHIBITS IN CONNECTION WITH YOUR**  
2           **TESTIMONY?**

3    A.           Yes. I sponsor the exhibits listed in the Table of Contents.

4    **Q.    WERE THESE EXHIBITS PREPARED BY YOU OR UNDER YOUR**  
5           **DIRECT SUPERVISION?**

6    A.           Yes.

7    **Q.    DO YOU SPONSOR OR CO-SPONSOR ANY SCHEDULES?**

8    A.           Yes. Consistent with the context of my testimony, I co-sponsor the  
9           schedule listed in the table of contents.

10   **Q.    PLEASE DESCRIBE THE DEPRECIATION STUDY ON WHICH WETT**  
11           **HAS BASED ITS REQUESTED DEPRECIATION RATES IN THIS CASE.**

12   A.           Since WETT is constructing new transmission and general plant assets,  
13           historical life and net salvage information is not available. The study approach  
14           relies on the specific characteristics of the assets being constructed, both from my  
15           experience and the experience of company experts who are overseeing the design  
16           and construction of the assets, as well as the lives and net salvage assigned by  
17           others utilities in Texas. The specific facts surrounding WETT's assets as  
18           compared to other Texas utilities, where possible, were factored into the ultimate  
19           selection of lives and net salvage for WETT's assets.

20   **Q.    WHAT PLANT ASSETS ARE INCLUDED IN YOUR FINAL**  
21           **DEPRECIATION RATES?**

1 A. The final depreciation rates include all of the plant assets for WETT's  
 2 CREZ projects, which are described in more detail in the testimony of Mr.  
 3 Ballard.

4 Q. WHAT DEPRECIATION RATES ARE BEING USED TO CALCULATE  
 5 DEPRECIATION EXPENSE IN THIS CASE?

6 A. The following table reflects the final depreciation rates found in WETT's  
 7 Depreciation Study.

Acct	Total Project Cost	Accumulated Depreciation	Average Life	Net Salvage %	Proposed Accrual Rate
302 Intangible	14,080,427.50	0.00	59.70	0%	1.68%
350.1 Fee Land	1,059,910.79	0.00	NA		NA
350.2 Land Rights	41,153,306.00	0.00	70.00	0%	1.43%
352 Structures and Improvements	1,293,190.00	0.00	40.00	-6%	2.65%
353 Station Equipment	42,630,795.03	0.00	37.15	-9%	2.93%
354 Transmission Towers	208,640,380.35	0.00	70.00	-17%	1.67%
355 Transmission Poles	66,913,427.42	0.00	60.00	-37%	2.28%
356 Conductor and Other Devices	122,179,696.18	0.00	47.74	-28%	2.68%
Transmission Composite					2.10%
382 SCADA Hardware, Primary and Back-up	442,443.00		3.00	0%	33.33%
383 SCADA Software, Primary and Back-up	399,957.00		10.00	0%	10.00%
384 Communications, Primary and Back-up Improvements, Primary/Backup & Generators	200,000.00 1,000,000.00		4.00 15.00	0% 0%	25.00% 6.67%
Regional Transmission Composite					14.89%
391.01 Computer Equipment	87,570.67	0.00	3.00	0%	33.33%
391.02 Equipment	43,131.07	0.00	4.00	0%	25.00%
391.03 Software	603,020.62	0.00	10.00	0%	10.00%
391.04 Furniture	105,274.13	0.00	20.00	0%	5.00%
391.05 Leasehold Improvements	43,093.47	0.00	5.00	0%	20.00%
General Plant Composite					12.94%
Total	500,875,623.23				

1           **III. OVERVIEW OF DEPRECIATION STUDY METHODOLOGY**

2   **Q.   WHAT DEFINITION OF DEPRECIATION HAVE YOU USED FOR THE**  
3       **PURPOSES OF CONDUCTING THE DEPRECIATION STUDIES AND**  
4       **PREPARING YOUR TESTIMONY?**

5   A.           The term “depreciation,” as used herein, is considered in the accounting  
6               sense; that is, a system of accounting that distributes the cost of assets, less net  
7               salvage (if any), over the estimated useful life of the assets in a systematic and  
8               rational manner. Depreciation is a process of allocation, not valuation.  
9               Depreciation expense is systematically allocated to accounting periods over the  
10              life of the properties. The amount allocated to any one accounting period does  
11              not necessarily represent the loss or decrease in value that will occur during that  
12              particular period. Thus, depreciation is considered an expense or cost, rather than  
13              a loss or decrease in value. WETT will accrue depreciation based on the original  
14              cost of all property included in each depreciable plant account. On retirement, the  
15              full cost of depreciable property, less the net salvage amount, if any, will be  
16              charged to the depreciation reserve.

17 **Q.   PLEASE DESCRIBE YOUR TYPICAL DEPRECIATION STUDY**  
18 **APPROACH.**

19 A.           I conduct a depreciation study in four phases as shown in my Exhibit  
20               DAW-2. The four phases are: Data Collection, Analysis, Evaluation, and  
21               Calculation. During the initial phase of the study, I collect historical data to be  
22               used in the analysis. After the data is assembled, I perform analyses to determine  
23               the life and net salvage percentage for the different property groups being studied.

24               The information obtained from field personnel, engineers, and/or managerial

1 personnel, combined with the study results, are then evaluated to determine how  
2 the results of the historical asset activity analysis, in conjunction with the  
3 Company's expected future plans, should be applied. Using all of these  
4 resources, I then calculate the depreciation rate for each function.

5 **Q. GIVEN THAT THE COMPANY IS A NEW MARKET ENTRANT AND**  
6 **DOES NOT YET HAVE HISTORICAL INFORMATION TO ANALYZE,**  
7 **WHAT PROCESS HAVE YOU UNDERTAKEN TO VALIDATE THE**  
8 **LIFE AND NET SALVAGE RECOMMENDATIONS YOU ARE**  
9 **MAKING?**

10 A. In order to achieve the most appropriate recommendations given WETT's  
11 unique characteristics, I evaluated the comparable life and net salvage  
12 characteristics for similar assets of other utilities in Texas and then applied  
13 specific information from Company experts to modify those indications as  
14 appropriate to make the most appropriate service life and net salvage selections.

15 An example of that process is the life assigned to transmission towers.  
16 The range of lives for transmission towers in Texas is 45 to 81 years with an  
17 average of 61 years. Typically, transmission towers within this account for  
18 various companies would include other items such as guys, foundations, anchors  
19 and grounding material. The largest component of the account would typically be  
20 the towers. As a general rule, transmission towers would have a longer life than  
21 poles (other than potentially some types of concrete poles). WETT is primarily  
22 installing steel towers. Interviews with WETT engineers familiar with steel  
23 towers and fixtures support a life recommendation of 70 years - within the range

1 found in Texas and reasonable based on my experience in setting depreciation  
2 rates for steel towers across Texas and the country. Based on this information, I  
3 have assigned a life to steel tower and fixture investment in Account 354 –  
4 Transmission Towers and Fixtures of 70 years. This meets the Company's  
5 expectations and is within the range of lives found in Texas. I assigned this 70  
6 year life for towers and related assets in Account 354 – Towers and Fixtures to  
7 determine a life for the overall account.

8 The objective in any depreciation study is to project the remaining cost  
9 (installation, material, and removal cost) to be recovered and the remaining  
10 periods in which to recover the costs. This necessarily requires that the service  
11 life and net salvage selections reflect the best representation of the Company's  
12 expectations and be validated by the experienced lives of other utilities in the area  
13 when specific company experience is not available. In order to understand  
14 WETT's expectations regarding asset lives and net salvage, I interviewed  
15 engineers working with WETT's assets, from a construction, operations, and  
16 maintenance perspective to understand current and future plans, as well as  
17 expectations for the specific types of assets being installed. The interview process  
18 provides important information regarding materials, operation, and maintenance,  
19 as well as WETT's current expectation regarding the service life of the assets. I  
20 considered this information in conjunction with my general life expectations from  
21 studying these types of assets over many years and approved service lives for  
22 similar assets from other utilities in Texas to develop the most reasonable and  
23 representative expected service lives for WETT's assets. The result of all of this

1 analysis is reflected in the service life recommendations set forth in my attached  
2 depreciation study.

3 **Q. CAN YOU PROVIDE AN EXAMPLE OF THE IMPORTANT**  
4 **INFORMATION YOU OBTAINED FROM COMPANY PERSONNEL**  
5 **THROUGH THE INTERVIEW PROCESS?**

6 A. In addition to the characteristics and life expectations for individual  
7 components within each account, the interview process gave me an understanding  
8 of WETT's anticipated "retirement unit," which is the level at which assets are  
9 retired and replaced as capital items. The higher the threshold of the retirement  
10 unit, the longer the life of the investment, since more of the investment will be  
11 replaced as expense instead of capitalized. Conversely, the lower the threshold of  
12 the retirement unit, the shorter the life of the overall investment since more of the  
13 investment will be retired and replaced as capital.

14 **Q. IS THE RETIREMENT UNIT LEVEL FOR WETT CONSISTENT WITH**  
15 **OTHER TEXAS UTILITIES?**

16 A. Yes. The retirement unit level for WETT is in line with other utilities in  
17 Texas and across the country. For instance, Account 353 – Substation Equipment  
18 breaks assets into the following groups: shunt reactor, capacitor bank, switches,  
19 surge arrestors, trench, aluminum bus, grading, and foundation.

20 **Q. WHAT OTHER TEXAS UTILITIES DID YOU RELY ON FOR THE NET**  
21 **SALVAGE ANALYSIS?**

22 A. By researching the publicly available information for Texas utilities, I was  
23 able to tabulate the approved service lives and net salvage by account for nine



1 major electric utilities in Texas. The utilities for which I found publicly available  
2 information are Oncor, CenterPoint, TNMP, Entergy, SWEPCO, El Paso Electric,  
3 SPS, AEP Texas Central, and AEP Texas North. The tabulation can be found in  
4 Exhibit DAW-2 Appendix C.

5 **Q. WHAT CRITERIA DID YOU USE TO SELECT THE OTHER TEXAS**  
6 **UTILITIES?**

7 A. The only criterion I applied in my search was whether the utility had  
8 publicly available information on approved service lives and net salvage derived  
9 from information specific for that company. In certain instances, information  
10 from a specific utility may be less valuable due to the extreme age of the study in  
11 determining the lives and net salvage (e.g. Entergy with lives and net salvage  
12 determined from an early 1990's study). However, including these older net  
13 salvage values adds an additional level of conservatism to the selection (i.e. many  
14 of Entergy's net salvage rates are positive while all others are not – with the result  
15 of bringing the average less negative). More information on the use of values  
16 from other utilities in Texas is included in Exhibit DAW-2 in the detailed life and  
17 net salvage discussions.

18 **Q. ARE THE OTHER TEXAS UTILITIES COMPARABLE TO WETT?**

19 A. No utility is exactly comparable to another, including WETT. Different  
20 geography, mix of assets, age and characteristics of assets, maintenance policies,  
21 among a host of other criteria create differences between WETT and any other  
22 company. However, without company-specific information, the range of lives  
23 and net salvage exhibited by other utilities in Texas is a reasonable starting point,

1           when coupled with specific expectations of experts constructing the assets, to set  
2           initial depreciation rates for WETT.

3   **Q.   HAVE YOU EVER CONDUCTED A DEPRECIATION STUDY FOR AN**  
4   **ENTITY WITH NO HISTORICAL DATA?**

5   A.           Yes. In Michigan Docket U-16536, I performed a depreciation study for  
6           Consumers Energy wind assets that were still under construction.

7   **Q.   WHAT DID THE REGULATOR CONCLUDE?**

8   A.           The Michigan Commission approved a settlement agreement that included  
9           my life recommendations. Since there was little historical experience with these  
10          wind assets in the industry, I based the service lives on the expectations of  
11          company engineers with some input from the manufacturer's expectations.

12   **Q.   HAS THE COMMISSION PREVIOUSLY CONSIDERED A**  
13   **DEPRECIATION STUDY FOR A NEW MARKET ENTRANT WITH NO**  
14   **HISTORICAL DATA?**

15   A.           Yes. In Dockets 20248 and 21591, Sharyland Utilities proposed  
16          depreciation rates based on an average of utilities across Texas. While Sharyland  
17          simply used average depreciation rates for other utilities to set their depreciation  
18          rates, the use of specific lives and average net salvage from other utilities is a  
19          more appropriate approach to calculating depreciation rates for WETT. The use  
20          of depreciation rates as a proxy fails to allow for the different reserve positions  
21          and mix of assets that will vary between utilities. By using the basic life and net  
22          salvage characteristic as WETT has done, a set of depreciation rates that is more  
23          applicable to WETT's assets is found.

1   **Q.    WHAT DEPRECIATION SYSTEM DID YOU USE?**

2    A.           The straight-line, Average Life Group ("ALG"), and the remaining-life  
3           depreciation system was employed to calculate annual and accrued depreciation in  
4           the studies. While Sharyland simply used average depreciation rates for other  
5           utilities to set their depreciation rates, the use of specific lives and average net  
6           salvage from other utilities is a more appropriate approach to calculating  
7           depreciation rates for WETT. The use of depreciation rates as a proxy fails to  
8           allow for the different reserve positions and mix of assets that will vary between  
9           utilities. By using the basic life and net salvage characteristic as WETT has done,  
10          a set of depreciation rates that is more applicable to WETT's assets is found.

11   **Q.    HOW ARE THE DEPRECIATION RATES DETERMINED?**

12   A.           In the ALG system, the annual depreciation expense for each account is  
13          computed by dividing the original cost of the asset, less allocated depreciation  
14          reserve, less estimated net salvage, by its respective remaining life. The resulting  
15          annual accrual amount of depreciable property within an account is divided by the  
16          original cost of the depreciable property in the account to determine the  
17          depreciation rate. The calculated remaining lives and annual depreciation accrual  
18          rates were based on attained ages of plant in service and the estimated service life  
19          and salvage characteristics of each depreciable group. The comparison of the  
20          current and recommended annual depreciation rates is shown in my Exhibit  
21          DAW-2, Appendix A. The remaining life calculations are discussed below and  
22          are shown in my Exhibit DAW-2, Appendix B.

23

1   **Q.    WHAT IS THE SIGNIFICANCE OF AN ASSET'S USEFUL LIFE IN**  
2   **YOUR DEPRECIATION STUDY?**

3   A.       An asset's useful life is used to determine the remaining life over which  
4           the remaining cost (original cost plus or minus net salvage, minus accumulated  
5           depreciation) can be allocated to normalize the asset's cost and spread it ratably  
6           over future periods.

7   **Q.    WHAT IS NET SALVAGE?**

8   A.       While discussed more fully in Exhibit DAW-2, net salvage is the  
9           difference between the gross salvage (what is received in scrap value for the asset  
10          when retired) and the removal cost (cost to remove and dispose of the asset or to  
11          retire the asset if retired in place). Salvage and removal cost percentages are  
12          normally calculated by dividing the current cost of salvage or removal by the  
13          original installed cost of the asset. Since WETT does not have historical  
14          experience to analyze, I relied on the approved net salvage values for other  
15          utilities in Texas for which information was publicly available, as well as input  
16          from WETT's own experts.

17  **Q.    IS THIS A REASONABLE METHOD FOR DETERMINING LIFE AND**  
18  **NET SALVAGE RATES?**

19  A.       Yes. Absent utility-specific historical information, the combination of the  
20          specific expectations of WETT's operations experts, an understanding of the  
21          characteristics of these assets from years of analysis of similar assets, and the  
22          expectations of other area utilities is the appropriate approach to setting initial  
23          lives, net salvage rates, and depreciation rates.

1       **IV. WIND ENERGY TRANSMISSION TEXAS DEPRECIATION STUDY**

2       **Q.     WHAT TYPE OF PROPERTY IS INCLUDED IN THE WETT**  
3       **DEPRECIATION STUDY?**

4       A.           WETT assets in the depreciation study consist primarily of transmission  
5       structures and conductor, substations, towers, poles, as well as control center and  
6       general plant assets. WETT's specific plant assets included for calculation of  
7       final rates are described in more detail in the testimony of Mr. Ballard. The  
8       investment in these assets is based on direct project costs, which were provided to  
9       me by Dr. Bruce Fairchild.

10      **Q.     DO YOU HAVE ANY GENERAL OBSERVATIONS REGARDING THE**  
11      **LIFE PARAMETERS YOU ARE RECOMMENDING IN THE STUDY?**

12      A.           Yes. The life parameters selected for each component are based on the  
13      expectations of the personnel constructing the assets, validated against the  
14      approved lives of similar assets in Texas. In some cases, the specific type of  
15      assets being constructed by WETT points to lives that are different than seen by  
16      other utilities in Texas. For example, Account 353 – Substation Equipment for  
17      WETT will not contain autotransformers (which has the tendency to weigh the  
18      overall life of the account higher) and will contain more electronic components  
19      (which has the tendency to weigh the overall life of the account lower) than the  
20      mix of assets in this account for other utilities. Each account is analyzed based on  
21      the specific assets contained within the account and individual lives are weighted  
22      to determine the overall life for the account.

1   **Q.   DO YOU HAVE ANY GENERAL OBSERVATIONS REGARDING THE**  
2       **NET SALVAGE PARAMETERS YOU ARE RECOMMENDING IN THE**  
3       **STUDY?**

4   A.       Yes. At the beginning of the life of the assets for WETT, there is no  
5       historical net salvage information that can be used to set net salvage rates. The  
6       general expectation (both in Texas and across the industry) is that most asset  
7       accounts within the transmission function will exhibit negative net salvage. In  
8       other words, the cost to remove the assets from service (i.e. removal cost) will  
9       exceed any proceeds received from the scrap materials (i.e. gross salvage), if any,  
10      once the asset is removed from service. The average net salvage characteristics of  
11      the nine large utilities with publicly available information were calculated. Some  
12      WETT asset accounts may have higher removal costs than other utilities (e.g.  
13      Account 354 – Towers and Fixtures due to the predominance of 345 kV steel  
14      towers in the account as compared to other utilities). However, given the lack of  
15      experience, the average net salvage (excluding high and low values) was used to  
16      model net salvage for WETT's assets at this point.

17   **Q.   WHAT ARE THE PRIMARY FORCES AFFECTING THE**  
18      **DEPRECIATION EXPENSE RECOMMENDED IN THE STUDY?**

19   A.       Generally, depreciation expense is affected by three separate factors –  
20      average service life, net salvage, and the effect of reserve position. In WETT's  
21      circumstance, there is no existing depreciation reserve so the reserve position is  
22      not a factor in calculating depreciation rates.

23

1   **Q.    DOES THE LACK OF A DEPRECIATION RESERVE AFFECT WETT'S**  
2       **DEPRECIATION RATES?**

3    A.       No. The depreciation rates are calculated at the beginning of the lives of  
4       the assets, therefore no depreciation reserve is expected or needed in the  
5       calculation.

6   **Q.    PLEASE DESCRIBE THE APPLICATION OF THE RESULTS OF YOUR**  
7       **STUDY.**

8    A.       The Company proposes to compute depreciation expense for its assets by  
9       multiplying the depreciation accrual rates shown in Appendix A of Exhibit DAW-  
10      2 times the plant basis in each plant account as found in Schedule II-E-1 and  
11      calculated in Dr. Fairchild's workpapers.

12   **V. CONCLUSION**

13   **Q.    MR. WATSON, DO YOU HAVE ANY CONCLUDING REMARKS?**

14   A.       Yes. The depreciation study and analysis performed under my supervision  
15      fully support setting depreciation rates at the levels I have indicated in my  
16      testimony. The depreciation study for WETT's depreciable property describes the  
17      detailed calculations performed and the resulting rates that are appropriate for  
18      Company property. The Company's depreciation rates should be set at my  
19      recommended levels in order to recover the Company's total investment in  
20      property over the estimated remaining life of the assets.

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

22   A.       Yes, it does. However, I reserve the right to make changes or corrections  
23      as necessary.

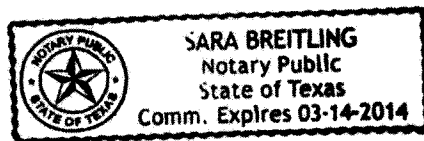
STATE OF TEXAS     §  
                                  §  
COUNTY OF COLLIN §

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

My name is Dane A. Watson. 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.

*Dane A. Watson*  
Dane A. Watson

**SUBSCRIBED AND SWORN TO BEFORE ME** by the said Dane A. Watson  
this 15 day of August, 2012.



*Sara Breitling*  
Notary Public, State of Texas



**Alliance Consulting Recent Engagements**  
**7/17/2012**

<b>Asset Location</b>	<b>Commission</b>	<b>Docket (If Applicable)</b>	<b>Company</b>	<b>Year</b>	<b>Description</b>
Texas	Railroad Commission of Texas	10182	CenterPoint Beaumont/ East Texas	2012	Gas Depreciation Study
Kansas	Kansas Corporation Commission	12-KCPE-764-RTS	Kansas City Power and Light	2012	Electric Depreciation Study
Nevada	Public Utility Commission of Nevada	12-04005	Southwest Gas	2012	Gas Depreciation Study
Texas	Railroad Commission of Texas	10147, 10170	Atmos Mid-Tex	2012	Gas Depreciation Study
Kansas	Kansas Corporation Commission	12-ATMG-564-RTS	Atmos Kansas	2012	Gas Depreciation Study
Texas	Texas Public Utility Commission	40020	Lone Star Transmission	2012	Electric Depreciation Study
Michigan	Michigan Public Service Commission	U-16938	Consumers Energy Company	2011	Gas Depreciation Study
Colorado	Public Utilities Commission of Colorado	11AL-947E	Public Service of Colorado	2011	Electric Depreciation Study
Texas	Texas Public Utility Commission	39896	Entergy Texas	2011	Electric Depreciation Study
MultiState	FERC	ER12-212	American Transmission Company	2011	Electric Depreciation Study
California	California Public Utilities Commission	A1011015	Southern California Edison	2011	Electric Depreciation Study
MultiState			Atmos Energy	2011	Shared Services Depreciation Study
Mississippi	Mississippi Public Service Commission	2011-UN-184	Atmos Energy	2011	Gas Depreciation Study

**Alliance Consulting Recent Engagements**  
**7/17/2012**

<b>Asset Location</b>	<b>Commission</b>	<b>Docket (If Applicable)</b>	<b>Company</b>	<b>Year</b>	<b>Description</b>
Texas	Texas Commission on Environmental Quality	Matter 37050-R	Southwest Water Company	2011	WasteWater Depreciation Study
Texas	Texas Commission on Environmental Quality	Matter 37049-R	Southwest Water Company	2011	Water Depreciation Study
MultiState			CenterPoint	2011	Shared Services Study
MultiState			CenterPoint	2011	Depreciation Reserve Study (SAP)
Pennsylvania	NA	NA	Safe Harbor	2011	Hydro Depreciation Study
Michigan	Michigan Public Service Commission	U-16536	Consumers Energy Company	2011	Wind Depreciation Rate Study
Texas	Public Utility Commission of Texas	38929	Oncor	2011	Electric Depreciation Study
Texas	Railroad Commission of Texas	10038	CenterPoint South TX	2010	Gas Depreciation Study
Multistate	NA	NA	Constellation Energy	2010	Fossil Generation Depreciation Study
Multistate	NA	NA	Constellation Energy Nuclear	2010	Nuclear Generation Depreciation Study
Alaska	Regulatory Commission of Alaska	U-10-070	Inside Passage Electric Cooperative	2010	Electric Depreciation Study
Texas	Public Utility Commission of Texas	36633	City Public Service of San Antonio	2010	Electric Depreciation Study
Texas	Texas Railroad Commission	10000	Atmos Pipeline Texas	2010	Gas Depreciation Study

**Alliance Consulting Recent Engagements**  
**7/17/2012**

<b>Asset Location</b>	<b>Commission</b>	<b>Docket (If Applicable)</b>	<b>Company</b>	<b>Year</b>	<b>Description</b>
Multi State – SE US	FERC	RP10-21-000	Florida Gas Transmission	2010	Gas Depreciation Study
Maine/ New Hampshire	FERC	10-896	Granite State Gas Transmission	2010	Gas Depreciation Study
Texas	Public Utility Commission of Texas	38480	Texas New Mexico Power	2010	Electric Depreciation Study
Texas	Public Utility Commission of Texas	38339	CenterPoint Electric	2010	Electric Depreciation Study
California	California Public Utility Commission	A10071007	California American Water	2009-2010	Water and Waste Water Depreciation Study
Texas	Texas Railroad Commission	10041	Atmos Amarillo	2010	Gas Depreciation Study
Georgia	Georgia Public Service Commission	31647	Atlanta Gas Light	2010	Gas Depreciation Study
Texas	Public Utility Commission of Texas	38147	Southwestern Public Service	2010	Electric Technical Update
Alaska	Regulatory Commission of Alaska	U-09-015	Alaska Electric Light and Power	2009-2010	Electric Depreciation Study
Michigan	Michigan Public Service Commission	In Progress	Edison Sault	2009	Electric Depreciation Study
Alaska	Regulatory Commission of Alaska	U-10-043	Utility Services of Alaska	2009-2010	Water Depreciation Study
Tennessee	Tennessee Regulatory Authority	09-000183	AGL – Chattanooga Gas	2009	Gas Depreciation Study
Michigan	Michigan Public Service Commission	U-16055	Consumers Energy/DTE Energy	2009-2010	Ludington Pumped Storage Depreciation Study
Michigan	Michigan Public Service Commission	U-16054	Consumers Energy	2009-2010	Electric Depreciation Study

**Alliance Consulting Recent Engagements**  
**7/17/2012**

<b>Asset Location</b>	<b>Commission</b>	<b>Docket (If Applicable)</b>	<b>Company</b>	<b>Year</b>	<b>Description</b>
Michigan	Michigan Public Service Commission	U-15963	Michigan Gas Utilities Corporation	2009	Gas Depreciation Study
New York	New York Public Service Commission		Key Span	2009	Generation Depreciation Study
Michigan	Michigan Public Service Commission	U-15989	Upper Peninsula Power Company	2009	Electric Depreciation Study
Texas	Railroad Commission of Texas	9869	Atmos Energy	2009	Shared Services Depreciation Study
Mississippi	Mississippi Public Service Commission	09-UN-334	CenterPoint Energy Mississippi	2009	Gas Depreciation Study
Texas	Railroad Commission of Texas	9902	CenterPoint Energy Houston	2009	Gas Depreciation Study
Iowa	NA		Cedar Falls Utility	2009	Telecommunications, Water, and Cable Utility
Wyoming	Wyoming Public Service Commission	30022-148-GR10	Source Gas	2009-2010	Gas Depreciation Study
Colorado	Colorado Public Utilities Commission	09AL-299E	Public Service of Colorado	2009	Electric Depreciation Study
Tennessee	Tennessee Regulatory Authority	11-00144	Piedmont Natural Gas	2009	Gas Depreciation Study
South Carolina	Public Service Commission of South Carolina		Piedmont Natural Gas	2009	Gas Depreciation Study
North Carolina	North Carolina Utilities Commission		Piedmont Natural Gas	2009	Gas Depreciation Study
Louisiana	Louisiana Public Service Commission	U-30689	Cleco	2008	Electric Depreciation Study

**Alliance Consulting Recent Engagements**  
**7/17/2012**

<b>Asset Location</b>	<b>Commission</b>	<b>Docket (If Applicable)</b>	<b>Company</b>	<b>Year</b>	<b>Description</b>
Texas	Public Utility Commission of Texas	35763	SPS	2008	Electric Production, Transmission, Distribution and General Plant Depreciation Study
Wisconsin	Wisconsin	05-DU-101	WE Energies	2008	Electric, Gas, Steam and Common Depreciation Studies
Arizona	NA	NA	Arizona Public Service	2008	Fixed Asset Consulting
Multiple States	NA	NA	Constellation Energy	2008	Generation Depreciation Study
North Dakota	North Dakota Public Service Commission	PU-07-776	Northern States Power	2008	Net Salvage
New Mexico	New Mexico Public Regulation Commission	07-00319-UT	SPS	2008	Testimony – Depreciation
Multiple States	Railroad Commission of Texas	9762	Atmos Energy	2007-2008	Shared Services Depreciation Study
Multiple States	None		Tennessee Valley Authority	2007-2008	Electric Generation and Transmission Depreciation Study
Colorado	Colorado Public Utilities Commission	Filed – no docket to date	Public Service of Colorado	2007-2008	Electric Depreciation Study
Colorado	Colorado Public Utilities Commission	10AL-963G	Public Service of Colorado	2007-2008	Gas Depreciation Study
Minnesota	Minnesota Public Utilities Commission	E015/D-08-422	Minnesota Power	2007-2008	Electric Depreciation Study

**Alliance Consulting Recent Engagements**  
**7/17/2012**

<b>Asset Location</b>	<b>Commission</b>	<b>Docket (If Applicable)</b>	<b>Company</b>	<b>Year</b>	<b>Description</b>
Texas	Public Utility Commission of Texas	35717	Oncor	2008	Electric Depreciation Study
Multiple States	NA	NA	Constellation Energy	2007	Generation Depreciation Study
Texas	Public Utility Commission of Texas	34040	Oncor	2007	Electric Depreciation Study
Michigan	Michigan Public Service Commission	U-15629	Consumers Energy	2006-2009	Gas Depreciation Study
Colorado	Colorado Public Utilities Commission	06-234-EG	Public Service of Colorado	2006	Electric Depreciation Study
Multiple States	Multiple	NA	CenterPoint Energy	2006	Shared Services Depreciation Study
Arkansas	Arkansas Public Service Commission	06-161-U	CenterPoint Energy – Arkla Gas	2006	Gas Distribution Depreciation Study and Removal Cost Study
Nevada	NA	NA	Nevada Power/Sierra Pacific	2006	ARO Consulting
Pennsylvania	NA	NA	Safe Harbor	2006	Hydro Depreciation Study
Utah, Nevada, California	NA	NA	Intermountain Power Authority	2006	Generation Depreciation Study
Texas, New Mexico	Public Utility Commission of Texas	32766	Xcel Energy	2005-2006	Electric Production, Transmission, Distribution and General Plant Depreciation Study
Texas	Railroad Commission of Texas	9670/9676	Atmos Energy Corp	2005-2006	Gas Distribution Depreciation Study

# **WIND ENERGY TRANSMISSION TEXAS**

## **ELECTRIC PLANT**

### **DEPRECIATION RATE STUDY**



<http://www.utilityalliance.com>

**WIND ENERGY TRANSMISSION TEXAS  
ELECTRIC PLANT  
DEPRECIATION RATE STUDY  
EXECUTIVE SUMMARY**

Wind Energy Transmission Texas ("WETT" or "Company") engaged Alliance Consulting Group to conduct a depreciation study of the Company's utility plant depreciable assets. The scope of the analysis included establishing depreciation rates that form the basis for a request for initial rates. WETT is a new entrant in the Texas electric market and is constructing approximately 374 miles of Competitive Renewable Energy Zone ("CREZ") facilities.

I conducted this study using a traditional depreciation study approach for life and net salvage adjusted to take into account the newness of WETT's investment (since its investment is at the beginning of its life). I used the broad group, average life, remaining life depreciation system. This methodology has been adopted by numerous state commissions, including the Public Utility Commission of Texas, and FERC. WETT has no existing depreciation rates; therefore, no comparison between existing and proposed depreciation rates is available. Appendix A to the study shows the computation of the requested depreciation rates.



**WIND ENERGY TEXAS TRANSMISISON  
ELECTRIC PLANT  
DEPRECIATION RATE STUDY  
AT IN-SERVICE DATE OF TRANSMISSION PLANT**

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**ATTACHMENTS**

- APPENDIX A - Accrual Rate**
- APPENDICES B-1 through B-3 - Calculation of Average Life by Account**
- APPENDIX C - Calculation of Net Salvage Percentages**

### **PURPOSE**

The purpose of this study is to develop depreciation and amortization rates for the projected depreciable and amortizable property for Wind Energy Texas Transmission assets when the facilities are placed in service. The account-based depreciation rates were designed to recover the total undepreciated investment, adjusted for net salvage, over the remaining life of WETT's property on a straight-line basis. Non-depreciable property was excluded from this study.

The Public Utility Commission of Texas awarded to WETT the right to construct CREZ transmission lines in PUC Dockets 38825, 38484, and 38295. Consistent with that award, WETT is constructing approximately 374 miles of 345 KV transmission line with approximately 1,360 lattice towers and 479 steel poles and various other transmission line and substation equipment.

## **STUDY RESULTS**

Depreciation rates for WETT's depreciable and amortizable property are shown in Appendix A. Appendices B-1 and B-2 present the calculation of average life by account. Appendix C shows net salvage parameters for utilities regulated by the Public Utility Commission of Texas whose depreciation parameters are available in the public domain. Because WETT is constructing a new transmission facility and has no historical information on which to establish net salvage parameters, the study calculated net salvage parameters by averaging the net salvage for similar types of assets approved by the Public Utility Commission of Texas for other Texas transmission utilities. The resulting averages were applied to WETT's assets.

## **GENERAL DISCUSSION**

### **Definition**

The term "depreciation" as used in this study is considered in the accounting sense, that is, a system of accounting that distributes the cost of assets, less net salvage (if any), over the estimated useful life of the assets in a systematic and rational manner. It is a process of allocation, not valuation. This expense is systematically allocated to accounting periods over the life of the properties. The amount allocated to any one accounting period does not necessarily represent the loss or decrease in value that will occur during that particular period. The Company accrues depreciation on the basis of the original cost of all depreciable property included in each functional property group. On retirement the full cost of depreciable property, less the net salvage value, is charged to the depreciation reserve.

### **Basis of Depreciation Estimates**

Annual and accrued depreciation were calculated in this study by the straight-line, remaining-life depreciation system. In this system, the annual depreciation accrual for each group (*i.e.* account) is computed by dividing the original cost of the group less depreciation reserve by the group's respective average service life. In this study, because WETT is constructing a new transmission facility, there is no current depreciation reserve. The respective service life for each group is determined by estimating the average service life for each type of asset within the group, and then dollar-weighting the individual lives to determine a group service life. The resulting annual accrual amounts of all depreciable property within each group was divided by the original cost of all depreciable property within the group to determine the depreciation rate for each group. The calculation of the depreciation expense, average service lives and depreciation rates are shown in Appendices A and B.

### **Actuarial Analysis**

Actuarial analysis (retirement rate method) was not available to be used due to the newness of WETT's assets and consequently, the lack of historical retirements. Average service lives for each type of asset was based on both Alliance's and WETT engineering experts' experience with similar assets, and future expectations for those assets.

### **Net Salvage Analysis**

Since the assets being analyzed are at the beginning of their lives, no traditional net salvage analysis was possible. Instead, the average of the net salvage rates approved by the Public Utility Commission of Texas for the same accounts of other Texas utilities was applied to WETT's assets. Appendix C shows net salvage parameters by account used by utilities in Texas. These percentages by account were averaged to estimate WETT's net salvage.

### **Depreciation Calculation Process**

Annual depreciation expense amounts for each account were calculated by the straight line, remaining life procedure. Because WETT is constructing a new transmission facility, the remaining life analysis is equivalent to the whole life of plant assets in this circumstance. In this calculation, the annual accrual rate is computed by the following equation,

$$\text{AnnualAccrualRate} = \frac{(100\% - \text{NetSalvagePercent})}{\text{AverageServiceLife}}$$

## **DETAILED DISCUSSION**

### **Depreciation Study Process**

During the initial data collection process, historical data is normally compiled from continuing property records and general ledger systems. However, since WETT's assets are new with no history available, we conducted interviews with engineering and operations personnel. I assigned lives to each asset type within each account based on the results of these interviews in conjunction with my own knowledge and experience gained from performing depreciation studies for transmission assets in Texas and the nation. I then used these lives to derive a composite average service life. One of the most important elements of performing a proper depreciation study is to understand how the Company utilizes assets and the environment of those assets. Interviews with engineering and operations personnel are important ways to allow the analyst to obtain information that is beneficial when evaluating the output from the life and net salvage programs in relation to the Company's actual asset utilization and environment. Information that was gleaned in these discussions is found both in the Detailed Discussion of this study and also in workpapers.

Since no operating history is available, net salvage is assigned based on the experience of other Texas utilities as approved by the Public Utility Commission in each utility's last respective rate case. The listing of utilities used and the calculation of the average net salvage percentage is found in Appendix C.

After assigning lives and net salvage, I calculated the accrual rates for each plant category. This final report documents my conclusions in recommending these accrual rates. The calculation of depreciation accruals and depreciation rates are found in Exhibit A. Recommendations for the various accounts are contained within the Detailed Discussion of this report.

### **Depreciation Rate Calculation**

Annual depreciation expense amounts for the depreciable accounts of WETT were calculated by the straight-line method, average life group ("ALG") procedure, and remaining-life technique. With this approach, remaining lives were calculated according to standard ALG expectancy techniques. For each plant account, the surviving investment, adjusted for estimated net salvage, is divided by the average life to yield the annual depreciation expense. Since these assets are new and have not incurred any depreciation expense, the book reserve is zero and remaining life is equal to average service life. These calculations are shown in Appendix A.

### **Remaining Life Calculation**

At the age of zero, Remaining Life is equal to Average Service Life. The average life of each asset group was calculated based on the expected life for each asset type included in the group and dollar-weighted to determine the average life of the group.

## **LIFE ESTIMATION**

### **INTANGIBLE PLANT**

#### **FERC Account 302 Intangible (59.70 years)**

This account consists of costs related to the application for a Certificate of Convenience and Necessity. The estimated balance in this account upon completion is \$14.1 million. The depreciation rates associated with this account reflect the average service life of the projected assets calculated from the time the assets are placed into service, which is assumed to be the time the entire transmission facility is placed into service. The recommended life for this account is 59.70 years based on the average life of all tangible assets. The calculation of the average life of all tangible assets used for this account is shown in Appendix B-2.

### **TRANSMISSION PLANT**

#### **FERC Account 350.2 Land Rights (70 years)**

This account consists of land rights used for transmission line assets. The estimated balance in this account is \$41.2 million when the entire transmission line goes into service. This study recommends a 70 year life based on the life of the longest-lived assets (transmission towers) occupying the land rights.

#### **FERC Account 352.0 Structures and Improvements (40 years)**

This account consists of structures and improvements associated with control houses and other miscellaneous structures in transmission substations. The projected balance once all transmission facilities are placed in service is \$1.3 million. The control building is estimated to have a 40 year life which is recommended for this account. This is shown in Appendix B-1.



**FERC Account 353.0 Station Equipment (37.15 years)**

This account consists of capacitors, shunt reactors, supply breakers, busses, protective relay panels and switches found in transmission substations. The projected balances in this account is \$42.6 million once the entire transmission facility is placed into service. The lives of the assets in this account vary from 15 years (remote terminal units or RTUs and surge arresters) to 40 years (e.g., conduit, cable trays and steel structures) with the predominant life for all assets being 40 years for assets such as capacitors, reactors and breakers). Due to the nature of these substations, they do not include transformers. Based on the dollar-weighted lives of the individual assets, this study recommends a life of 37.15 years as shown in Appendix B-1.

**FERC Account 354.0 Towers and Fixtures (70 years)**

This account consists of steel transmission towers including foundations and grounding. The projected balances in this account is \$208.6 million once the entire transmission facility is placed into service. The lives of the assets in this account are all estimated at 70 years. Based on the dollar-weighted lives of the individual assets, this study recommends a life of 70 years as shown in Appendix B-1.

**FERC Account 355.0 Poles and Fixtures (60 years)**

This account includes steel and concrete poles, anchors, anchor rods, other related equipment. The projected balance in this account is \$66.9 million. The lives of the assets in this account are all estimated at 60 years. Based on the dollar-weighted lives of the individual assets as shown in Appendix B-1, this study recommends a life of 60 years.

### **FERC Account 356.0 OH Conductors and Devices (47.74 years)**

This account includes overhead conductors, insulators and devices for transmission plant. The projected balance in this account is \$122.2 million. The lives of the assets in this account vary from 30 years (e.g., dampers, spacers and insulators) to 50 years (e.g., conductor and fiber optic cable) with the predominant life for all assets being 50 years. Based on the dollar-weighted lives of the individual assets as shown in Appendix B-1, this study recommends a life of 47.74 years.

## **REGIONAL TRANSMISSION AND OPERATIONS PLANT**

### **Regional Transmission and Operations Accounts, FERC Accounts 382.0-384.0**

#### **FERC Account 382.0 SCADA Hardware (3.0 years)**

This account includes all computer hardware associated with regional transmission and operations plant. These assets will reside in the Primary and Back-up Control Centers. The projected balance in this account is \$442 thousand. Based on the dollar-weighted lives of the individual as shown in Appendix B-1, this study recommends a life of 3.0 years.

#### **FERC Account 383.0 SCADA Software (10.0 years)**

This account includes all computer software associated with primary and backup Energy Management Systems or EMS at regional transmission centers. The projected balance in this account is \$400 thousand. Based on the dollar-weighted lives of the individual as shown in Appendix B-1, this study recommends a life of 10.0 years.

#### **FERC Account 384.0 Telecommunications (4.0 years)**

This account includes all communication equipment associated with regional transmission and operations plant. The projected balance in this account is \$200 thousand. Based on the dollar-weighted lives of the individual as shown in Appendix B-1, this study recommends a life of 4.0 years.

#### **FERC Account 385.0 Improvements (15.0 years)**

This account includes all improvements associated with regional transmission and operations plant. The projected balance in this account is \$1 million. Based on the dollar-weighted lives of the individual as shown in Appendix B-1, this study recommends a life of 15.0 years.

### **GENERAL PLANT**

#### **FERC Account 391.01 Computer Equipment (3 years)**

This account includes computer equipment which is used for general utility operations. The projected balance in this account is \$88 thousand. Assets in this account are estimated to have a life of 3 years which is recommended for this account. This is shown in Appendix B-1.

#### **FERC Account 391.02 Equipment (4 years)**

This account includes general office equipment. The projected balance in this account is \$43 thousand. Assets in this account are estimated to have a life of 4 years which is recommended for this account. This is shown in Appendix B-1.

#### **FERC Account 391.03 Computer Software (10 years)**

This account includes computer software. The projected balance in this account is \$603 thousand. Assets in this account are estimated to have a life of 10 years which is recommended for this account. This is shown in Appendix B-1.

#### **FERC Account 391.04 Furniture (20 years)**

This account includes furniture and fixtures used for general utility operations. The projected balance in this account is \$105 thousand. Assets in this account are estimated to have a life of 20 years which is recommended for this account. This is shown in Appendix B-1.

#### **FERC Account 391.05 Leasehold Improvements (5 years)**

This account includes leasehold improvements at company facilities. The projected balance in this account is \$43 thousand. Assets in this account are estimated to have a life of 5 years which is recommended for this account. This is shown in Appendix B-1.

### **SALVAGE ESTIMATION**

When a capital asset is retired, physically removed from service and finally disposed of, terminal retirement is said to have occurred. The residual value of a terminal retirement is called gross salvage. Net salvage is the difference between the gross salvage amount (what the asset can be sold for) and the removal cost (the cost to remove and dispose of the asset). Salvage and removal cost percentages are calculated by dividing the current cost of salvage or removal by the original installed cost of the asset. Some plant assets can experience significant negative removal cost percentages due to the timing of the original addition versus the retirement.

At the beginning of the life of the assets for WETT, there is no historical net salvage information that can be used to model net salvage rates. The general expectation (both in Texas and across the industry) is that most asset accounts within the transmission function will exhibit negative net salvage, with regional operations and general plant having a zero percent net salvage. In other words, for the negative net salvage, the cost to remove the assets from service (*i.e.* removal cost) will exceed any proceeds received from the scrap materials (*i.e.* gross salvage), if any, once the asset is removed from service.

Because the WETT transmission facilities have no historical net salvage information, the study looked to similarly situated utilities as a model for the expected net salvage associated with the WETT assets. The study looked at the net salvage characteristics most recently approved by the Public Utility Commission of Texas of the nine largest Texas utilities with publicly available information, and then performed a simple average. Some WETT asset accounts may have a higher level of effort required to remove the assets than other utilities (*i.e.* Account 354 – Transmission Towers due to the predominance of steel towers in the account as compared to other utilities), and some of the net salvage rates included in the calculation may understate removal cost given the age of the respective studies. However, given the lack of historical experience, the average net salvage is a reasonable basis on which to model net salvage for WETT assets.

### **Salvage Characteristics**

**Transmission, FERC Accounts 350.1-356.0**

The net salvage percentage applied to WETT's transmission assets is calculated using the average of the nine utilities in Texas as shown in Appendix C. A brief discussion of study recommendations for each account follows below.

**TRANSMISSION PLANT**

**FERC Account 350.2 Land Rights (0% Net Salvage)**

This account includes any salvage and removal cost of land rights used for transmission function assets. Land rights are not expected to have any salvage or removal cost. This study recommends a 0 percent net salvage.

**FERC Account 352.0 Structures and Improvements (-6% Net Salvage)**

This account includes any salvage and removal cost of structures and improvements in connection with control houses and other miscellaneous structures associated with transmission substations. As shown in Appendix C, the range of net salvage percentages from other Texas utilities is from negative 33 percent to a positive 5 percent (for Entergy from a study in the 1990s). The average of the eight Texas utilities (with one not reporting a net salvage percentage for this account) is negative 6 percent. This study recommends the average negative 6 percent net salvage for this account.

**FERC Account 353.0 Station Equipment (-9% Net Salvage)**

This account includes any salvage and removal cost of capacitors, shunt reactors, supply breakers, steel structures, protective relay panels and switches for transmission plant. As shown in Appendix C, the range of net salvage percentages from other Texas utilities is from negative 25 percent (AEP North) to a positive 2 percent (AEP Central). The average of the nine Texas utilities is negative 9 percent. This study recommends the average negative 9 percent net salvage for this account.

**FERC Account 354.0 Towers and Fixtures (-17% Net Salvage)**

This account includes any salvage and removal cost of steel transmission towers and fixtures. As shown in Appendix C, the range of net salvage percentages is from negative 34 percent to 0 percent (for Southwest Public Service which has few assets in this category, with all except Southwest Public Service being negative). The average of the nine Texas utilities is negative 17 percent. This study recommends the average negative 17 percent net salvage for this account.

**FERC Account 355.0 Poles and Fixtures (-37% Net Salvage)**

This account includes any salvage and removal cost of steel and concrete poles, anchors, anchor rods, other related equipment, and foundations for transmission plant. As shown in Appendix C, the range of net salvage percentages is from negative 100 percent to a positive 25 percent (for Entergy from a study in the 1990s with all except Entergy being negative). The average of the nine Texas utilities is negative 37 percent. This study recommends the average negative 37 percent net salvage for this account.

**FERC Account 356.0 OH Conductors and Devices (-28% Net Salvage)**

This account includes any salvage and removal cost of overhead conductors, insulators and devices for transmission plant. As shown in Appendix C, the range of net salvage percentages from other Texas utilities is from negative 74 percent to a positive 20 percent (for Entergy from a study in the 1990s with all except Entergy being negative or

zero). The average of the nine Texas utilities is negative 28 percent. This study recommends the average negative 28 percent net salvage for this account.

### **REGIONAL TRANSMISSION AND OPERATIONS PLANT**

#### **Regional Transmission and Operations Accounts, FERC Accounts 382.0-384.0**

##### **FERC Account 382.0 SCADA Hardware (0% Net salvage)**

This account includes gross salvage and cost of removal for all computer hardware associated with regional transmission and operations plant. It is not expected that the assets in this account will have any removal cost or salvage at the end of its life. This study recommends a 0 percent net salvage.

##### **FERC Account 383.0 SCADA Software (0% Net Salvage)**

This account includes gross salvage and cost of removal associated with computer software associated with primary and backup Energy Management Systems or EMS at regional transmission centers. It is not expected that the assets in this account will have any removal cost or salvage at the end of its life. This study recommends a 0 percent net salvage.

##### **FERC Account 384.0 Telecommunications (0% Net Salvage)**

This account includes gross salvage and cost of removal associated with communication equipment associated with regional transmission and operations plant. It is not expected that the assets in this account will have any removal cost or salvage at the end of its life. This study recommends a 0 percent net salvage.

##### **FERC Account 385.0 Improvements (0% Net Salvage)**

This account includes gross salvage and cost of removal associated with improvements associated with regional transmission and operations plant. It is not expected that the assets in this account will have any removal cost or salvage at the end of its life. This study recommends a 0 percent net salvage.



## **GENERAL PLANT**

### **FERC Account 391.01 Computer Equipment (0% Net Salvage)**

This account includes any salvage or removal cost for computer equipment which is used for general utility operations. It is not expected that the assets in this account will have any removal cost or salvage at the end of its life. This study recommends a 0 percent net salvage.

### **FERC Account 391.02 Equipment (0% Net Salvage)**

This account includes any salvage or cost of removal for general office equipment. It is not expected that the assets in this account will have any removal cost or salvage at the end of its life. This study recommends a 0 percent net salvage.

### **FERC Account 391.03 Computer Software (0% Net Salvage)**

This account includes any gross salvage or removal cost for computer software. It is not expected that the assets in this account will have any removal cost or salvage at the end of its life. This study recommends a 0 percent net salvage.

### **FERC Account 391.04 Furniture (0% Net Salvage)**

This account includes any gross salvage or cost of removal for furniture and fixtures used for general utility operationst. It is not expected that the assets in this account will have any removal cost or salvage at the end of its life. This study recommends a 0 percent net salvage.

### **FERC Account 391.05 Leasehold Improvements (0% Net Salvage)**

This account includes any gross salvage or cost of removal for leasehold improvements at company facilities. Typically assets in this account will have no net salvage at the end of its life. This study recommends a 0 percent net salvage.



**APPENDIX A**  
**Accrual Rate**

**Wind Energy Transmission Texas, LLC**  
**Computation of Proposed Depreciation Accrual Rate**

Appendix A

FINAL Acct	Total Project Cost	Accumulated Depreciation	Average Life	Net Salvage %	Proposed Annual Accrual	Proposed Accrual Rate
302 Intangible	14,080,427.50	0.00	59.70	0%	236,551.18	1.68%
350.1 Fee Land	1,059,910.79	0.00	NA	NA	NA	NA
350.2 Land Rights	41,153,306.00	0.00	70.00	0%	588,492.28	1.43%
352 Structures and Improvements	1,293,190.00	0.00	40.00	-6%	34,269.54	2.65%
353 Station Equipment	42,630,795.03	0.00	37.15	-9%	1,249,082.29	2.93%
354 Transmission Towers	208,640,380.35	0.00	70.00	-17%	3,484,294.35	1.67%
355 Transmission Poles	66,913,427.42	0.00	60.00	-37%	1,525,626.15	2.28%
356 Conductor and Other Devices	122,179,696.18	0.00	47.74	-28%	3,274,415.86	2.68%
Transmission Composite						2.10%
382 SCADA Hardware, Primary and Back-up	442,443.00		3.00	0%	147,466.25	33.33%
383 SCADA Software, Primary and Back-up	399,957.00		10.00	0%	39,995.70	10.00%
384 Communications, Primary and Back-up	200,000.00		4.00	0%	50,000.00	25.00%
385 Improvements, Primary/Backup & Gene	1,000,000.00		15.00	0%	66,700.00	6.67%
Regional Transmission Composite						14.89%
391.01 Computer Equipment	87,570.67	0.00	3.00	0%	29,187.30	33.33%
391.02 Equipment	43,131.07	0.00	4.00	0%	10,782.77	25.00%
391.03 Software	603,020.62	0.00	10.00	0%	60,302.06	10.00%
391.04 Furniture	105,274.13	0.00	20.00	0%	5,263.71	5.00%
391.05 Leasehold Improvements	43,093.47	0.00	5.00	0%	8,618.69	20.00%
General Plant Composite						12.94%
Total	500,875,623.23				10,811,048.13	

**APPENDICES B-1 THROUGH B-2**  
**Calculation of Average Life by Account**

Wind Energy Transmission Texas, LLC  
Calculation of Average Life by Account

Acct	Description	Plant Total	Useful Life	\$ x Useful Life	Average Service Life
350.1	Land	1,059,910.79	NA	NA	
<b>350.1 Total</b>		<b>1,059,910.79</b>			
350.2	ROW	41,153,306.00	70	2,880,731,420	0
<b>350.2 Total</b>		<b>41,153,306.00</b>		<b>2,880,731,420</b>	<b>70.00</b>
352	CONTROL BUILDING	1,293,190.00	40	51,727,600	
<b>352 Total</b>		<b>1,293,190.00</b>		<b>51,727,600</b>	<b>40.00</b>
353	SHUNT REACTOR	2,041,433.14	40	81,657,325	
353	CAPACITOR BANK	342,744.59	40	13,709,784	
353	CIRCUIT BREAKER	8,453,468.25	40	338,138,730	
353	DISC SWITCHES	2,312,806.78	30	69,384,203	
353	CCVT	708,244.09	30	21,247,323	
353	SURGE ARRESTORS	231,643.74	15	3,474,656	
353	PANEL & RELAYS	2,279,015.97	20	45,580,319	
353	BATTERIES	320,259.45	20	6,405,189	
353	AC/DC SYSTEMS	552,779.75	20	11,055,595	
353	TELECOMM	810,993.81	20	16,219,876	
353	STEEL STRUCTURES	5,480,254.44	40	219,210,177	
353	CONTROL CABLE & LUGS	2,252,531.39	40	90,101,256	
353	TRENCH	1,384,702.70	40	55,388,108	
353	ALUMINIUM BUS	651,064.89	40	26,042,596	
353	INSULATORS	641,714.42	30	19,251,433	
353	GROUNDING	878,052.89	40	35,122,116	
353	OTHER MATERIALS	3,217,703.87	40	128,708,155	
353	SPARE PARTS	1,228,276.47	40	49,131,059	
353	GRADING	3,829,980.00	40	153,199,200	
353	FOUNDATIONS	5,013,124.38	40	200,524,975	
<b>353 Total</b>		<b>42,630,795.03</b>		<b>1,583,552,075</b>	<b>37.15</b>
354	TOWERS	133,415,400.94	70	9,339,078,066	
354	GROUNDING MATERIAL	537,117.43	70	37,598,220	
354	FOUNDATION	73,211,067.53	70	5,124,774,727	
354	GROUNDING	1,476,794.45	70	103,375,611	
<b>354 Total</b>		<b>208,640,380.35</b>		<b>14,604,826,624</b>	<b>70.00</b>

Wind Energy Transmission Texas, LLC  
Calculation of Average Life by Account

Acct	Description	Plant Total	Useful Life	\$ x Useful Life	Average Service Life
355	Poles and fixtures	66,913,427.42	60	4,014,805,645	
<b>355 Total</b>		<b>66,913,427.42</b>		<b>4,014,805,645</b>	<b>60.00</b>
356	CONDUCTOR / CABLE	44,809,414.60	50	2,240,470,730	
356	OPGW	4,486,142.35	50	224,307,117	
356	INSULATORS & HARDWARE	11,320,828.00	30	339,624,840	
356	DAMPERS/SPACERS	1,879,473.23	30	56,384,197	
356	BIRD DIVERTERS	85,783.00	30	2,573,490	
356	MARKER BALLS	502,264.00	30	15,067,920	
356	STRINGING	51,271,227.00	50	2,563,561,350	
356	TRIM OUT	7,824,564.00	50	391,228,200	
<b>356 Total</b>		<b>122,179,696.18</b>		<b>5,833,217,844</b>	<b>47.74</b>
382	SCADA Hardware, Primary and Back-up	\$442,443.00	3	1,327,329	
<b>382 Total</b>		<b>442,443.00</b>		<b>1,327,329</b>	<b>3.00</b>
383	SCADA Software, Primary and Back-up	399,957.00	10	3,999,570	
<b>383 Total</b>		<b>399,957.00</b>		<b>3,999,570</b>	<b>10.00</b>
384	Communications, Primary and Back-up	\$ 200,000.00	4	800,000	
<b>384 Total</b>		<b>200,000.00</b>		<b>800,000</b>	<b>4.00</b>
385	Improvements, Primary/Backup & Generators	1,000,000.00	15	15,000,000	
<b>385 Total</b>		<b>1,000,000.00</b>		<b>15,000,000</b>	<b>15.00</b>
391.1	Computer Hardware	87,570.67	3	262,712	
<b>391.1 Total</b>		<b>87,570.67</b>		<b>262,712</b>	<b>3.00</b>
391.2	Office Equipment	43,131.07	4	172,524	
<b>391.1 Total</b>		<b>43,131.07</b>		<b>172,524</b>	<b>4.00</b>
391.3	Computer Software	603,020.62	10	6,030,206	
<b>391.1 Total</b>		<b>603,020.62</b>		<b>6,030,206</b>	<b>10.00</b>

Wind Energy Transmission Texas, LLC  
Calculation of Average Life by Account

Appendix B-1

Acct	Description	Plant Total	Useful Life	\$ x Useful Life	Average Service Life
391.4	Office Furniture	105,274.13	20	2,105,483	
391.1 Total		105,274.13		2,105,483	20.00
391.5	Leasehold Improvements	43,093.47	5	215,467	
391.5 Total		43,093.47		215,467	5.00
302	INTANGIBLES	14,080,427.50			
302 Total		14,080,427.50			
Total	Final	500,875,623.03			



Wind Energy Transmission Texas, LLC  
Calculation of Average Life of Tangible Assets  
For Use in Amortization of Account 302

Appendix B-2

Acct	Description	Total Project Cost	Average Life	\$ x Avg Life	Average Life
350.2	Land Rights	\$ 41,153,306	70.00	2,880,731,420	
352	Structures and Improvements	\$ 1,293,190	40.00	51,727,600	
353	Station Equipment	\$ 42,630,795	37.15	1,583,734,035	
354	Transmission Towers	\$ 208,640,380	70.00	14,604,826,624	
355	Transmission Poles	\$ 66,913,427	60.00	4,014,805,645	
356	Conductor and Other Devices	\$ 122,179,696	47.74	5,832,858,696	
382	SCADA Hardware, Primary and Back-up	\$ 442,443	3.00	1,327,329	
383	SCADA Software, Primary and Back-up	\$ 399,957	10.00	3,999,570	
384	Communications, Primary and Back-up	\$ 200,000	4.00	800,000	
385	Improvements, Primary/Backup & Generators	\$ 1,000,000	15.00	15,000,000	
391.01	Computer Equipment	\$ 87,571	3.00	262,712	
391.02	Equipment	\$ 43,131	4.00	172,524	
391.03	Software	\$ 603,021	10.00	6,030,206	
391.04	Furniture	\$ 105,274	20.00	2,105,483	
391.05	Leasehold Improvements	\$ 43,093	5.00	215,467	
Total		\$ 485,735,285		28,998,597,312	59.70
* Excludes Intangibles and Land					
350.1	Land	\$ 1,059,911			
302	INTANGIBLES	\$ 14,080,428			
Total		\$ 500,875,623			

**APPENDIX C**  
**Calculation of Net Salvage Percentages**