

Exhibit No.:
Issue: Depreciation Rates
Witness: Thomas J. Sullivan
Type of Exhibit: Surrebuttal Testimony
Sponsoring Party: Empire District Electric
Case No. ER-2016-0023
Date Testimony Prepared: May 2016

**BEFORE THE
MISSOURI PUBLIC SERVICE COMMISSION**

Case No. ER-2016-0023

The Empire District Electric Company

Surrebuttal Testimony of

Thomas J. Sullivan

Issue:

Depreciation Rates

**SURREBUTTAL TESTIMONY
OF THOMAS J. SULLIVAN
BEFORE THE
MISSOURI PUBLIC SERVICE COMMISSION
CASE NO. ER-2016-0023**

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

2 A. Thomas J. Sullivan, 15898 Millville Road, Richmond, Missouri 64085.

3 **Q. ARE YOU THE SAME THOMAS J. SULLIVAN WHO FILED DIRECT AND**
4 **REBUTTAL TESTIMONIES IN THIS MATTER BEFORE THE MISSOURI**
5 **PUBLIC SERVICE COMMISSION (“COMMISSION”) ON BEHALF OF THE**
6 **EMPIRE DISTRICT ELECTRIC COMPANY (“EMPIRE” OR “COMPANY”)?**

7 A. Yes, I am.

8 **Q. DO YOU SPONSOR ANY EXHIBITS WITH YOUR SURREBUTTAL**
9 **TESTIMONY?**

10 A. Yes. I sponsor two exhibits. Schedule TJS-5 is a copy of Page A-14 from my
11 Depreciation Study for Empire dated September 2010. Schedule TJS-6 contains
12 a 2006-2015 History of Accumulated Reserve for Depreciation for Empire.

13 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

14 A. I will address statements regarding cost of removal made in the rebuttal
15 testimony of Ms. Amanda C. McMellen of the Missouri Public Service
16 Commission Staff (“Staff”) and regarding the Riverton reserve deficiency
17 amortization in the rebuttal testimony of Mr. John A. Robinett of Staff.

18 **Q. PLEASE IDENTIFY WHERE YOU HAVE AN ISSUE WITH MS. MCMELLEN’S**
19 **REBUTTAL TESTIMONY.**

1 A. In response to her question beginning on Line 16 of Page 2 of her rebuttal
2 testimony which asks “Is it reasonable to expect the amount of cost of removal
3 collected in rates by a utility will ever be equal to the amount of cost of removal
4 actually incurred by a utility”, Ms. McMellen states the following:

5 “No. Current ratemaking policy allows for collection in rates of estimated
6 cost of removal amounts in some cases decades in advance of when
7 actual expenditures are expected to be made. This means, as a practical
8 matter, that the amount of cost of removal collected in rates will never be
9 “trued-up” to the amount of actual costs of removal expenditures for a
10 company.”
11

12 **Q. DO YOU AGREE WITH MS. MCMELLEN’S STATEMENT?**

13 A. No. Although it is true that cost of removal is estimated in advance, the amount
14 collected from ratepayers may later be “trued-up” or matched against the actual
15 costs incurred by the utility. The intent of the depreciation rates I have developed
16 is to collect all of the capital required for the infrastructure necessary to provide
17 service to customers. This includes the capital investment made less salvage
18 value offset by the cost to remove the plant, no more and no less, over the useful
19 life of the asset. Often times the cost of removal exceeds the salvage value
20 resulting in an addition to the amount to collect through depreciation over the
21 service life of the asset. The development of depreciation rates is based both on
22 estimates of the useful life of the asset as well as estimates of the salvage and
23 cost of removal. To the extent possible, these estimates are based on the
24 utility’s historical experience.

25 Even though the depreciation rates are based on estimates, the actual
26 costs incurred, the capital investment and the cost of removal, are not estimates.

1 When an asset is retired, the original cost of the asset is deducted from both the
2 plant in service and the accumulated reserve for depreciation. If there is a cost
3 of removing that asset, the actual removal cost (less any salvage realized) is also
4 deducted from the accumulated reserve for depreciation. If over the life of an
5 asset, the estimates used to determine the assets useful life and the cost of
6 removal estimates differ from the actual life of the asset and the actual cost of
7 removal, those differences will be reflected in a residual balance (positive or
8 negative) in the accumulated reserve for depreciation after the asset is retired
9 and the cost of removal is incurred. At some point, either the depreciation rate
10 will need to be adjusted to remove these differences (as would generally be the
11 case on mass accounts) or the difference should be amortized over a reasonable
12 period of time after the asset is retired (as I am recommending for unit properties
13 such as Riverton 7 and 8).

14 Ms. McMellen's statement that because the cost of removal allowances
15 that are included in depreciation rates are based on estimates, they will never be
16 trued-up appears to imply that this is somehow an underlying fact of ratemaking.
17 This is never my intent in developing depreciation rates, and there are
18 reasonable mechanisms in place that allow for differences in depreciation
19 expense accrual and actual cost to be aligned, preferably as closely as possible
20 over the assets useful life.

21 As an example, the cost of purchased gas that is reflected in the current
22 rates a natural gas customer pays are based on estimates of gas cost and the
23 amount of gas purchased. To the extent that the amount of gas cost recovered

1 from customers differs from the amount of cost incurred, these differences are
2 quantified and then reflected in subsequent rate design. The same logic applies
3 to properly developed depreciation rates.

4 **Q. PLEASE SUMMARIZE THE ISSUE YOU WISH TO ADDRESS IN MR.**
5 **ROBINETT'S REBUTTAL TESTIMONY.**

6 A. On Pages 2 and 3 of his rebuttal testimony, Mr. Robinett makes a series of
7 inaccurate statements and assumptions that form the false foundation upon
8 which his recommended treatment of the reserve deficiency for Riverton 7 and 8
9 is based. On Page 2, Lines 12 through 18, he compares information provided in
10 Case No. ER-2010-0310 to different information provided in Case No. ER-2011-
11 0004, and he incorrectly assumes that because the information is different that
12 the Company must have created detail in reserve balances that did not exist prior
13 to 2011, which in turn created the reserve deficiency. Mr. Robinette further
14 states on Page 3, Lines 4 and 5, that "The change in depreciation method has
15 forced the deficiency issue by separating reserves by generation facility..."
16 These statements or conclusions are false.

17 **Q. DID THE CHANGE IN METHODOLOGY TO THE LIFE SPAN METHOD IN**
18 **CASE NO. ER-2011-004 CREATE THE RESERVE DEFICIENCY ON**
19 **RIVERTON 7 AND 8?**

20 A. No. The reserve deficiency on Riverton 7 and 8 resulted because the
21 depreciation rates that were used over the life of these plants were insufficient to
22 accumulate a depreciation reserve balance sufficient to cover the cost of the
23 plant and the cost of dismantling that plant. In other words, at the time the plant

1 was retired, the accumulated depreciation balance was less than the plant
2 balance plus the cost of dismantling the plant.

3 The depreciation reserve consists of the accumulated actual depreciation
4 expense, retirements, and net salvage actually booked over the life of the plants.
5 A change in methodology cannot change the historical actual amount booked to
6 the asset, unless reserve is explicitly transferred to or from the asset, and this did
7 not occur as a result of Case No. ER-2011-0004.

8 **Q. IS THERE A POSSIBLE EXPLANATION FOR MR. ROBINETT'S**
9 **MISUNDERSTANDING?**

10 A. Yes. It appears as though Mr. Robinett might be confusing actual booked
11 depreciation reserve with theoretical depreciation reserve that is part of the
12 depreciation analysis associated with whole life rates.

13 Prior to the assets retirement, we can estimate, based on the proposed
14 depreciation rate, whether the remaining plant balance will be fully depreciated
15 over its remaining life based on a recommended depreciation rate. If such a
16 depreciation rate will not fully depreciate the asset, a theoretical reserve
17 deficiency can be estimated and recommendation made to adjust the
18 depreciation rate to better align the depreciation expense such that the asset is
19 fully depreciated at the end of its useful life. Conversely, if such a rate will over
20 depreciate an asset, a like adjustment can be made. This analysis is generally
21 applicable only to the whole life methodology. Since actual depreciation reserve
22 is explicitly used in the remaining life method calculation, the depreciation rate is
23 explicitly designed to recover the undepreciated balance over the remaining life

1 of the asset. While an asset is still in service, a change in depreciation rate can
2 result in a change in the calculation of a theoretical deficiency or excess, but has
3 no impact on the actual accumulated depreciation reserve.

4 **Q. DOES THE THEORETICAL RESERVE ANALYSIS HAVE ANYTHING TO DO**
5 **WITH THE RIVERTON RESERVE DEFICIENCY?**

6 A. No. There were no adjustments made to depreciation rates or depreciation
7 reserve in Case No. ER-2011-0004 based on any estimated reserve deficiencies
8 or excesses. Further, and most importantly, once Riverton 7 and 8 were retired,
9 the reserve deficiency is not a theoretical number, it is an actual number.

10 **Q. DID THE COMPANY CREATE RESERVE BALANCES BY PLANT FOR THE**
11 **2011 RATE CASE THAT DID NOT EXIST PRIOR TO THE 2011 RATE CASE?**

12 A. No. Mr. Robinett is comparing less detailed information from Case No. ER-2010-
13 0130 that summarizes plant reserve by production type or function to different
14 and more detailed information in Case No. ER-2011-0004, and makes the
15 erroneous conclusion that the more detailed data did not exist prior to Case No.
16 ER-2011-0004.

17 Using this improper apples to oranges comparison, on Page 3, beginning
18 on Line 2 of his rebuttal testimony, Mr. Robinett makes the following false
19 conclusion:

20 "The change to the Life Span method, or its further subset remaining life,
21 has now tied reserves specifically to an individual unit to recover over the
22 life of a facility. Previously, reserves were aggregated by production type.
23 The change in depreciation method has forced the deficiency issue by
24 separating reserve by generation facility and not by type."
25

1 **Q. DID THE COMPANY MAINTAIN DEPRECIATION RESERVE BALANCES**
2 **PRIOR TO THE 2011 RATE CASE?**

3 A. Yes. The depreciation report I sponsored in Case No. ER-2011-0004 was based
4 on Company data through December 31, 2009 (“2010 Report”). In that report, I
5 calculated remaining life rates by generating unit based on the Company’s actual
6 booked depreciation reserve at December 31, 2009. Attached to my surrebuttal
7 testimony is Schedule TJS-5 which shows the calculation of a remaining life rate
8 for the Riverton plant based on Accumulated Depreciation (EOY 2009). This
9 figure predates both of the pieces of information cited in Mr. Robinett’s rebuttal
10 testimony in this case where he claims such a figure did not exist prior to Case
11 No. ER-2011-0004.

12 Further, Schedule 4 of Mr. Gregory E. Macias’s Direct Testimony filed on
13 behalf of the Missouri Public Service Commission Staff in Case No. ER-2004-
14 0570 dated September 30, 2004 shows book reserve at December 31, 2003 by
15 generating unit (the same level of detail used in both my 2010 and 2015 reports).

16 In addition, I asked the Company to provide me the actual depreciation
17 reserve balances by account by plant for the last 10 years (back to 2006). This
18 analysis is contained in Schedule TJS-6. In Schedule TJS-6, the sum of the
19 figures on Lines 3 through 7 in the 2009 column match the number shown in
20 Schedule TJS-5 (\$28,774,554). Clearly, the Company maintained depreciation
21 reserve balances before and since the preparation of my 2010 report.

22 Mr. Robinett’s claim that depreciation reserve balances by plant did not
23 exist prior to Case No. ER-2011-0004 is false. His further claim that the use of

1 the life span method resulted in the creation of reserve balances by plant is also
2 false, as demonstrated by the balances that existed prior to the use of this
3 methodology.

4 **Q. IS THERE ANY OTHER AREA OF CONFUSION IN THE STAFF'S POSITION**
5 **THAT YOU WOULD LIKE TO CLARIFY?**

6 A. Yes. I would like to clarify how a unit property should be defined for purposes of
7 depreciation rates and depreciation reserve. The depreciation rates I am
8 recommending for the Company break down the Company's generating assets
9 into the following unit properties:

10 Asbury

11 Riverton Stream – Riverton 7 and 8

12 Iatan 1

13 Iatan 2

14 Plum Point

15 Ozark Beach Hydroelectric

16 State Line Combined Cycle

17 State Line Combustion Turbine

18 Energy Center 1 and 2

19 Energy Center 3 and 4

20 Riverton Combustion Turbine

21 Riverton (12) Combined Cycle

22 Throughout my report and testimony, and throughout the Staff's report and
23 testimony, different terms such as plants or units may be used, but the units

1 listed above are the discrete units for which I have developed separate
2 depreciation rates, as shown in my depreciation study, Schedule TJS-2.

3 The Company maintains depreciation reserve at this level of detail and the
4 Company did not create this level of detail as a result of switching from the whole
5 life method to the lifespan or remaining life method, as claimed by the Staff.
6 Reports that may have shown lesser detail than the detail level shown above
7 would simply be a summary of the detail shown above. For example, figures
8 showing steam production plant would have been the summation of Asbury,
9 Riverton Steam, Iatan 1, Iatan 2, and Plum Point; figures showing hydraulic
10 production plant would have included Ozark Beach; figures showing other
11 production plant would have included the remaining facilities.

12 While Riverton Steam could be further broken down into the individual
13 generating units (7 and 8), the depreciation analysis and recommendations I
14 have made do not require that information be broken down to this level of detail.
15 I have never recommended depreciation rates for Riverton Unit 7 separate and
16 unique from Riverton Unit 8, and I have never considered them separately when
17 addressing the issue of depreciation reserve.

18 **Q. WHAT IS YOUR RECOMMENDATION REGARDING STAFF'S PROPOSED**
19 **TREATMENT OF THE ACTUAL RIVERTON DEPRECIATION RESERVE**
20 **DEFICIENCY?**

21 A. Staff's recommendation should be rejected. It is based on false and erroneous
22 assumptions regarding the Company's depreciation reserve balances. The
23 Staff's recommendation is based on the assumption that the reserve balances

1 were “created” on or around 2011 and are therefore not actually specific to each
2 generating plant. The facts do not support this assumption or conclusion.
3 Therefore, the Staff’s recommendation that the reserve deficiency associated
4 with the Riverton steam plant be transferred to other generating units should be
5 rejected.

6 **Q. DOES THIS COMPLETE YOUR PREPARED SURREBUTTAL TESTIMONY?**

7 A. Yes, it does.

APPENDIX

THE EMPIRE DISTRICT ELECTRIC COMPANY
DEPRECIATION STUDY

Summary by Plant
The Empire District Electric Company
Riverton Plant

Account	Description	Direct Investment 2009\$	Depreciation Rate
310	Land	0	0.00%
311	Structure & Improvements	11,401,578	3.67%
312	Boiler Plant Equipment	23,866,305	3.08%
314	Turbo Generator Equipment	7,130,958	2.39%
315	Accessory Electric Equipment	1,570,339	1.85%
316	Misc Power Equipment	2,114,350	5.27%
Total		46,083,530	3.18% whole life weighted average rate

Remaining Life Depreciation Rate Calculation

Per Books Balance 12/31/09	46,083,530
Forecast Interim Additions	3,066,861
Forecast Gross Salvage Value	2,423,448
Forecast Less Cost of Removal	4,846,897
Forecast Net Salvage Value	(2,423,448)
Forecast Total to be Recovered with COR	51,573,839
Forecast Total to be Recovered w/o COR	46,726,942
Accumulated Depreciation (2009 EOY)	(28,774,554)
Forecast Remaining Life Balance with COR	22,799,286
Forecast Remaining Life Balance w/o COR	17,952,389
Forecast Plant Balances	379,292,566
Remaining Life Rate with COR	6.01%
Remaining Life Rate w/o COR	4.73%
Reserve Variance with COR	(10,744,830)

			Accumulated Reserve for Depreciation Balance at December 31									
Line	Account	Description	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
			\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1	RIVERTON											
2	310	Land	-	-	-	-	-	-	-	-	-	-
3	311	Structures	2,794,338	2,894,467	3,014,503	3,134,707	3,257,870	3,401,010	3,540,647	3,904,280	3,786,077	961,286
4	312	Boiler Plant	16,602,265	16,249,358	16,644,712	17,085,988	17,496,087	17,856,810	18,353,659	18,868,978	10,765,138	(4,502,447)
5	314	Turbogenerators	6,514,191	6,557,681	6,586,376	6,457,717	6,571,246	6,704,669	6,836,140	7,011,470	4,064,909	(1,390,628)
6	315	Access. Electric	1,427,325	1,287,707	1,287,707	1,315,901	1,344,116	1,373,255	1,403,077	1,433,433	1,320,023	266,769
7	316	Misc. Equipment	701,845	722,527	742,576	780,241	819,221	838,036	862,687	912,012	901,438	41,047
8	ASBURY											
9	310	Land	-	-	-	-	-	-	-	-	-	-
10	311	Structures	3,521,520	3,640,256	3,785,016	3,935,220	4,077,422	3,796,047	3,707,205	3,772,672	4,054,373	4,934,264
11	312	Boiler Plant	21,074,101	19,926,097	21,704,104	23,705,111	25,352,978	27,281,740	27,628,095	31,407,251	23,923,643	30,491,867
12	312	(Unit Train)	5,489,556	5,594	5,594	5,594	5,594	5,594	5,594	-	-	-
13	314	Turbogenerators	8,874,813	9,068,143	9,284,707	9,650,100	9,942,339	10,301,923	10,634,968	8,134,892	3,879,472	4,532,758
14	315	Access. Electric	1,877,184	1,916,931	1,959,271	2,052,085	2,069,863	1,986,527	2,050,050	2,164,712	2,195,678	2,380,239
15	316	Misc. Equipment	873,680	893,007	930,801	970,825	982,909	1,019,630	1,022,535	1,096,956	961,930	1,024,687
16	IATAN 1											
17	310	Land	-	-	-	-	-	-	-	-	-	-
18	311	Structures	2,345,550	2,354,516	2,398,249	2,442,198	2,560,235	2,645,757	2,690,125	2,765,869	2,692,543	2,578,129
19	312	Boiler Plant	25,222,913	23,944,013	24,368,626	25,923,300	23,411,574	24,267,837	25,707,158	27,703,474	29,738,977	30,435,753
20	312	(Unit Train)	(0)	(0)	(0)	(0)	0	14,085	34,963	55,933	76,924	97,911
21	314	Turbogenerators	5,359,139	5,096,299	5,183,101	5,317,186	4,676,739	4,787,962	4,930,440	5,150,622	5,355,678	4,844,540
22	315	Access. Electric	2,510,713	1,752,250	1,846,636	1,965,944	2,175,850	2,345,591	2,486,545	2,723,337	2,981,400	3,207,924
23	316	Misc. Equipment	405,635	391,563	411,390	430,200	705,697	918,314	935,140	965,780	1,007,595	1,019,945
24	IATAN 2											
25	311	Structures	-	-	-	-	-	236,914	567,483	945,412	1,345,481	1,848,594
26	311	Reg Plan Amort	-	-	-	-	-	-	3,906,666	3,906,666	3,906,666	3,544,751
27	312	Boiler Plant	-	-	-	-	-	1,526,375	3,300,546	5,761,376	8,502,561	12,796,565
28	312	Reg Plan Amort	-	-	-	-	-	-	17,507,238	17,507,238	17,507,238	23,321,791
29	314	Turbogenerators	-	-	-	-	-	228,957	509,516	1,297,909	2,263,128	4,189,432
30	314	Reg Plan Amort	-	-	-	-	-	-	2,917,873	2,917,873	2,917,873	8,319,550
31	315	Access. Electric	-	-	-	-	-	259,028	581,923	844,162	1,091,157	1,061,296
32	315	Reg Plan Amort	-	-	-	-	-	-	2,910,410	2,910,410	2,910,410	2,101,102
33	316	Misc. Equipment	-	-	-	-	-	924,649	2,030,998	2,297,040	2,296,004	19,222
34	316	Reg Plan Amort	-	-	-	-	-	-	10,070,766	10,070,766	10,070,766	25,758

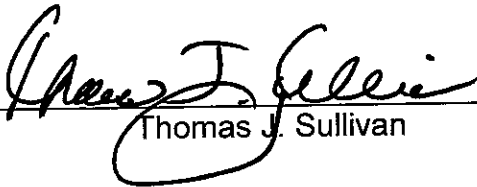
			Accumulated Reserve for Depreciation Balance at December 31									
Line	Account	Description	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
			\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
35	IATAN COMMON											
36	310		-	-	-	-	-	-	-	-	-	-
37	311	Structures	-	-	-	-	-	(37)	5,338	122,575	396,386	674,833
38	312	Boiler Plant	-	-	-	-	-	833,685	1,863,886	2,830,477	3,618,423	4,446,735
39	314	Turbogenerators	-	-	-	-	-	-	-	10,306	35,097	60,172
40	315	Access. Electric	-	-	-	-	-	-	19	40,804	138,594	236,944
41	316	Misc. Equipment	-	-	-	-	-	3,069	9,418	18,287	27,240	39,875
42	PLUM POINT											
43	310	Structures	-	-	-	-	-	-	-	-	-	-
44	311	Boiler Plant	-	-	-	-	110,289	429,784	654,147	1,013,370	1,417,641	1,821,966
45	312	Turbogenerators	-	-	-	-	298,217	1,200,577	2,185,698	3,248,253	3,984,918	5,086,102
46	312	(Unit Train)	-	-	-	-	169,617	518,961	853,506	1,189,218	1,525,274	1,858,069
47	314	Turbogenerators	-	-	-	-	54,180	223,955	495,971	821,264	1,159,784	1,502,921
48	315	Access. Electric	-	-	-	-	41,897	166,617	283,434	387,710	495,457	603,112
49	316	Misc. Equipment	-	-	-	-	44,833	167,843	226,052	287,178	349,001	410,393
50	HYDRO											
51	330	Land	-	-	-	-	-	-	-	-	-	-
52	331	Structures	239,275	248,644	259,194	269,291	280,593	291,792	302,945	315,588	325,891	335,622
53	332	Dams	1,322,680	1,346,998	1,364,244	1,352,396	1,355,299	1,382,633	1,440,832	1,373,767	1,368,904	1,404,787
54	333	Turbogenerators	386,529	410,246	433,964	457,710	481,590	505,800	529,938	570,771	617,071	547,988
55	334	Access. Electric	188,302	200,104	211,888	229,459	247,870	266,192	274,889	298,066	309,583	335,851
56	335	Misc. Equipment	157,169	166,079	167,310	177,447	189,035	198,187	208,762	222,648	207,899	223,840
57	ENERGY CENTER											
58	340	Land	-	-	-	-	-	-	-	-	-	-
59	341	Structures	1,656,203	1,705,905	1,742,027	1,778,228	1,814,505	1,825,387	1,859,927	1,901,560	1,945,178	1,989,785
60	342	Fuel Holders	1,491,898	1,540,280	1,588,662	1,593,941	1,658,538	1,567,203	1,567,203	1,567,203	1,565,630	1,565,630
61	343	Prime Movers	14,128,360	13,920,530	14,397,160	14,909,826	15,462,272	14,834,155	15,343,581	15,929,485	16,468,237	16,764,731
62	344	Generators	6,174,949	6,729,462	6,717,462	6,717,462	6,717,462	6,717,462	6,717,462	6,717,462	6,737,484	6,737,484
63	345	Access. Electric	700,382	763,004	763,004	837,009	912,048	986,899	1,061,932	1,104,897	1,129,918	1,147,402
64	346	Misc. Equipment	2,891,806	3,255,732	3,255,732	3,249,620	3,244,824	3,167,556	3,167,556	3,167,556	3,163,476	3,163,476
65	ENERGY CENTER FT8											
66	341	Structures	-	10,454	31,208	51,792	72,387	92,730	112,951	134,779	157,634	180,449
67	342	Fuel Holders	-	23,594	77,489	130,983	184,475	214,031	267,153	304,360	337,597	371,055
68	343	Prime Movers	-	306,586	1,248,079	2,103,241	3,067,932	3,925,282	4,853,647	5,799,961	6,756,732	7,717,904
69	344	Generators	-	3,382	13,129	23,010	32,896	(1,228)	8,177	17,937	27,820	37,702
70	345	Access. Electric	-	56,570	177,121	299,134	359,496	390,121	506,388	591,257	658,318	727,925
71	346	Misc. Equipment	-	20,513	62,373	104,221	146,063	183,785	227,177	257,038	282,393	248,574

			Accumulated Reserve for Depreciation Balance at December 31									
Line	Account	Description	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
			\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
72	RIVERTON COMMON											
73	340	Land	-	-	-	-	-	-	-	-	-	-
74	RIVERTON 9, 10, 11											
75	341	Structures	126,385	161,271	208,253	249,013	267,147	285,059	302,868	299,150	325,380	1,801,926
76	342	Fuel Holders	65,765	85,572	106,266	150,216	204,588	258,536	312,773	232,053	242,882	237,148
77	343	Prime Movers	5,479,803	5,760,724	6,104,687	6,528,288	6,972,912	7,410,556	7,820,442	4,839,336	4,973,947	3,324,489
78	344	Generators	611,697	878,790	1,261,466	1,545,108	1,795,232	2,044,325	2,292,400	1,095,960	1,134,601	914,363
79	345	Access. Electric	177,433	425,320	792,042	1,163,726	1,558,838	1,951,416	2,343,698	764,062	799,949	602,395
80	346	Misc. Equipment	70,241	73,651	80,105	124,203	186,949	249,178	311,080	72,037	75,867	342,768
81	RIVERTON UNIT 12											
82	341	Structures	-	-	-	-	-	-	-	25,939	29,934	51,539
83	342	Fuel Holders	-	-	-	-	-	-	-	118,328	139,901	161,477
84	343	Prime Movers	-	-	-	-	-	-	-	2,558,789	2,857,695	1,996,989
85	344	Generators	-	-	-	-	-	-	-	1,452,948	1,673,752	1,894,463
86	345	Access. Electric	-	-	-	-	-	-	-	1,860,145	2,066,927	1,375,662
87	346	Misc. Equipment	-	-	-	-	-	-	-	283,042	317,227	351,419
88	STATE LINE UNIT 1											
89	340	Land	-	-	-	-	-	-	-	-	-	-
90	341	Structures	1,075,417	1,152,268	1,190,705	1,190,550	1,190,550	1,190,550	1,190,550	1,190,550	1,190,550	1,190,550
91	342	Fuel Holders	1,055,950	1,228,373	1,435,151	1,555,531	1,679,762	1,802,352	1,922,589	2,011,573	2,090,436	2,169,272
92	343	Prime Movers	10,237,081	11,030,755	9,752,100	10,140,040	9,672,756	10,117,269	10,622,567	11,393,187	12,252,645	13,111,769
93	344	Generators	3,032,083	3,241,584	3,418,432	3,549,416	3,682,873	3,814,144	3,943,211	4,107,158	4,282,803	4,458,416
94	345	Access. Electric	854,783	987,092	1,097,589	1,200,679	1,303,820	1,406,326	1,507,952	1,588,546	1,661,982	1,735,869
95	346	Misc. Equipment	153,380	163,645	186,676	216,560	258,397	293,818	303,610	303,610	303,610	271,232
96	STATE LINE CC											
97	340	Land	-	-	-	-	-	-	-	-	-	-
98	341	Structures	998,672	1,192,974	1,439,255	1,648,148	1,950,300	2,251,176	2,552,331	2,803,549	3,038,448	3,273,384
99	342	Fuel Holders	1,180,625	1,428,700	1,474,087	1,518,971	1,587,799	1,632,929	1,632,929	1,632,929	1,632,929	1,632,929
100	343	Prime Movers	12,537,360	14,985,479	17,253,490	19,967,034	20,940,840	23,312,861	26,348,208	25,124,011	27,374,209	29,329,039
101	344	Generators	3,478,777	4,151,999	4,939,302	2,914,103	3,471,302	2,102,893	2,988,139	3,792,734	4,569,953	5,347,177
102	345	Access. Electric	1,160,935	1,384,841	1,573,459	1,869,375	2,189,645	2,468,329	2,727,410	2,992,127	2,561,645	2,758,905
103	346	Misc. Equipment	10,023	13,785	81,599	163,980	245,358	327,031	423,231	507,131	586,771	667,233
104	TOTAL	All Production	<u>\$177,238,731</u>	<u>\$175,755,314</u>	<u>\$185,058,080</u>	<u>\$195,152,025</u>	<u>\$201,555,125</u>	<u>\$215,731,895</u>	<u>\$271,706,422</u>	<u>\$287,823,189</u>	<u>\$281,908,702</u>	<u>\$277,393,844</u>

AFFIDAVIT OF THOMAS J. SULLIVAN

STATE OF MISSOURI)
) ss
COUNTY OF RAY)

On the 11th day of May, 2016, before me appeared Thomas J. Sullivan, to me personally known, who, being by me first duly sworn, states that he is President of Navillus Utility Consulting, LLC and acknowledged that he has read the above and foregoing document and believes that the statements therein are true and correct to the best of his information, knowledge and belief.



Thomas J. Sullivan

Subscribed and sworn to before me this 11th day of May, 2016



Notary Public

My commission expires: 4-19-2020

MANDY FLOYD Notary Public - Notary Seal State of Missouri Commissioned for Ray County My Commission Expires: April 19, 2020 Commission Number: 16364744
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