Snavely King Majoros O'Connor & Lee, Inc. National Study of U.S. Steam Generating Unit Lives 50 MW and Greater (Update)

Snavely King Majoros O'Connor & Lee, Inc. ("Snavely King") performed a study of U.S. Steam Generating Units Lives, 50 MW and Greater using analytical techniques generally accepted in the utility industry and a database maintained by the U.S. Department of Energy ("DOE"). Snavely King concludes that the lives of the U.S. Steam Generating Units (50 MW and Greater) are experiencing average life spans of approximately 60 years and these spans are lengthening almost on a year-to-year basis.

Database

The DOE's Energy Information Administration ("EIA") requires every owner of an electric utility generating plant to file a Form 860 describing the status of its generating facilities. From these reports, EIA maintains data on the installation and retirements of generating units around the country.

The data utilized in this study is available on the EIA's web site. The primary data used in Snavely King's study is located in the Form 860-A database files. The Form 860-B data is also used to check the current status of units that have been sold to Non-Utility Generators ("NUG's"). The data was downloaded in several steps into a single Microsoft Access file and developed into inputs for Snavely King's actuarial analysis program.

Various sorts were made to refine the data and to remove bad data. For instance, some units listed as retired had no retirement dates indicated, etc.

Analysis

Snavely King initially conducted a full band (1918-1999) resulting in a 54 L4 life and Iowa curve indication. Snavely King's initial ten-year band resulted in a 59 L4 indication and its initial rolling and shrinking band analysis showed trends toward longer lives – as long as 70 years.

Snavely King's update consisted of an analysis of the full band (1900-2000) and the most recent ten-year band (1991-2000) of data. The full band analysis had a best fit result of 60.5 L3, which indicates a 60 year life. The ten-year band best fit was a 59.5 R4, which indicates a 59 year life. Additional analyses were performed: an expanded full band analysis, rolling band analysis and a shrinking band analysis. The results are discussed and set forth in tabular form below.

Expanded Full Band Analysis

	Expanded Full Band Analys	is
Band	Life	Curve Type
1900-00	60.5	L3
1900-99	58.5	L3
1900-98	58	L3
1900-97	57	L3
1900-96	56	L3

The expanded full band analysis held the initial year constant but used cut-off dates of 1999, 1998, 1997 and 1996. The actuarial analyses yielded the following results.

The results indicate that large generating units are being kept operational longer.

Rolling Band Analysis

The ten-year band analyses for these data sets provided a "rolling band" analysis. The results are summarized in the table below.

Band	Life	Curve Type
1991-2000	59.5	R4
1990-1999	56	R4
1989-1998	57.5	L4
1988-1997	54	S4
1987-1996	54.5	L4

This indicates an increase in lives of generating units probably coincident with the wide spread introduction of life extension programs and the reduction in investment by utilities in new base load generating units.

Shrinking Band Analysis

Band	Width	Life	Curve Type
1996-99	5 years	77.5	R2
1995-00	6 years	74.5	R2.5
1994-00	7 years	66.5	R3
1993-00	8 years	69.5	L3
1992-00	9 years	67.5	L3
1991-00	10 years	59.5	R4
1986-00	15 years	58	R4
1981-00	20 years	56	L4
1976-00	25 years	55	L4

Finally, Snavely King did a "shrinking band" analysis, in which the final 2000 year was held constant and the bands were continually shrunk.

The shrinking band analysis corroborated earlier results and conclusions. The average life span of steam units 50 MW and Greater is currently in the 60-year range and is getting longer.

Best Fit Curve for 1900-2000



Analytical Parameters

OLT Placement Band:	1900 -2000
OLT Experience Band:	1900 - 2000
Minimum Life Parameter:	10
Maximum Life Parameter:	150
Life Increment Parameter:	0.5
Maximum Observations (T-Cut):	77 (75.5)



Analytical Parameters

OLT Placement Band:	1900 -2000
OLT Experience Band:	1991 - 2000
Minimum Life Parameter:	10
Maximum Life Parameter:	150
Life Increment Parameter:	0.5
Maximum Observations (T-Cut):	65 (63.5)

Exhibit (MJM-4) Page 5 of 5

Snavely King Majoros O'Connor & Lee, Inc. National Study of U.S. Other Production Unit Lives (Original)

Snavely King Majoros O'Connor & Lee, Inc. ("Snavely King") performed a study of U.S. Other Production Units Lives using analytical techniques generally accepted in the utility industry and a database maintained by the U.S. Department of Energy ("DOE"). Snavely King concludes that U.S. Other Production Units are experiencing average life spans of approximately 46.5 years at a minimum, and that these spans have lengthened in recent years to as long as 56.5 years. Snavely King was unable to update this analysis due to a lack of data.

Database

The DOE's Energy Information Administration ("EIA") requires every owner of an electric utility generating plant to file a Form 860 describing the status of its generating facilities. From these reports, EIA maintains data on the installation and retirements of generating units around the country.

The data utilized in this study is available on the EIA's web site. The primary data used in Snavely King's study is located in the Form 860-A database files. The Form 860-B data is also used to check the current status of units that have been sold to Non-Utility Generators ("NUG's"). The data was downloaded in several steps into a single Microsoft Access file and developed into inputs for Snavely King's actuarial analysis program.

Various sorts were made to refine the data and to remove bad data. For example, plant with in-service dates of 1900 apparently had a Y2K problem. Some units listed as retired had no retirement dates indicated, etc.

Analysis

Snavely King performed an analysis of the full band (1899-1996) and a "shrinking band" analysis, in which the final year (1996) was held constant and the bands were continually shrunk. The results are discussed and set forth in tabular form below.

Band	Width	Life	Curve Type
1899-96	Full	52.0	L2.0
1977-96	20 years	46.5	L1.5
1982-96	15 years	47.5	L1.5
1987-96	10 years	52.5	L1.5
1992-96	5 years	56.5	L2.0

As the analysis indicates, the average life span for Other Production Units has lengthened in recent years.

Observed Life Table and Best Fit Iowa Curve All U.S. Other Production Units: Band 1899-1996



Exhibit (MJM-5) Page 2 of 11

Exhibit___(MJM-5) Page 3 of 11

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QQVQa1 ACTUARIAL ANALYSIS CUBVE FITTING RESULTS ACCOUNT: 888000 BAND: 1899,1996

		AVERAGE	SUM OF
	IOWA	SERVICE	SQUARED
RANK	CURVE	LIFE	DEVIATIONS
1	L2	52.00	1121.66
. 2	L1.5	52.00	1749.96
3	S1	50.50	2419.96
4	\$0.5	50.50	2669.22
5	S1. 5	50.50	2698.74
6	L3	52.00	2749.26
7	R1.5	49.50	3195.03
8	L1	51.50	3379. 0 0
9	R2	49.50	3507.07
10	S 2	50.50	3825.60
11	S0	50.00	3863.70
12	Rl	49.00	4179.53
13	R2.5	50.00	4402.90
14	L0.5	51.50	5336.07
15	RQ.5	49.00	6092.86
16	\$-0.5	49.50	6182.28
17	R3	50. 0 0	6439.15
18	\$3	50.50	7381.55
19	L0	52.00	8110.19
20	L4	51.00	8858.58
21	01	49.00	10014.22
22	02	52,50	10310.85
23	R4	50. 50	11604.03
24	\$ 4	50.50	14100.69
25	L5	51.00	16336.66
26	03	64.50	19846.15
27	R5	50.50	19875.93
28	S 5	50.50	22178.0 8
29	04	84.50	24972.8 6
30	S 6	50.50	30361.29
31	SQ	49.50	49189.21

Observed Life Table and Best Fit Iowa Curve All U.S. Other Production Units: Band 1977-1996



Exhibit (MJM-5) Page 4 of 11 QQVQal ACTUARIAL ANALYSIS CURVE FITTING RESULTS ACCOUNT: 888000 BAND: 1977,1996

		AVERAGE	SUM OF
	IOWA	SERVICE	SQUARED
RANK	CURVE	LIPE	DEVIATIONS
1	L1.5	46.50	890.79
2	L2	47.00	1214.63
3	Ll	46.50	1486.82
4	\$0.5	45.50	1738.92
5	S0 .	45.00	2068.88
6	S 1	45.50	2241.00
7	R1	44.50	2310.87
8	R1.5	45.00	2352.97
9	L0.5	46.50	2528.51
10	R0.5	44.00	3224.10
11	\$1.5	46.00	3260.10
12	S-0. 5	44.50	3341.13
13	R2	45.00	3538.36
14	L3	46.50	4347,48
15	L0	46.00	4364.76
16	52	46.00	5031.07
17	R2.5	45.50	5342.66
18	01	43.50	5904.40
19	02	47.00	5941,92
20	R3	45.50	8187.31
21	S3	46.00	9683.67
22	L4	46.00	11527.50
23	R4	46.00	14611.97
24	03	55.50	15077.92
25	S4	46.00	17390.95
26	L5	46.00	19723.73
27	04	71.00	20738.40
28	R5	45.50	23700.81
29	S5	45.50	25950.52
30	S6	45.00	34082.54
31	SQ	43.50	51072.33





Exhibit (MJM-5) Page 6 of 11 QQVQA1 ACTUARIAL ANALYSIS CURVE FITTING RESULTS ACCOUNT: 888000 BAND: 1982,1996

-		AVERAGE	SUM OF
	IOWA	SERVICE	SQUARED
RANK	CURVE	LIFE	DEVIATIONS
1	L1.5	47.50	1118.69
2	LI	47.00	1318.91
3	1.2	47.50	1853.33
4	L0.5	47.00	1966.71
5	S 0	45.50	2208.91
6	S0.5	46.00	2224.03
7	R 1	45.00	2547.78
8	R0.5	45.90	2945.64
9	R1.5	45.50	2965.67
10	S-0.5	45.00	3009.49
11	S1	46.50	3108.92
12	LO	47.00	3414.09
13	S1.5	46.50	4424.84
14	R2	45.50	4572.63
15	02	48.00	4679.77
16	01	44.50	5155.09
17	L3	47.50	5743.41
18	S2	46.50	6521.74
19	R2. 5	46.00	6682.54
20	R 3	46.00	9867.68
21	S 3	46,50	11638.85
22	03	56.50	12805.77
23	L4	47.00	13606.64
24	R4	46.50	16728.92
25	04	72.00	17949.21
26	S 4	46.50	19745.52
27	L5	46.50	22185.46
28	R5	46.50	26233.52
29	S 5	46.50	28 609. 65
30	S 6	46.00	36996.22
31	SQ	43.50	54451.44

Observed Life Table and Best Fit Iowa Curve All U.S. Other Production Units: Band 1987-1996



Exhibit (MJM-5) Page 8 of 11 QQVQAI ACTUARIAL ANALYSIS CURVE FITTING BESULTS ACCOUNT: 888000 BAND: 1987,1996

		AVERAGE	SUM OF
	IOWA	SERVICE	SQUARED
RANK	CURVE	LIFE	DEVIATIONS
1	L1.5	52.50	1425.50
2	L2	53.00	1586.31
3	S0.5	51.00	2147.43
4	L1	52.00	2278.64
5	S0	51.00	2621.18
6	S1	51.50	2637.51
7	R1.5	50.00	2640.16
8	R1	50.00	2825.25
9	L0.5	52.00	3495.25
10	\$1.5	51.50	3519.27
11	R2	50.50	3766.24
12	R0.5	50.00	3818.13
13	S-0.5	50.00	3976.92
14	L3	52.50	4389.92
15	S2	51.50	5265.97
16	R2.5	50.50	5346.45
17	LO	52.50	5528.59
18	01	49.50	6832.53
19	02	53.50	7079.00
20	R3	51.00	8082.98
21	S 3	51.50	9724.13
22	L4	52.00	11469.84
23	R4	51.50	14229.10
24	03	65.00	15496.68
25	S4	51.50	17216.77
26	L5	52.00	19617.66
27	04	84,50	20112.98
28	R5	51.50	23315.78
29	S 5	51.50	25784.65
30	S 6	51.50	34306.98
31	SQ	51.00	53468.24



Observed Life Table and Best Fit lowa Curve

Exhibit (MJM-5) Page 10 of 11 qqvqa1 ACTUARIAL ANALYSIS CURVE FITTING RESULTS ACCOUNT: 888000 BAND: 1992,1996

•		AVERAGE	SUM OF
	IOWA	SERVICE	SQUARED
RANK	CURVE	LIFE	DEVIATIONS
1	L2	56.50	1969.77
2	L1.5	56.50	2071.53
3	50.5	54.50	2306.61
4	R1.5	54.00	2576.68
5	51	55.00	2598.77
6	Rl	53.50	2994.95
7	S0	54.50	2997.49
8	L1	56.00	3221.35
9	\$1.5	55.50	3327.10
10	R2	54.00	3563.95
11	L3	56.50	4092.86
12	R0.5	53.00	4401.13
13	L0.5	56.50	4661.40
14	S-0.5	53.50	4690.56
15	R2.5	54.50	4934.77
16	S 2	55.50	4969.21
17	LO	56.50	6913.56
18	R3	54.50	7577.41
19	01	52.50	7870.18
20	02	57.50	8545.85
21	S 3	55.50	9191.79
22	L 4	56.00	10671.21
23	R4	55.00	13409.13
24	S4	55.50	16328.33
25	03	72.00	16639.12
26	L5	56.00	18620.55
27	04	94.50	20709.27
28	R5	55.50	22110.83
29	S5	55.50	24596.04
30	S 6	56.00	33193.13
31	SQ	55,00	52932.29

Depreciation Concepts

Public Utility Depreciation

From a regulator's perspective, the objective of public utility depreciation is straight-line capital recovery. This is accomplished by allocating the original cost of assets to expense over the lives of those assets through the application of depreciation rates to plant balances.

There are several unique factors driving public utility depreciation rates. First, public utility depreciation is based on a "group life" as opposed to the lives of individual assets. Second, the cost of removing or disposing of an asset that is retired from service is charged to the accumulated depreciation reserve, as opposed to being recognized as an operating expense in the year incurred. Third, the original cost of a retired asset is also recorded in the accumulated depreciation reserve, as opposed to being written off in the year of the asset's retirement/disposal. Fourth, in certain jurisdictions public utility depreciation rates incorporate net salvage factors as discussed above. This is not the case for unregulated entities. Each of these factors affects the depreciation rates that are ultimately determined for the group of assets that are recorded in plant accounts designated by the FERC Uniform System of Accounts ("USOA").

Depreciation expense is one of the primary cost drivers of public utility revenue requirement calculations because these companies are capital intensive. An excessive depreciation rate can unreasonably increase the utility's revenue requirement and resulting service rates; thereby unnecessarily charging millions of dollars to a utility's customers.

Depreciation is a legitimate expense, but it is a major expense based on a substantial amount of judgment and complex analytical procedures, and it drives utility prices. Therefore, the measurement of depreciation and the calculation of the expense warrant careful regulatory consideration and scrutiny.

I discuss the fundamentals of public utility depreciation below, including the difference between the whole-life and remaining life techniques and the impact of life and net salvage estimation on depreciation rates.

Plant Additions. Retirements and Balances

Public utilities record their plant investment activity in the individual plant accounts set-forth in the Federal Energy Regulatory Commission's ("FERC") Uniform System of Accounts ("USOA"). Additions, retirements and balances refer to individual plant accounts. For example, account 311-Structures and Improvements, is a plant account. An annual addition is the original cost of plant added to the account during the year. An annual retirement is the original cost of a prior addition which is now removed from service. The plant balance is what is left.

Depreciation Expense

Depreciation expense is a charge to operating expense to reflect the recovery of the cost of an asset. Public utility depreciation expense is typically straight-line over service life, which results in an equal share of the cost of assets being assigned or allocated to expense each year over the service life of the assets. A service life is the period of time during which depreciable plant [and equipment] is in service.¹ Annual depreciation expense is a cost included in a public utility's revenue requirement.

Annual depreciation expense is calculated by applying a depreciation rate to plant balances. The resulting expense (also called accrual) is charged, just as any other expense, to the revenue requirement and from there it is charged to the utility's customers.

Depreciation is a non-cash expense in contrast to payroll expense, for example, which involves the current outlay of cash. That is, depreciation expense does not involve a specific payment during the current or test-year. Both depreciation and payroll are included as expenses in the income statement and revenue requirement, but no cash flows out of the company for depreciation expense. Instead of reducing the cash account, depreciation expense is recorded on the income statement as an expense and simultaneously recorded on the balance sheet in the accumulated depreciation account; which is shown as an offset to plant in service.

Accumulated depreciation (hereinafter called reserve or accumulated depreciation) is, in essence, a record of the previously recorded depreciation expense. At any point in time, the accumulated depreciation account represents the net accumulated amount of the original cost of assets and net salvage that has been recovered to date. It can be considered a measure of the depreciation recovered from ratepayers.

¹ Public Utility Depreciation Practices, August, 1996. National Association of Regulatory Utility Commissioners ("NARUC Manual"), p. 321.

Depreciation Rates

Depreciation rates such as Westar's are founded upon three fundamental parameters: a service life, a dispersion pattern and a net salvage ratio. Westar has used the remaining life technique to compute its rates. In order to understand remaining life depreciation, it is useful to first address whole-life depreciation.

Whole-Life Technique

The following calculation shows a straight-line whole-life depreciation rate assuming a 10-year average service life. This example does not include net salvage.

Table 1

Straight-Line Whole-Life Depreciation Rate <u>Assuming 10-Year Life</u>

<u>100%</u>= 10.0% 10 yrs.

Each year the 10.0 percent depreciation rate would be applied to plant in service to produce an annual depreciation expense. All things equal, at the end of 10 years, the plant balance will be 100%, and the depreciation reserve balance will be 100%. This equality is important to an understanding of certain issues in this case.

Westar includes net salvage in the depreciation rate calculation. A central issue in this case is <u>negative</u> net salvage. I will, therefore, use negative net salvage in my example. Negative net salvage is the net cost of removal of the asset after completion of its service life. For the remainder of this discussion I

use the terms negative net salvage, decommissioning and cost of removal interchangeably. Assuming a negative 5 percent (-5%) net salvage ratio, the equation above with a value for negative net salvage is as follows:

Table 2

Straight-Line Whole-Life Depreciation Rate Assuming 10-Year Life and -5% Net Salvage

<u>100%-(-5%)</u> = 10.5% 10 yrs.

Negative net salvage <u>increases</u> the resulting whole-life depreciation rate from 10.0% to 10.5%. This happens because negative salvage is, in effect, added to the original cost of the plant. Instead of 100% (which represents the original cost of assets), the numerator becomes 105%. This is equivalent to capitalizing or adding the estimated cost of removal to the original cost of the asset.

At the end of life under this scenario the plant balance will be 100% but the reserve will be 105%. In other words, unlike the "zero net salvage scenario" in Table 1; when negative net salvage is included in a depreciation rate there will not be an equality of plant and reserve at the end of an asset's life because the Company will have charged more depreciation than it paid for the original cost of the asset.

Under these circumstances, equality will only be achieved if the Company actually spends the additional money at the end of the asset's life. However, unless the Company has a legal liability to remove the asset, it is not required to spend the money. Furthermore, since accumulated depreciation is an "unfunded account", even though the Company collected unnecessary cost of removal amounts in the past, it will have already spent that money on whatever it chose: salaries, dividends, etc.

Remaining Life Technique

The remaining life technique is similar to the whole-life technique, but it incorporates accumulated depreciation into the numerator of the equation, and the denominator becomes the remaining life rather than the whole life of the asset.

If the hypothetical 10-year asset discussed above is 3 years old, its remaining life would be 7 years (10 - 3 = 7). The accumulated depreciation account would be 31.5 percent of the original cost because the 10.5 percent depreciation rate from Table 2 would have been applied for three years (3 x 10.5% = 31.5%). The remaining life depreciation rate would then be calculated as follows:

Table 3

Straight-Line Remaining Depreciation Life Rate Assuming 10-year Life, 7-year Remaining Life <u>And -5% Net Salvage</u>

<u>100%- (-5%) – 31.5%</u> = 10.5% 7 years

In the examples shown in Tables 2 and 3, the remaining life depreciation rate and the whole-life depreciation rates are the same (10.5 percent), because I have assumed that the accumulated depreciation account is in balance. In other words, based on a continuation of the fundamental parameters, i.e., the 10-year

service life and the negative 5 percent net salvage ratio, exactly the right amount of depreciation (31.5 percent) has been charged and collected in the past,

If either the service life or net salvage parameter changes during the life of the plant, the accumulated depreciation account will be out of balance, and the remaining life rate will be either higher or lower than whole-life rate depending on the direction of the imbalance. That is because the Company will have collected either too much depreciation or not enough depreciation in the past, given the current estimates of lives or future net salvage.

The difference between the actual amount recovered, as included in the book depreciation reserve, and a theoretical estimate of what should be in the book reserve, is called a "reserve imbalance." The remaining life technique is often used to deal with such reserve imbalances.

The remaining life technique has been accepted and used in many jurisdictions. Its primary failing is that if there is a reserve imbalance, positive or negative, it results in the application of an incorrect rate to new plant additions. In other words, the remaining life technique perpetuates the same imbalances it attempts to cure. This problem can be resolved by using whole-life rates and separate treatment for any reserve imbalances.

Impact of Life and Net Salvage Estimation

Utilities own thousands of assets, represented by millions of dollars of investment. Given the capital intensity of the industry, it is very difficult to track and depreciate every <u>single</u> asset that a utility owns. Public utility depreciation is,

therefore, based on a group concept, which relies on averages of the service lives and remaining lives of the assets within a specific group.

These factors are necessarily estimates of the average service lives and average remaining lives of groups of assets. These estimates are in turn based on complex analytical procedures which involve not only the age of existing and retired assets, but also retirement dispersion patterns called "lowa curves." The important point to remember is that service life, average age and lowa curves are all used in the estimation of an average service life and average remaining life of a group of assets and are ultimately used to calculate the depreciation rate for that group of assets.

In depreciation analysis it is axiomatic that the shorter the life, the higher the resulting depreciation rate. If Westar's depreciation rates are based on lives which are too short, the depreciation rates will be too high. What if the 10-year life I used in the earlier examples really should have been 30 years? For example, assume that the analyst conducted statistical analyses which indicated that the average life is actually 30 years. The following table shows the impact of continuing to use a shorter life.

Table 4

<u>Impact of Reducing a Life From 30 Years to 10 Years</u> 30 year life = 100%/30 = 3.3% 10 year life = 100%/10 = 10.0%

If the life <u>should have been</u> 30 years, the rate should have been 3.3 percent rather than the 10 percent depreciation rate based on a 10 year life. The

shorter the life, the higher the rate. If the life is too short, the resulting rate is obviously excessive.

The estimation of future net salvage also has an impact on depreciation rates. Many of Westar's proposed depreciation rates contain negative net salvage factors which charge too much for future cost of removal because they are too negative. They result in excessive depreciation rates. The next table shows the impact on depreciation rates of increasing the cost of removal ratio.

Table 5

Impact of Increasing Cost of Removal Ratio

-5% ratio = 100 %-(-5)/30 = 3.5 % -50% ratio = 100 %-(-50)/30 = 5.0 %

Increasing a cost of removal ratio from -5% to -50% increases the depreciation rate from 3.5% to 5.0%. If the estimated -50% cost of removal ratio is not supportable, obviously, the resulting 5.0% depreciation rate is excessive. The combination of these two factors, i.e., understated lives and overstated cost of removal ratios, compounds the excessive depreciation rate problem.



FORM 8-K/A

WESTAR ENERGY INC /KS - wr

Filed: May 10, 2005 (period: May 02, 2005)

Amendment to a previously filed 8-K



Exhibit 99.1

Westar Energy. **Summary of Rate Application** May 2, 2005







Exhibit___(MJM-7) Page 6 of 8







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Home Page Change Password

Wednesday, July 06, 2005
Logged in as: [Margaret Kenney] Logout

Docket: [05-WSEE-981-RTS] 2005 Rate Case Requestor: [CURB] [David Springe] Data Request: CURB 9 :: General Date: 2005-06-28

Question 1 (Prepared by John Spanos)

Please provide copies of all external correspondence, including correspondence with Mr. Spanos and Gannett Fleming, which deals in any way with the Company's retirement unit costs, electric depreciation rates, and/or the Depreciation Study.

Response:

Attached are correspondence between Westar and Mr. Spanos which deals with retirement unit costs, depreciation rates and the Depreciation Study.

No Digital Attachments Found.

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<jspanos@GFNET.co m> To: <Dick_F_Rohlfs@wr.com>
cc: <Lee_Wages@wr.com>
Subject: RE: questions on study

12/06/2004 07:07

Dick:

I will incorporate the new results of LaCygne as soon as you are able to get them to me. As for net salvage, there is a difference in the way the net salvage was done this time versus last time. We studied net salvage on the account level this time versus the plant level last time. Part of the reason was that we received the data in that form and the also that is how we normally study net salvage. If there is historical net salvage at the plant level I can work out some results that way as well. Either way I will support my results on the stand.

Finally, do we have a date set up yet to meet with Larry? I have a trip on the 13th and 14th on the west coast and would stop in KC on the 15th if that is the scheduled day. Let me know if there is a firm date set.

John

-----Original Message-----From: Dick_F_Rohlfs@wr.com [mailto:Dick_F_Rohlfs@wr.com] Sent: Friday, December 03, 2004 6:05 PM To: Spanos, John J. Cc: Lee_Wages@wr.com Subject: questions on study

the change and be able to support this on the stand?

John, 1. I have Rod Pauls from our plant accounting group separating La Cygne 1 and La Cygne 2 dollars and retirement history for you. He should have this for you mid week approx. Dec 8 or 9. I trust you can incorporate this into the study for KGE. La Cygne 2 is the unit with the lease. 2. I have some questions on the net salvage numbers for the power plants. The concern I have is that the percent is higher than the last study. In some cases the change goes from negative 7% to negative 30%. Can you provide an explanation for

3. I have a call into Generation to discuss the assumed retirement dates for the power plants. Once I get a hold of the person I will call you or send you a second e mail with and proposed changes.

Have a good weekend.

dick

÷.

g P



Home Page Change Password

58 Wednesday, September 07, 2005 Logged in as: [Margaret Kenney] Logout

Docket: [05-WSEE-981-RTS] 2005 Rate Case **Requestor:** [CURB] [David Springe] Data Request: CURB 30 :: Net Salvage Date: 2005-07-28

Question 1 (Prepared by John Spanos)

If not provided elsewhere, please provide on diskette or CD all workpapers supporting estimated terminal net salvage estimates for each account for which terminal net salvage is a factor. Please include all calculations in electronic format (Excel), with all formulae intact.

Response:

The final or terminal net salvage analysis was determined on a functional level and then allocated to the account level. The dismantling costs were determined by location by dollars/kilowatt and the summation of all future dollars applied to the account level. The LaCygne Unit 2 was left out of this analysis. The calculation is attached. The future dismantling dollars for the nine locations total \$281,507,819 or 16% of the December 31, 2003 balance. These dollars are allocated by account to determine the amount of terminal net salvage to be accrued over the remaining life of each plant. Therefore, for Account 311, Structures and Improvements, the future accrual amount for the existing original cost related to net salvage is \$85,451,147, with 46,673,370 or 55% related to terminal net salvage. A corrected spreadsheet is attached to KCC 324. (Released 8/17/05)

Attachment File Name

Attachment Note

Curb 30.xls

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DATA REDUENT Chergyloois, UC. EANY Access Management Bystem	A Recursor
me Page Change Password	Wednesday, September 07, 2005 Logged in as: [Margaret Kenney] Logout
Docket: [05-WSEE-981-RTS] 2005 Rate Ca Requestor: [KCC] [Larry Holloway] Data Request: KCC 324 :: Net Salvage Date: 2005-08-17	se
Question 1 (Prepared by John Spanos) Regarding the response to CURB DR 30, please p indicate that the total future costs for dismantling when the total of the units is 407920057 (sum of	provide the following response: 1. Why does the spreadsheet g Westar's steam production units will be 281507819 (cell L27) f L17 through L25)?
Response: There was an error in the formula in cell L27 for units. The total future cost is 407,920,057. A cor assigned to each location were correct in the spre account does not change.	total future costs of dismantling Westar's steam production rected version of the spreadsheet is attached. The amounts eadsheet, therefore, the estimated net salvage percents for each
Attachment File Name Attachment Not dismantling schedule-KCC	te

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DISMANTLING COSTS RELATED TO STEAM PRODUCTION PLANTS

LOCATION (1)	ESTIMATED RETIREMENT <u>YEAR</u> (2)	MW (3)	ESTIMATED DISMANTLING COSTS (\$/KW) (4)	TOTAL DISMANTLING COSTS (CURRENT \$) (5)=(3)*(4)	TOTAL DISMANTLING COSTS (FUTURE \$) (6)a	ORIGINAL COST AT 12/31/03 (7)	NET SALVAGE (8)
STEAM							
	2021	831	35 27	29 309 370	67.057.719		

GURDAN EVANS	2021	001	00.21	20,000,010	01,0011.10		
JEFFREY	2040	1857	12.74	23,658,180	94,914,135		
LACYGNE 1	2033	681	38.56	26,259,360	85,659,025		
MURRAY GILL	2015	317	46.56	14,759,520	28,280,767		
NEOSHO	2009	67	52.05	3,487,350	5,596,173	•	
RIPLEY	2008	50	52.42	2,621,000	4,083,433		
HUTCHINSON	2018	257	47.88	12,305,160	25,764,272		
LAWRENCE	2031	539	41.68	22,465,520	69,076,610		
TECUMSEH	2022	242	48.20	11,664,400	27,487,923		
TOTAL STEAM		4841	30.27	←→146,529,860	407,920,057	1,717,979,369	23.74%
			Kw	\$ 3,5%	- -	/	
				overat	34,2	6/Kus	
						/ · · · · ·	

Ac	count	Original Cost	Allocation Factor	Dismantling Costs (Future)	- 1-7	22 74 8
31	1.00	284,837,158	17%	67,632,238	A C	73 74 7
31	2.00	945,633,516	55%	224,532,893	20 10	23, 14 %
31	4.00	334,751,694	19%	79,484,034	23,74	and c
31	15.00	121,754,042	7%	28,909,495	23,74	070
31	6.00	31,002,960	2%	7,361,398	23,74	076
		1.717.979.369		407,920,057		

a Column 6 = (Column 5) x (1.03**(Estimated Retirement Year - 1993))

Exhibit (MJM-9) Page 3 of 3

Excessive! Depreciation

An excessive depreciation rate is one that produces depreciation expense which is more than necessary to return a company's capital investment over the life of the asset. The concept of excessive depreciation is not new, and in fact was explained by the U.S. Supreme Court in a landmark 1934 decision, Lindheimer v. Illinois Bell Telephone Company, as follows:

> If the predictions of service life were entirely accurate and retirements were made when and as these predictions were precisely fulfilled, the depreciation reserve would represent the consumption of capital, on a cost basis, according to the method which spreads that loss over the respective service periods. But if the amounts charged to operating expenses and credited to the account for depreciation reserve are excessive, to that extent subscribers for the telephone service are required to provide, in effect, capital contributions, not to make good losses incurred by the utility in the service rendered and thus to keep its investment unimpaired, but to secure additional plant and equipment-upon which the utility expects a return.

> <u>Confiscation being the issue, the</u> <u>company has the burden of making a</u> <u>convincing showing that the amounts it</u> <u>has charged to operating expenses for</u> <u>depreciation have not been excessive</u>. <u>That burden is not sustained by proof</u> that its general accounting system has been correct. The calculations are mathematical, but the predictions underlying them are essentially matters of opinion. They proceed from studies

of the "behavior of large groups" of items. These studies are beset with a host of perplexing problems. Their determination involves the examination variable elements of many and opportunities for excessive allowances, even under a correct system of accounting, are always present. The necessity of checking the results is not guestioned. The predictions must meet the controlling test of experience.¹

Excessive depreciation rates produce excessive depreciation expense. In other words, if an excessive depreciation rate is applied to the plant balance, it results in excessive depreciation expense. Since depreciation expense flows dollar-for-dollar into the revenue requirement, excessive depreciation expense results in an excessive revenue requirement.

Excessive depreciation also flows dollar-for-dollar into the accumulated depreciation reserve account. This can result in a depreciation reserve actually exceeding the gross plant balance. That is because the depreciation rate is excessive; it is more than necessary to fully depreciate the plant. This is what the Court was talking about in Lindheimer. Therefore, at the end of its life, this results in an accumulated depreciation account which *exceeds* the original cost in the plant account.

Lindheimer v. Illinois Bell Telephone Company, 292 U.S. 151, 168-170, 54 S.Ct. 658, 665-666 (1934). (Emphasis added; footnote deleted.)

The public accounting profession, through the Financial Accounting

Standards Board ("FASB") has also addressed accumulated reserve excesses in

its SFAS No. 143.² Paragraph B22 says the following:

B22. Paragraph 37 of Statement 19 states that "estimated dismantlement. abandonment restoration. and costs...shall be taken into account in determining amortization and depreciation rates." Application of that paragraph has the effect of accruing an irrespective expense of the requirements for liability recognition in the FASB Concepts Statements. In doing so, it results in recognition of depreciation that can accumulated exceed the historical cost of a long-lived asset. The Board concluded that an entitv should be precluded from including an amount for an asset retirement obligation in the depreciable base of a long-lived asset unless that amount also meets the recognition criteria in this Statement. When an entity recognizes a liability for an asset retirement obligation, it also will recognize an increase in the carrying amount of the related long-lived asset. Consequently, depreciation of that asset will not result in the recognition of accumulated depreciation in excess of the historical cost of a long-lived asset.³

As one can see from the above, as recently as 2002, the public accounting profession does not approve of depreciating an asset beyond its original cost. It actually used the word "excess," and it is obvious that it frowns upon accumulated depreciation balances that exceed the original cost of plant.

² Statement of Financial Accounting Standards No. 143 ("SFAS No. 143") – Accounting for Asset Retirement Obligations.

³ SFAS No. 143, paragraph B22 (emphasis added).

GAAP does not control ratemaking, but the rationale described above is both informative and makes sense.

Ultimately, ratepayers pay for excessive depreciation rates. As the U.S. Supreme Court said, the result is the extraction of capital contributions from ratepayers, which the Court decided was inappropriate. Current GAAP accounting rules highlight these amounts associated with negative net salvage and require that they be reported as Regulatory Liabilities ("amounts owed") to ratepayers.

Westar's Traditional Inflated Future Cost Approach <u>"TIFCA"</u>

Westar's non-legal ARO request exceeds its actual annual cost of removal to a large degree because Westar uses a Traditional Inflated Future Cost Approach ("TIFCA") to make its future non-legal ARO estimates. This will result in a large regulatory liability to ratepayers because Mr. Spanos has bundled inflated cost of removal factors in most of his depreciation rates, and then would apply those rates for years to an ever-expanding depreciable plant base. The accruals resulting from this approach vastly exceed, year-by-year, the money that Westar actually spends or even allocates for cost of removal.

Westar's TIFCA results in inflated cost of removal factors because Westar's TIFCA net salvage studies relate removal costs in current dollars to retirements of assets whose cost reflects very old historical dollars. The result is that due to inflation which has been experienced, the current removal cost is many multiples of the historical original cost dollars of the retired asset.

Hypothetical TIFCA Example

Below is a hypothetical example of Mr. Spanos' TIFCA studies in this case. These are the same types of studies that Westar and other utilities, including the telephone industry, have used in the past. The TIFCA studies are summaries of annual retirements and net salvage, which are used as a basis for future net salvage proposals. The following table is a hypothetical example of Mr. Spanos' TIFCA net salvage studies.

1

Hypothetical TIFCA Net Salvage Study

Add <u>Year</u> (a)	Ret. <u>Year</u> (b)	Original <u>Cost</u> (c)	(\$) (d)	Cost of <u>Removal</u> (e)=(d)/(c)
1947	1997	1,000	(500)	(50)%
1948	1998	2,000	(1,500)	(75)
1949	1999	2,500	(1,000)	(40)
1950	2000	3,000	(2,500)	(83)
1951	2001	<u>4,000</u>	(5,000)	<u>(125)</u>
Total		12,500	(10,500)	(84)%
3-Year Avg.		3,167	(2,833)	(89)%
5-Year Avg.		2,500	(2,100)	(84)%

The years in column (a) are the years in which the assets in column (c) were added to plant. The years in column (b) are the years these assets were retired from service. They were added to plant in service several years ago, they lived their service life, and then they were retired or withdrawn from service. The cost of removal amounts in column (d) are the retirement costs incurred in the retirement year. For example, an asset purchased for \$4,000 in 1951 was retired from service in 2001, but it cost \$5,000 to dispose of the 1951 asset. The ratios in column (e) are the cost of removal amount expressed as a percentage of the original cost of the assets; that is:

\$5,000 removal cost / \$4,000 original cost = 125 percent.

Mr. Spanos used figures from several bands of data to estimate his future net salvage ratios. The hypothetical TIFCA uses a 3-year and a 5-year band to demonstrate Mr. Spanos' application of TIFCA. Mr. Spanos' net salvage approach results in an increase to depreciation rates because he primarily recommends negative net salvage ratios, and as demonstrated in the concepts exhibit, any negative net salvage ratio will increase a depreciation rate. TIFCA net salvage ratios as developed by Mr. Spanos will increase the rates even further.

As shown above, TIFCA net salvage ratios depend on the relationship of the current cost of removal as a percentage of the <u>original</u> cost of the assets retired, as shown above. The timing mismatch within this relationship results in an inflated negative net salvage ratio which is then bundled into the depreciation rate calculation.

This happens because the retirements are in very old original cost dollars versus retirement costs in current dollars. There is a fundamental mismatch in the value of dollars between the years the assets were installed and the years they are retired.

As an additional example, assume that the \$4,000 of assets retired in 2001 were actually placed in service in 1951 or 50 years earlier. The cost of removal in 2001 dollars is \$5,000, or 125 percent, of the 1951 addition. The result is negative 125 percent because it fails to take into account the fact that the \$5,000 cost of removal has experienced 50 years of inflation relative to what it would have been in 1951.

If we assume the inflation rate has been 5 percent annually, the cost of removal in 50-year old dollars is only \$436 or 11 percent of the original \$4,000 installation. Mr. Spanos' approach, however, shows 125 percent as a result of this timing mismatch. The same disparity would be true for all other years in the

3

example. There is a fundamental mismatch between the dollars associated with the installation dates of the assets and the dates they are removed from service.

Mr. Spanos would use a negative 125 percent ratio in the current depreciation rate calculation. This approach is equivalent to capitalizing 125 percent of the existing plant in service. In fact Mr. Spanos has in some cases used negative net salvage ratios that far exceed 125 percent.

The example above addresses only retirements. But at the same time, the actual plant balance has been growing for many reasons. The hypothetical company has been making additions every year due to growth, and these additions have also experienced inflation. Assume the current total plant balance in this account is \$100,000,000. Mr. Spanos would calculate depreciation rates designed to collect \$225,000,000 from ratepayers, i.e. \$125,000,000 more than the company spent on the plant, and this would be based on a \$4,000 retirement.

This mismatch leads to exorbitant current charges to current ratepayers for an inflated future cost of removal. These amounts far exceed the amounts that would be allowed even if Westar had legal AROs on which to spend the money, which it does not.

Mr. Spanos' future net salvage ratios are <u>inflated</u>, but not reduced to their fair or net present value. They result in excessive non-legal charges because these inflated net salvage ratios are applied to current plant balances. Thus, current ratepayers pay for inflated removal costs that are not expected to occur.

4

Alternatives to TIFCA

There are alternatives to TIFCA. The following discussion addresses a "cash basis" alternative, and three "accrual basis" alternatives. There are probably more alternatives.

Alternatives to TIFCA

Cash Basis:	- Expensing
Accrual Basis:	- Normalized Net Salvage Allowance
	- SFAS No. 143 Fair Value Approach
	- Net Present Value Approach

All of these have, in one form or another, been adopted by certain other state agencies.

Cash Basis Alternative to TIFCA

The cash basis alternative removes non-legal removal costs and dismantlement from the depreciation rate process. It would no longer be charged to accumulated depreciation. The cash basis alternative involves capitalization and/or expensing. The allocation, like all allocations, is at least somewhat arbitrary. Thus, one component of the cash basis alternative would be to consider capitalizing the entire cost of replacements to plant in service, rather than allocating a portion to cost of removal. This would have the same effect on rate base as the company's current accounting and would eliminate the problems created by the allocation. It would have the same effect on rate base because the current accounting debits actual cost to accumulated depreciation which increases rate base. If there is not a replacement, under the cash basis

alternative the cost of removal and/or dismantlement would be charged to operating expense.

It is not necessary, under the cash basis alternative, to have a combination of capitalization and expensing. Westar could charge all non-legal cost of removal and dismantlement to operating expense. It would be eliminated from depreciation expense and estimated, just as any other operating expense, in a rate case. If there are concerns that Westar or its customers could unduly suffer from an over-or under-estimation of this expense, the KCC could adopt balancing account treatment for the actual recorded expenses, subject to reasonableness review.

Accrual Basis Alternatives to TIFCA

There are three accrual basis alternatives to TIFCA: the normalized net salvage allowance approach, the SFAS No. 143 ARO Fair Value approach, and the net present value approach.

Normalized Net Salvage Allowance Accrual Approach

The normalized net salvage allowance approach is similar to the cash basis approach except that the annual average net salvage, which includes cost of removal, is included as a specifically identifiable amount within the annual depreciation accrual. In other words, a normalized net salvage amount is still a component of the depreciation expense accrual and is credited to accumulated depreciation and actual cost of removal continues to be charged to accumulated depreciation. The annual net salvage accrual could be either a fixed amount or a rolling five-year average amount that would be included in the annual depreciation accrual and actual net salvage would continue to be charged to accumulated depreciation.

SFAS NO. 143 Fair Value Accrual Approach

The SFAS No. 143 Fair Value Approach treats Westar's non-legal AROs as if they were legal AROs.

Net Present Value Accrual Approach

The net present value approach is much less complicated than the SFAS No. 143 fair value approach. The net present value approach merely discounts Westar's future cost of removal estimates back to 2003 values using the inflation factor that Westar used for its production plant dismantlement studies.

NET PRESENT VALUE OF WESTAR'S FUTURE COST OF REMOVAL REQUESTS

	ACCOUNT	PLANT BALANCE AT 12/31/03	REMAINING LIFE	INFLATED FUTURE COST OF REMOVAL	NET PRESENT VALUE OF COR	NET PRESENT VALUE OF COR	NPV OF COR ROUNDED
	(1)	(2)	(3)	(4)	(5)	NET PRESENT VALUE OF COR (6) 3.00% -10.95% -17.41% -13.55% -19.66% -19.66% -14.88% -21.52% -17.24% -24.15% -24.15% -24.15% -22.28% 0.00% 0.00%	(7)
e.			Average D	Scount Rate -	5.00%	5.00 %	3.00 /6
311.00							
511.00	IFEEREY	153 486 630 47	34.1	-30.00%	-5 57%	-10 95%	-11%
	TECUMSEH	14,658,030,35	18.4	-30.00%	-12.10%	-17.41%	-17%
	LAWRENCE	22.871.212.24	26.9	-30.00%	-7.95%	-13.55%	-14%
	HUTCHINSON	5,547,666.56	14.3	-30.00%	-14.81%	-19.66%	-20%
	TOTAL STRUCTURES & IMPROVEMENTS	196,563,539.62					
312.00	BOILER PLANT EQUIPMENT						
	JEFFREY	291,979,243.05	29.9	-36.00%	-8.23%	-14.88%	-15%
	TECUMSEH	48,157,901.09	17.4	-36.00%	-15.25%	-21.52%	-22%
	LAWRENCE	92,419,174.73	24.9	-36.00%	-10.53%	-17.24%	-17%
	HUTCHINSON	16,007,286.97	13.5	-36.00%	-18.49%	-24.15%	-24%
	TOTAL BOILER PLANT EQUIPMENT	448,563,605.84					
312.10	POLLUTION CONTROL EQUIPMENT						
	JEFFREY	140,733,721.32	16.2	-40.00%	-17.98%	-24.78%	-25%
	TECUMSEH	8,635,761.92	13.2	-40.00%	-20.85%	-27.08%	-27%
	LAWRENCE	11,339,226.03	19.8	-40.00%	-15.05%	-22.28%	-22%
	TOTAL POLLUTION CONTROL EQUIPMENT	160,708,709.27					
312.20	BOILER PLANT EQUIPMENT - TRAIN CARS						
	JEFFREY	294,464.00	21.0	0.00%	0.00%	0.00%	0%
	TECUMSEH	5,183,981.40	16.2	0.00%	0.00%	0.00%	0%
	LAWRENCE	12,246,741.55	21.1	0.00%	0.00%	0.00%	0%
	TOTAL BOILER PLANT EQUIPMENT - TRAIN CARS	17,725,186.95					
314.00	TURBOGENERATOR UNITS						
	JEFFREY	130,840,041.67	17.0	-23.00%	-9.94%	-13.92%	-14%
	TECUMSEH	21,727,970.32	9.2	-23.00%	-14.61%	-17.52%	-18%
	LAWRENCE	54,246,443.90	14.7	-23.00%	-11.13%	-14.89%	-15%
	HUTCHINSON	11,874,764.46	6.7	-23.00%	-16.52%	-18.87%	-19%
	TOTAL TURBOGENERATOR UNITS	218,689,220.35					

Exhibit (MJM-12) Page 1 of 8

NET PRESENT VALUE OF WESTAR'S FUTURE COST OF REMOVAL REQUESTS

	ACCOUNT	PLANT BALANCE AT 12/31/03	REMAINING LIFE	INFLATED FUTURE COST OF REMOVAL	NET PRESENT VALUE OF COR	NET PRESENT VALUE OF COR	NPV OF COR ROUNDED
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
			Average D	iscount Rate ■	5.06%	3.00%	3.00%
315.00	ACCESSORY ELECTRIC EQUIPMENT						
	JEFFREY	49,071,728.36	28.0	-11.00%	-2.76%	-4.81%	-5%
	TECUMSEH	11,194,778.94	17.6	-11.00%	-4.61%	-6.54%	-7%
	LAWRENCE	15,574,869.72	24.7	-11.00%	-3.25%	-5.30%	-5%
	HUTCHINSON	3,670,808.83	13.1	-11.00%	-5.76%	-7.47%	-7%
	TOTAL ACCESSORY ELECTRIC EQUIPMENT	79,512,185.85					
316.00	MISCELLANEOUS POWER PLANT EQUIPMENT						
	JEFFREY	10,655,696.43	26.7	-17.00%	-4.55%	-7.72%	-8%
	TECUMSEH	3,320,277.16	16.5	-17.00%	-7.53%	-10.44%	-10%
	LAWRENCE	4,493,201.83	22.5	-17.00%	-5.60%	-8.74%	-9%
	HUTCHINSON	1,124,544.82	13.2	-17.00%	-8.86%	-11.51%	-12%
	TOTAL MISCELLANEOUS POWER PLANT EQUIPMENT	19,593,720.24					
тс	DTAL STEAM PRODUCTION PLANT	1,141,356,168.12					
0	THER PRODUCTION PLANT						
341.00	STRUCTURES & IMPROVEMENTS						
	JEFFREY	40.235.10	12.5	0.00%	0.00%	0.00%	0%
	TECUMSEH	41,855,98	8.5	0.00%	0.00%	0.00%	0%
	HUTCHINSON	65,859.76	0.0	0.00%	0.00%	0.00%	0%
	ABILENE	556,460,44	0.0	0.00%	0.00%	0.00%	0%
	EVANS	11,348,399.38	37.5	0.00%	0.00%	0.00%	0%
	TOTAL STRUCTURES & IMPROVEMENTS	12,052,810.66					
342.00	FUEL HOLDERS, PRODUCERS & ACCESSORIES						
	TECUMSEH	144,398.63	0.0	0.00%	0.00%	0.00%	0%
	HUTCHINSON	696,809.85	11.5	0.00%	0.00%	0.00%	0%
	ABILENE	129,626.75	0.0	0.00%	0.00%	0.00%	0%
	EVANS	4,667,101.25	37.5	0.00%	0.00%	0.00%	0%
	TOTAL FUEL HOLDERS, PRODUCERS & ACCESSORIES	5,637,936.48					

NET PRESENT VALUE OF WESTAR'S FUTURE COST OF REMOVAL REQUESTS

	ACCOUNT	PLANT BALANCE AT 12/31/03	REMAINING LIFE	INFLATED FUTURE COST OF REMOVAL	NET PRESENT VALUE OF COR	NET PRESENT VALUE OF COR	NPV OF COR ROUNDED
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
344.00	GENERATORS		Average D	iscount Rate =	5.06%	3.00%	3.00%
544.00	JEFEREY	1 202 157 28	12.5	0.00%	0.00%	0.00%	0%
	TECUMSEH	4 652 991 77	12.5	0.00%	0.00%	0.00%	0%
	HUTCHINSON	26.251.045.67	0.0	0.00%	0.00%	0.00%	0%
	ABILENE	7,089,996.25	0.0	0.00%	0.00%	0.00%	0%
	EVANS	84,590,308.16	28.1	0.00%	0.00%	0.00%	0%
	TOTAL GENERATORS	123,786,499.13					
345.00	ACCESSORY ELECTRIC EQUIPMENT						
	JEFFREY	73,170.47	12.5	0.00%	0.00%	0.00%	0%
	TECUMSEH	214,507.09	8.5	0.00%	0.00%	0.00%	0%
	HUTCHINSON	1,272,920.46	9.9	0.00%	0.00%	0.00%	0%
	ABILENE	609,729.07	9.5	0.00%	0.00%	0.00%	0%
	EVANS	22,539,495.36	34.0	0.00%	0.00%	0.00%	0%
	TOTAL ACCESSORY ELECTRIC EQUIPMENT	24,709,822.45					
346.00	MISCELLANEOUS PLANT EQUIPMENT						
	JEFFREY	17,933.54	12.5	0.00%	0.00%	0.00%	0%
	TECUMSEH	807,751.27	0.0	0.00%	0.00%	0.00%	0%
	HUTCHINSON	80,360.89	0.0	0.00%	0.00%	0.00%	0%
	ABILENE	84,206.10	9.5	0.00%	0.00%	0.00%	0%
	EVANS	145,050.43	37.5	0.00%	0.00%	0.00%	0%
	TOTAL MISCELLANEOUS PLANT EQUIPMENT	1,135,302.23					
T	OTAL GAS TURBINE PLANT	167,322,370.95					
TF	RANSMISSION PLANT						
352.00	STRUCTURES & IMPROVEMENTS	9,009,445.60	40.4	-10.00%	-1.36%	-3.03%	-3%
353.00	STATION EQUIPMENT	131,589,301.28	34.3	-15.00%	-2 .76%	-5.44%	-5%
354.00	TOWERS & FIXTURES	2,911,904.36	26.8	-32.00%	-8.52%	-14.49%	-14%
355.00	POLES & FIXTURES	98,677,201.47	32.8	-28.00%	-5.55%	-10.62%	-11%
356.00	OVERHEAD CONDUCTORS & DEVICES	73,132,521.08	35.5	-19.00%	-3.29%	-6.65%	-7%
357.00	UNDERGROUND CONDUIT	368,152.01	46.4	0.00%	0.00%	0.00%	0%
358.00	UNDERGROUND CONDUCTOR & DEVICES	1,084,297.34	35.9	0.00%	0.00%	0.00%	0%
т	DTAL TRANSMISSION PLANT	316,772,823.14					

NET PRESENT VALUE OF WESTAR'S FUTURE COST OF REMOVAL REQUESTS

	ACCOUNT	PLANT BALANCE AT	REMAINING	INFLATED FUTURE COST OF	NET PRESENT VALUE OF	NET PRESENT VALUE OF	NPV OF COR
		(2)	(3)		(5)	<u> </u>	
	(*)	(=)	Average D	iscount Rate =	5.06%	3.00%	3.00%
D	ISTRIBUTION PLANT						
361.00	STRUCTURES & IMPROVEMENTS	7.435.831.53	32.9	-10.00%	-1.97%	-3.78%	-4%
362.00	STATION EQUIPMENT	91,424,380,31	36.3	-20.00%	-3.33%	-6.84%	-7%
364.00	POLES, TOWERS & FIXTURES	157,973,596.80	28.3	-34.00%	-8.41%	-14.73%	-15%
365.00	OVERHEAD CONDUCTORS & DEVICES	91,389,092.64	33.1	-45.00%	-8.78%	-16.92%	-17%
366.00	UNDERGROUND CONDUIT	19,507,625.61	46.4	-10.00%	-1.01%	-2.54%	-3%
367.00	UNDERGROUND CONDUCTORS & DEVICES	46,665,491.35	36.7	-26.00%	-4.25%	-8.79%	-9%
368.00	LINE TRANSFORMERS	148,391,031.48	31.2	-23.00%	-4.93%	-9.15%	-9%
369.00	SERVICES	46,406,633.80	46.8	-25.00%	-2.48%	-6.27%	-6%
370.00	METERS	41,239,246.38	29.6	0.00%	0.00%	0.00%	0%
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES	3,146,830.92	0.0	0.00%	0.00%	0.00%	0%
372.00	LEASED PROPERTY ON CUSTOMERS' PREMISES	10,954,319.31	16.7	0.00%	0.00%	0.00%	0%
373.00	STREET LIGHTING & SIGNAL SYSTEMS	22,649,806.79	25.3	-17.00%	-4.88%	-8.05%	-8%
т	OTAL DISTRIBUTION PLANT	687,183,886.92					
G	ENERAL PLANT						
390.00	STRUCTURES & IMPROVEMENTS	24,976,325.88	21.8	-5.00%	-1.70%	-2.62%	-3%
391.00	OFFICE FURNITURE & EQUIPMENT	12,663,728.77	13.6	0.00%	0.00%	0.00%	0%
391.10	COMPUTER & OTHER ELECTRONIC EQUIPMENT	42,304,777.38	3.6	0.00%	0.00%	0.00%	0%
392.00	TRANSPORTATION EQUIPMENT	2,034,260.41	6.8	0.00%	0.00%	0.00%	0%
393.00	STORES EQUIPMENT	2,340,944.08	8.3	0.00%	0.00%	0.00%	0%
394.00	TOOLS, SHOPS & GARAGE EQUIPMENT	6,852,216.35	12.7	0.00%	0.00%	0.00%	0%
395.00	LABORATORY EQUIPMENT	2,722,108.30	8.1	0.00%	0.00%	0.00%	0%
396.00	POWER OPERATED EQUIPMENT	1,757,132.45	10.7	0.00%	0.00%	0.00%	0%
397.00	COMMUNICATION EQUIPMENT	39,857,341.14	11.1	0.00%	0.00%	0.00%	0%
398.00	MISCELLANEOUS EQUIPMENT	275,042.10	11.7	0.00%	0.00%	0.00%	0%
т	OTAL GENERAL PLANT	135,783,876.86					
т	OTAL DEPRECIABLE PLANT	2,448,419,125.99					

Sources:

Cols. (2) and (4) from Depreciation Study, pages III-7 through III-9. Col. (3) from "westarNorth-CURB227b.txt" These are the remaining lives without Spanos net salvage adjustment. Discount rate of 5.06% from CURB 74. Discount rate of 3.00% from CURB 30.

Exhibit (MJM-12) Page 4 of 8

NET PRESENT VALUE OF WESTAR'S FUTURE COST OF REMOVAL REQUESTS USING SNAVELY KING REMAINING LIVES

	ACCOUNT	PLANT BALANCE AT 12/31/03	COMPOSITE REMAINING LIFE	INFLATED FUTURE COST OF REMOVAL	NET PRESENT VALUE OF COR	NET PRESENT VALUE OF COR	NPV OF COR ROUNDED
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
			Average D	iscount Rate =	5.06%	3.00%	3.00%
S	TEAM PRODUCTION PLANT						
311.00	STRUCTURES & IMPROVEMENTS						
	JEFFREY	48,670,387.38	34.2	-30.00%	-5.55%	-10.92%	-11%
	RIPLEY	2,111,828.27	4.4	-30.00%	-24.14%	-26.34%	-26%
	NEOSHO	2,683,171.52	5.4	-30.00%	-22.98%	-25.57%	-26%
	MURRAY GILL	5,224,995.24	11.5	-30.00%	-17.01%	-21.35%	-21%
	GORDAN EVANS	4,074,654.47	17.3	-30.00%	-12.77%	-17.99%	-18%
	LACYGNE UNIT 1	25,508,581.00	28.6	-30.00%	-7.31%	-12.88%	-13%
	LACYGNE UNIT 2	1,691,460.00	29.2 1	/ -10.00%	-2.37%	-4.22%	-4%
	TOTAL STRUCTURES & IMPROVEMENTS	89,965,077.88					
312.00	BOILER PLANT EQUIPMENT						
	JEFFREY	92,602,293.17	29.9	-36.00%	-8.23%	-14.88%	-15%
	RIPLEY	613,728.00	4.4	-36.00%	-28.97%	-31.61%	-32%
	NEOSHO	5,302,976.40	5.3	-36.00%	-27.71%	-30.78%	-31%
	MURRAY GILL	20,797,771.34	10.7 2	2/ -36.00%	-21.23%	-26.24%	-26%
	GORDAN EVANS	29,092,094.62	16.5	-36.00%	-15.94%	-22.10%	-22%
	LACYGNE UNIT 1	86,057,779.00	26.5	-36.00%	-9.73%	-16.45%	-16%
	LACYGNE UNIT 2	23,880,703.00	28.3 1	/ -15.00%	-3.71%	-6.50%	-6%
	TOTAL BOILER PLANT EQUIPMENT	258,347,345.53					
312.10	POLLUTION CONTROL EQUIPMENT						
	JEFFREY	43,513,437.11	16.4	-44.00%	-19.58%	-27.10%	-27%
	LACYGNE UNIT 1	40,563,914.00	25.9	-44.00%	-12.25%	-20.46%	-20%
	TOTAL POLLUTION CONTROL EQUIPMENT	84,077,351.11					
312.20	BOILER PLANT EQUIPMENT - TRAIN CARS						
	JEFFREY	92,020.00	21.0	0.00%	0.00%	0.00%	0%
	LACYGNE UNIT 2	1,286,715.99	29.50 1	0.00%	0.00%	0.00%	0%
	TOTAL BOILER PLANT EQUIPMENT - TRAIN CARS	1,378,735.99					

Exhibit (MJM-12) Page 5 of 8

NET PRESENT VALUE OF WESTAR'S FUTURE COST OF REMOVAL REQUESTS USING SNAVELY KING REMAINING LIVES

	ACCOUNT	PLANT BALANCE AT 12/31/03	COMPOSITE REMAINING LIFE	INFLATED FUTURE COST OF REMOVAL	NET PRESENT VALUE OF COR	NET PRESENT VALUE OF COR	NPV OF COR ROUNDED
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
			Average Di	scount Rate =	5.06%	3.00%	3.00%
314.00	TURBOGENERATOR UNITS						
	JEFFREY	42,501,767.66	16.4	-23.00%	-10.24%	-14.16%	-14%
	NEOSHO	4,376,391.25	3.3	-23.00%	-19.54%	-20.86%	-21%
	MURRAY GILL	23,125,021.99	10.9	-23.00%	-13.43%	-16.66%	-17%
	GORDAN EVANS	22,735,281.56	17.0	-23.00%	-9.94%	-13.92%	-14%
	LACYGNE UNIT 1	23,324,011.00	10.5	-23.00%	-13.70%	-16.86%	-17%
	LACYGNE UNIT 2	5,606,664.00	26.4 1/	-10.00%	-2.72%	-4.58%	-5%
	TOTAL TURBOGENERATOR UNITS	121,669,137.46					
315.00	ACCESSORY ELECTRIC EQUIPMENT						
	JEFFREY	15,519,163.73	28.1	-11.00%	-2.75%	-4.79%	-5%
	WICHITA	196,684.52	0.00	-11.00%	-11.00%	-11.00%	-11%
	RIPLEY	658,792.00	4.0	-11.00%	-9.03%	-9.77%	-10%
	NEOSHO	1,937,670.51	5.4	-11.00%	-8.43%	-9.38%	-9%
	MURRAY GILL	5,919,303.94	11.4	-11.00%	-6.27%	-7.85%	-8%
	GORDAN EVANS	5,770,813.11	17.3	-11.00%	-4.68%	-6.60%	-7%
	LACYGNE UNIT 1	12,239,428.00	23.8	-11.00%	-3.40%	-5.44%	-5%
	LACYGNE UNIT 2	2,133,732.00	28.7 1/	-5.00%	-1.21%	-2.14%	-2%
	TOTAL ACCESSORY ELECTRIC EQUIPMENT	44,375,587.81					
316.00	MISCELLANEOUS POWER PLANT EQUIPMENT						
	JEFFREY	3,634,656.09	24.7	-17.00%	-5.02%	-8.19%	-8%
	RIPLEY	300,132.01	4.1	-17.00%	-13.89%	-15.06%	-15%
	NEOSHO	482,388.67	4.8	-17.00%	-13.41%	-14.75%	-15%
	MURRAY GILL	1,431,422.59	10.4	-17.00%	-10.17%	-12.50%	-13%
	GORDAN EVANS	1,349,650.86	15.9	-17.00%	-7.76%	-10.63%	-11%
	LACYGNE UNIT 1	4,210,990.00	24.0	-17.00%	-5.20%	-8.36%	-8%
	LACYGNE UNIT 2	1,253,341.00	27.5 1	-5.00%	-1.29%	-2.22%	-2%
	TOTAL MISCELLANEOUS POWER PLANT EQUIPMENT	12,662,581.22					
Т	OTAL STEAM PRODUCTION PLANT	612,475,817.00					

NET PRESENT VALUE OF WESTAR'S FUTURE COST OF REMOVAL REQUESTS USING SNAVELY KING REMAINING LIVES

	ACCOUNT	PLANT BALANCE AT 12/31/03	COMPOSITE REMAINING LIFE	INFLATED FUTURE COST OF REMOVAL	NET PRESENT VALUE OF COR	NET PRESENT VALUE OF COR	NPV OF COR ROUNDED
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
N	UCLEAR PRODUCTION PLANT		Average L	iscount Rate =	5.06%	3.00%	3.00%
321.00	STRUCTURES AND IMPROVEMENTS	399.941.190.35	37.6	-5.00%	-0.78%	-1.65%	-2%
322.00	REACTOR PLANT EQUIPMENT	626,162,397,47	34.8	-11.00%	-1.97%	-3.93%	-4%
323.00	TURBOGENERATOR UNITS	166,568,931.82	29.7	-18.00%	-4.16%	-7.48%	-7%
324.00	ACCESSORY ELECTRIC EQUIPMENT	131,138,532.32	29.9	0.00%	0.00%	0.00%	0%
325.00	MISCELLANEOUS POWER PLANT EQUIPMENT	61,643,029.79	28.1	0.00%	0.00%	0.00%	0%
т	OTAL NUCLEAR PRODUCTION PLANT	1,385,454,081.75					
G	AS TURBINE PLANT						
341.00	STRUCTURES & IMPROVEMENTS						
	JEFFREY	10,491.12	12.5	0.00%	0.00%	0.00%	0%
344.00	GENERATORS						
	JEFFREY	376,493.89	12.4	0.00%	0.00%	0.00%	0%
	GORDAN EVANS	1,549,284.89	28.1	0.00%	0.00%	0.00%	0%
	TOTAL GENERATORS	1,925,778.78					
345.00	ACCESSORY ELECTRIC EQUIPMENT						
	JEFFREY	22,776.40	12.5	0.00%	0.00%	0.00%	0%
346.00	MISCELLANEOUS PLANT EQUIPMENT						
	JEFFREY	5,544.56	12.5	0.00%	0.00%	0.00%	0%
т	OTAL GAS TURBINE PLANT	1,964,590.86					
т	RANSMISSION PLANT						
352.00	STRUCTURES & IMPROVEMENTS	4,508,216.19	41.1	-10.00%	-1.31%	-2.97%	-3%
353.00	STATION EQUIPMENT	116,243,326.26	46.4	-15.00%	-1.52%	-3.81%	-4%
354.00	TOWERS & FIXTURES	6,891,043.02	38.6	-32.00%	-4.76%	-10.22%	-10%
355.00	POLES & FIXTURES	85,569,105.00	42.3	-28.00%	-3.47%	-8.02%	-8%
356.00	OVERHEAD CONDUCTORS & DEVICES	60,772,529.00	31.4	-1 9 .00%	-4.03%	-7.51%	-8%
357.00	UNDERGROUND CONDUIT	419,469.00	36.4	0.00%	0.00%	0.00%	0%
358.00	UNDERGROUND CONDUCTOR & DEVICES	490,540.00	23.1	0.00%	0.00%	0.00%	0%
359.00	ROADS & TRAILS	19,910.00	26.1	0.00%	0.00%	0.00%	0%
т	OTAL TRANSMISSION PLANT	274,914,138.47					

Exhibit (MJM-12) Page 7 of 8

NET PRESENT VALUE OF WESTAR'S FUTURE COST OF REMOVAL REQUESTS USING SNAVELY KING REMAINING LIVES

		PLANT BALANCE AT	COMPOSITE REMAINING	INFLATED FUTURE COST OF	NET PRESENT VALUE OF	NET PRESENT VALUE OF	NPV OF COR
	ACCOUNT	12/31/03	LIFE	REMOVAL	COR		ROUNDED
	(1)	(2)	(3) Average D	(4) Necessary Bote =	(5) 5.06%	(6)	(7)
			Average D	ASCOUNT Rate =	5.00 %	3.00 /6	5.00 /6
261.00		2 406 560 69	12.2	10 0.0%	1 74%	2 86%	-3%
301.00		5,490,009.00	42.3	-10.00%	-1.24%	-2.00%	-5%
362.00		54,052,242.55	44.4	-20.00%	-2.23%	-0.30%	-13%
304.00		100,204,589.00	33.2	-34.00%	-0.00%	-12.74%	-15%
305.00		01,202,390.00	54.5 52.5	-45.00%	-0.20%	-10.33%	-7%
300.00		33,510,093.00 64,022,272.00	55.5 40.6	-35.00%	-2.50%	-7.20%	-770
367.00	UNDERGROUND CONDUCTORS & DEVICES	04,032,273.00	40.0	-37.00%	-4.99%	-11.14/0	-11/6
368.00		137,521,034.00	30.0 47 7	-12.00%	-1.79%	-3.65%	-4 %
369.00	SERVICES	62,162,754.00	47.7	-40.00%	-3.60%	-9.77%	-10%
370.00		41,300,588.00	22.1	0.00%	0.00%	0.00%	0%
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES	1,776,650.00	0.9	0.00%	0.00%	0.00%	0%
3/2.00	LEASED PROPERTY ON CUSTOMERS' PREMISES	6,304,347.03	12.9	0.00%	0.00%	11 270/	110/
373.00	STREET LIGHTING & SIGNAL SYSTEMS	22,893,863.00	13.6	-17.00%	-8.69%	-11.37%	-1170
Т	OTAL DISTRIBUTION PLANT	611,123,393.26					
G	ENERAL PLANT						
390.00	STRUCTURES & IMPROVEMENTS	13,633,023.78	16.9	-5.00%	-2.17%	-3.03%	-3%
391.00	OFFICE FURNITURE & EQUIPMENT	5,078,757.41	9.6	0.00%	0.00%	0.00%	0%
391.10	COMPUTER & OTHER ELECTRONIC EQUIPMENT	12,755,103.96	2.3	0.00%	0.00%	0.00%	0%
392.00	TRANSPORTATION EQUIPMENT	1,454,532.69	0.00	0.00%	0.00%	0.00%	0%
393.00	STORES EQUIPMENT	1,071,716.51	14.1	0.00%	0.00%	0.00%	0%
394.00	TOOLS, SHOPS & GARAGE EQUIPMENT	3,713,961.61	12.6	0.00%	0.00%	0.00%	0%
395.00	LABORATORY EQUIPMENT	2,595,828.41	9.1	0.00%	0.00%	0.00%	0%
396.00	POWER OPERATED EQUIPMENT	841,791.39	14.2	0.00%	0.00%	0.00%	0%
397.00	COMMUNICATION EQUIPMENT	38,537,911.40	7.7	0.00%	0.00%	0.00%	0%
398.00	MISCELLANEOUS EQUIPMENT	182,207.00	5.2	0.00%	0.00%	0.00%	0%
т	OTAL GENERAL PLANT	79,864,834.16					
т	OTAL DEPRECIABLE PLANT	2,965,796,855.50					

Sources:

Cols. (2) and (4) from Depreciation Study, pages III-4 through III-6.

Col. (3) from "westarSouth-CURB227a.txt" These are the remaining lives without Spanos net salvage adjustment.

Discount rate of 5.06% from CURB 74.

Discount rate of 3.00% from CURB 30.

1/ Based on 6-2033 FRY - same as LaCygne #1.

2/ Spanos did not provide the unadjusted remaining life for this account. 10.7 is his adjusted remaining life.

		ORIGINAL	CAPITAL RE CALCUL ANNUAL A	COVERY ATED CCRUAL	COST OF F CALCUI ANNUAL A	REMOVAL LATED ACCRUAL	COMBINED CALCULATED ANNUAL ACCRUAL	
	ACCOUNT	COST	AMOUNT	RATE		RATE		RATE
	(1)	(2)	(3)	(4)=(3)/(2)	(5)	(6)=(5)/(2)	(7)=(3)+(5)	(8)=(4)+(6)
S	TEAM PRODUCTION PLANT							
311.00	STRUCTURES & IMPROVEMENTS							
	JEFFREY	153,486,630	2,113,103	1.38	342,130	0.22	2,455,233	1.60
	TECUMSEH	14,658,030	305,348	2.08	108,351	0.74	413,698	2.82
	LAWRENCE	22,871,212	334,984	1.46	90,134	0.39	425,118	1.85
	HUTCHINSON	5,547,667	88,718	1.60	64,404	1.16	153,122	2.76
	TOTAL STRUCTURES & IMPROVEMENTS	196,563,540	2,842,153	1.45	605,018	0.31	3,447,172	1.76
312.00	BOILER PLANT EQUIPMENT							
	JEFFREY	291,979,243	4,362,234	1.49	1,914,208	0.66	6,276,442	2.15
	TECUMSEH	48,157,901	1,143,208	2.37	736,272	1.53	1,879,480	3.90
	LAWRENCE	92,419,175	1,508,628	1.63	801,796	0.87	2,310,424	2.50
	HUTCHINSON	16,007,287	549,549	3.43	339,145	2.12	888,694	5.55
	TOTAL BOILER PLANT EQUIPMENT	448,563,606	7,563,619	1.69	3,791,421	0.85	11,355,041	2.54
312.10	POLLUTION CONTROL EQUIPMENT							
	JEFFREY	140,733,721	4,581,725	3.26	2,162,953	1.54	6,744,678	4.80
	TECUMSEH	8,635,762	398,737	4.62	175,973	2.04	574,710	6.66
	LAWRENCE	11,339,226	432,776	3.82	125,407	1.11	558,183	4.93
	TOTAL POLLUTION CONTROL EQUIPMENT	160,708,709	5,413,238	3.37	2,464,333	1.53	7,877,571	4.90
312.20	BOILER PLANT EQUIPMENT - TRAIN CARS							
	JEFFREY	294,464	10,609	3.60	-	-	10,609	3.60
	TECUMSEH	5,183,981	254,553	4.91	-	-	254,553	4.91
	LAWRENCE	12,246,742	462,777	3.78		-	462,777	3.78
	TOTAL BOILER PLANT EQUIPMENT - TRAIN CARS	17,725,187	727,939	4.11	-	-	727,939	4.11
314.00	TURBOGENERATOR UNITS							
	JEFFREY	130,840,042	4,985,158	3.81	1,061,452	0.81	6,046,610	4.62
	TECUMSEH	21,727,970	1,417,706	6.52	420,186	1.93	1,837,892	8.45
	LAWRENCE	54,246,444	2,278,976	4.20	545,837	1.01	2,824,813	5.21
	HUTCHINSON	11,874,764	517,193	4.36	333,050	2.80	850,243	7.16
	TOTAL TURBOGENERATOR UNITS	218,689,220	9,199,033	4.21	2,360,525	1.08	11,559,558	5.29
315.00	ACCESSORY ELECTRIC EQUIPMENT							
	JEFFREY	49,071,728	944,756	1.93	85,683	0.17	1,030,439	2.10
	TECUMSEH	11,194,779	426,292	3.81	43,819	0.39	470,110	4.20
	LAWRENCE	15,574,870	503,402	3.23	30,828	0.20	534,230	3.43
	HUTCHINSON	3,670,809	88,736	2.42	19,304	0.53	108,040	2.95
	TOTAL ACCESSORY ELECTRIC EQUIPMENT	79,512,186	1,963,185	2.47	179,634	0.23	2,142,819	2.70

			CAPITAL RE	COVERY	COST OF F	REMOVAL	COMBINED		
			CALCUL	ATED	CALCU	LATED	CALCULATED		
		ORIGINAL	ANNUAL A	CCRUAL	ANNUAL A	CCRUAL	ANNUAL	ACCRUAL	
	ACCOUNT	COST	AMOUNT	RATE	AMOUNT	RATE	AMOUNT	RATE	
	(1)	(2)	(3)	(4)=(3)/(2)	(5)	(6)=(5)/(2)	(7)=(3)+(5)	(8)=(4)+(6)	
316.00	MISCELLANEOUS POWER PLANT EQUIPMENT								
	JEFFREY	10,655,696	215,255	2.02	30,479	0.29	245,734	2.31	
	TECUMSEH	3,320,277	127,519	3.84	19,393	0.58	146,911	4.42	
	LAWRENCE	4,493,202	190,493	4.24	17,248	0.38	207,741	4.62	
	HUTCHINSON	1,124,545	29,596	2.63	9,914	0.88	39,510	3.51	
	TOTAL MISCELLANEOUS POWER PLANT EQUIPMENT	19,593,720	562,862	2.87	77,035	0.39	639,897	3.26	
то	TAL STEAM PRODUCTION PLANT	1,141,356,168	28,272,030	2.48	9,477,967	0.83	37,749,997	3.3 1	
от	HER PRODUCTION PLANT								
341.00	STRUCTURES & IMPROVEMENTS								
	JEFFREY	40,235	2,557	6.35	-	-	2,557	6.35	
	TECUMSEH	41,856	45	0.11	-	-	45	0.11	
	HUTCHINSON	65,860	-	-	-	-	-	-	
	ABILENE	556,460	-	-	-	-	-	-	
	EVANS	11,348,399	284,055	2.50		-	284,055	2.50	
	TOTAL STRUCTURES & IMPROVEMENTS	12,052,811	286,656	2.38	-	-	286,656	2.38	
342.00	FUEL HOLDERS, PRODUCERS & ACCESSORIES								
	TECUMSEH	144,399	-	-	-	-	-	-	
	HUTCHINSON	696,810	8,092	1.16	-	-	8,092	1.16	
	ABILENE	129,627	-	-	-	-	-	-	
	EVANS	4,667,101	116,864	2.50	_	-	116,864	2.50	
	TOTAL FUEL HOLDERS, PRODUCERS & ACCESSORIES	5,637,936	124,956	2.22	-	-	124,956	2.22	
344.00	GENERATORS								
	JEFFREY	1,202,157	75,478	6.28	-	-	75,478	6.28	
	TECUMSEH	4,652,992	-	-	-	-	-	-	
	HUTCHINSON	26,251,046	-	-	-	-	-	-	
	ABILENE	7,089,996	-	-	-	-	-	-	
	EVANS	84,590,308	2,574,500	3.04	<u> </u>	-	2,574,500	3.04	
	TOTAL GENERATORS	123,786,499	2,649,978	2.14	-	-	2,649,978	2.14	
345.00	ACCESSORY ELECTRIC EQUIPMENT								
	JËFFREY	73,170	4,513	6.17	-	-	4,513	6.17	
	TECUMSEH	214,507	1,104	0.51	-	-	1,104	0.51	
	HUTCHINSON	1,272,920	36,882	2.90	-	-	36,882	2.90	
	ABILENE	609,729	987	0.16	-	-	987	0.16	
	EVANS	22,539,495	622,501	2.76		-	622,501	2.76	
	TOTAL ACCESSORY ELECTRIC EQUIPMENT	24,709,822	665,988	2.70	-	-	665,988	2.70	

		ORIGINAL	CAPITAL RE CALCUL ANNUAL A	ECOVERY ATED CCRUAL	COST OF F CALCUI ANNUAL A	REMOVAL LATED ACCRUAL	COMBINED CALCULATED ANNUAL ACCRUAL	
	ACCOUNT	COST	AMOUNT	RATE	AMOUNT	RATE	AMOUNT	RATE
	(1)	(2)	(3)	(4)=(3)/(2)	(5)	(6)=(5)/(2)	(7)=(3)+(5)	(8)=(4)+(6)
346.00	MISCELLANEOUS PLANT EQUIPMENT							
	JEFFREY	17,934	1,125	6.27	-	-	1,125	6.27
	TECUMSEH	807,751	-	-	-	-	-	-
	HUTCHINSON	80,361	-	-	-	-	-	-
	ABILENE	84,206	512	0.61	-	-	512	0.61
	EVANS	145,050	3,543	2.44		-	3,543	2.44
	TOTAL MISCELLANEOUS PLANT EQUIPMENT	1,135,302	5,179	0.46	-		5,179	0.46
Т	OTAL GAS TURBINE PLANT	167,322,371	3,732,756	2.23	-	-	3,732,756	2.23
Т	RANSMISSION PLANT							
352.00	STRUCTURES & IMPROVEMENTS	9,009,446	111,530	1.24	2,386	0.03	113,916	1.27
353.00	STATION EQUIPMENT	131,589,301	2,081,909	1.58	184,649	0.14	2,266,558	1.72
354.00	TOWERS & FIXTURES	2,911,904	61,240	2.10	(8,463)	(0.29)	52,778	1.81
355.00	POLES & FIXTURES	98,677,201	1,658,138	1.68	174,692	0.18	1,832,830	1.86
356.00	OVERHEAD CONDUCTORS & DEVICES	73,132,521	1,066,683	1.46	148,480	0.20	1,215,163	1.66
357.00	UNDERGROUND CONDUIT	368,152	6,133	1.67	-	-	6,133	1.67
358.00	UNDERGROUND CONDUCTOR & DEVICES	1,084,297	24,237	2.24		-	24,237	2.24
т	OTAL TRANSMISSION PLANT	316,772,823	5,009,871	1.58	501,744	0.16	5,511,615	1.74
D	ISTRIBUTION PLANT							
361.00	STRUCTURES & IMPROVEMENTS	7,435,832	133,000	1.79	16,522	0.22	149,522	2.01
362.00	STATION EQUIPMENT	91,424,380	1,599,520	1.75	166,510	0.18	1,766,030	1.93
364.00	POLES, TOWERS & FIXTURES	157,973,597	3,222,188	2.04	825,935	0.52	4,048,123	2.56
365.00	OVERHEAD CONDUCTORS & DEVICES	91,389,093	1,523,098	1.67	718,202	0.79	2,241,300	2.46
366.00	UNDERGROUND CONDUIT	19,507,626	326,979	1.68	11,857	0.06	338,836	1.74
367.00	UNDERGROUND CONDUCTORS & DEVICES	46,665,491	883,877	1.89	109,333	0.23	993,210	2.12
368.00	LINE TRANSFORMERS	148,391,031	2,109,271	1.42	407,915	0.27	2,517,185	1.69
369.00	SERVICES	46,406,634	569,402	1.23	(104,402)	(0.22)	464,999	1.01
370.00	METERS	41,239,246	734,479	1.78	(32,473)	(0.08)	702,006	1.70
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES	3,146,831	-	-	-	-	-	-
372.00	LEASED PROPERTY ON CUSTOMERS' PREMISES	10,954,319	438,355	4.00	-	-	438,355	4.00
373.00	STREET LIGHTING & SIGNAL SYSTEMS	22,649,807	378,67 7	1.67	33,530	0.15	412,207	1.82
т	OTAL DISTRIBUTION PLANT	687,183,887	11,918,845	1.73	2,152,929	0.31	14,071,774	2.04

		ORIGINAL	CAPITAL RE CALCUL ANNUAL A	ECOVERY ATED CCRUAL	COST OF F CALCU ANNUAL A	REMOVAL LATED ACCRUAL	COMBINED CALCULATED ANNUAL ACCRUAL	
	ACCOUNT	COST	AMOUNT	RATE	AMOUNT	RATE	AMOUNT	RATE
	(1)	(2)	(3)	(4)=(3)/(2)	(5)	(6)=(5)/(2)	(7)=(3)+(5)	(8)=(4)+(6)
(GENERAL PLANT							
390.00	STRUCTURES & IMPROVEMENTS	24,976,326	809,233	3.24	34,371	0.14	843,604	3.38
391.00	OFFICE FURNITURE & EQUIPMENT	12,663,729	700,146	5.53	-	-	700,146	5.53
391.10	COMPUTER & OTHER ELECTRONIC EQUIPMENT	42,304,777	4,044,707	9.56	-	-	4,044,707	9.56
392.00	TRANSPORTATION EQUIPMENT	2,034,260	213,196	10.48	-	-	213,196	10.48
393.00	STORES EQUIPMENT	2,340,944	139,171	5.95	-	-	139,171	5.95
394.00	TOOLS, SHOPS & GARAGE EQUIPMENT	6,852,216	279,333	4.08	-	-	279,333	4.08
395.00	LABORATORY EQUIPMENT	2,722,108	231,629	8.51	-	-	231,629	8.51
396.00	POWER OPERATED EQUIPMENT	1,757,132	20,478	1.17	-	•	20,478	1.17
397.00	COMMUNICATION EQUIPMENT	39,857,341	1,908,911	4.79	-	-	1,908,911	4.79
398.00	MISCELLANEOUS EQUIPMENT	275,042	9,669	3.52	<u> </u>	-	9,669	3.52
٦	TOTAL GENERAL PLANT	135,783,877	8,356,474	6.15	34,371	0.03	8,390,845	6.18
1	TOTAL DEPRECIABLE PLANT	2,448,419,126	57,289,977	2.34	12,167,011	0.50	69,456,987	2.84
ł	NONDEPRECIABLE PLANT							
389.10	LAND IN FEE	216,706						
٦	TOTAL NONDEPRECIABLE PLANT	216,706						
-	TOTAL ELECTRIC PLANT	2,448,635,832	57,289,977					

Sources:

Col. (2) from Depreciation Study, pages III-7 through III-9. Col. (3) from Exhibit___(MJM-13), pages 5-7. Col. (5) from Exhibit___(MJM-13), pages 8-11.

		ORIGINAL	BOOK INAL RESERVE		FUTURE	SURVIVOR	REMAINING	CAPITAL RI CALCUL ANNUAL A	ECOVERY ATED CCRUAL
	ACCOUNT	COST	LESS COR	PERCENT	ACCRUALS	CURVE		AMOUNT	
	(1)	(2)	(3)	(4)	(5)=(2)^(1-(4))-(3)	(6)	(7)	(0)=(3)/(7)	(9)≕(0)/(Z)
S	FEAM PRODUCTION PLANT								
311.00	STRUCTURES & IMPROVEMENTS								
	JEFFREY	153.486.630	81,429,814	0	72,056,816	75-R3 *	34.1	2,113,103	1.38
	TECUMSER	14,658,030	9.039.634	0	5.618.397	75-R3 •	18.4	305,348	2.08
	AWBENCE	22.871.212	13.860.141	0	9.011.071	75-R3 *	26.9	334,984	1,46
	HUTCHINSON	5,547,667	4,278,992	0	1,268,674	75-R3 *	14.3	88,718	1.60
	TOTAL STRUCTURES & IMPROVEMENTS	196,563,540	108,608,582		87,954,958		30.9	2,842,153	1.45
312.00									
012.00	JEFEREY	291 979 243	158.628.647	1	130.430.804	55-R1 *	29.9	4,362,234	1.49
	TECHNSEH	48 157 901	27 784 505	1	19 891 817	55-R1 *	17.4	1,143,208	2.37
		90,107,001	52 030 124	4	37 564 849	55-21 •	24 0	1 508 628	1.63
		16 007 297	9 4 28 205	1	7 / 18 910	55-P1 •	13.5	549 549	3.43
	HUICHINSON	10,007,207_	0,420,000		7,410,510	55-K1	10.0		0.40
	TOTAL BOILER PLANT EQUIPMENT	448,563,606	248,771,590		195,306,380		25.8	7,563,619	1.69
312.10	POLLUTION CONTROL EQUIPMENT								
	JEFFREY	140,733,721	66,509,782	0	74,223,939	35-R2.5 *	16.2	4,581,725	3.26
	TECUMSEH	8,635,762	3,372,432	0	5,263,330	35-R2.5 •	13.2	398,737	4.62
	LAWRENCE	11,339,226	2,770,265	0	8,568,961	35-R2.5 •	19.8	432,776	3.82
	TOTAL POLLUTION CONTROL EQUIPMENT	160,708,709	72,652,479		88,056,230		16.3	5,413,238	3.37
312 20									
J12.20	IEEEDEV	204 464	71 672	0	222 792	25-R2 •	21.0	10.609	3.60
	JEFFRET	E 102 001	1 060 221	õ	4 123 760	25-82 *	16.2	254 553	4 91
	IECOMSER	100,001	2 492 142	0	9,123,700	25-02 *	21.1	462 777	3.78
	LAWRENCE	12,240,742	2,402,142	0	3,704,000	23-112	21.1	402,777	5.70
	TOTAL BOILER PLANT EQUIPMENT - TRAIN CARS	17,725,187	3,614,035		14,111,152		19.4	727,939	4.11
314.00	TURBOGENERATOR UNITS								
	JEFFREY	130,840,042	42,167,148	3	84,747,692	30-S2 *	17.0	4,985,158	3.81
	TECUMSEH	21,727,970	8,033,233	3	13,042,898	30-S2 *	9.2	1,417,706	6.52
	LAWRENCE	54,246,444	19,118,108	3	33,500,942	30-S2 *	14.7	2,278,976	4.20
	HUTCHINSON	11,874,764	8,053,330	3	3,465,192	30-S2 •	6.7	517,193	4.36
	TOTAL TURBOGENERATOR UNITS	218,689,220	77,371,820		134,756,724		14.6	9,199,033	4.21
315.00	ACCESSORY ELECTRIC FOUIPMENT								
010.00	IEFEREY	49 071 728	22 127 841	1	26 453 170	50-S1.5 *	28.0	944.756	1.93
	TECHNSEN	11 104 779	3 580 099	1	7 502 732	50-51.5	17.6	426,292	3.81
		15 574 970	2 085 000	4	12 434 022	50-51.5 *	24.7	503 402	3 23
	HUTCHINSON	3,670,809	2,471,661	1	1,162,440	50-S1.5 *	13.1	88,736	2.42
	TOTAL ACCESSORY ELECTRIC EQUIPMENT	79,512,186	31,164,700		47,552,364		24.2	1,963,185	2.47
316.00	MISCELLANEOUS POWER PLANT EQUIPMENT								
	JEFFREY	10,655,696	4,695,274	2	5,747,308	35-R2 *	26.7	215,255	2.02
	TECUMSEH	3,320,277	1,149,816	2	2,104,056	35-R2 *	16.5	127,519	3.84
	LAWRENCE	4,493,202	117,249	2	4,286,089	35-R2 •	22.5	190,493	4.24
	HUTCHINSON	1,124,545	711,387	2	390,667	35-R2 •	13.2	29,596	2.63
	TOTAL MISCELLANEOUS POWER PLANT EQUIPMENT	19,593,720	6,673,726		12,528,120		22.3	562,862	2.87
т	OTAL STEAM PRODUCTION PLANT	1,141,356,168	548,856,932		580,265,927		20.5	28,272,030	2.48

	ACCOUNT	ORIGINAL	BOOK	GROSS SALVAGE FUTURE PERCENT ACCRUALS	FUTURE	SURVIVOR	REMAINING	CAPITAL RE CALCUL ANNUAL A	ECOVERY .ATED CCRUAL	
	ACCOUNT	COST	LESS COR	PERCENT	ACCRUALS	CURVE	LIFE	AMOUNT	RATE	
	(1)	(2)	(3)	(4)	(5)=(2)*(1-(4))-(3)	(6)	(7)	(8)=(5)/(7)	(9)=(8)/(2)	
0	THER PRODUCTION PLANT									
341.00	STRUCTURES & IMPROVEMENTS									
	JEFFREY	40,235	8,277	0	31,958	SQUARE *	12.5	2,557	6.35	
	TECUMSEH	41,856	41,474	0	382	SQUARE *	8.5	45	0.11	
	HUTCHINSON	65,860	80,475	0	(14,615)	SQUARE *	0.0	0	-	
	ABILENE	556,460	726,797	0	(170,337)	SQUARE •	0.0	0	-	
	EVANS	11,348,399	696,355	0	10,652,044	SQUARE *	37.5	284,055	2.50	
	TOTAL STRUCTURES & IMPROVEMENTS	12,052,811	1,553,378		10,499,433		36.6	286,656	2.38	
342.00	FUEL HOLDERS, PRODUCERS & ACCESSORIES									
	TECUMSEH	144,399	183,652	0	(39,253)	SQUARE *	0.0	0	-	
	HUTCHINSON	696,810	603,755	0	93,055	SQUARE *	11.5	8,092	1.16	
	ABILENE	129,627	165,894	0	(36,267)	SQUARE •	0.0	0	-	
	EVANS	4,667,101	284,694	0	4,382,407	SQUARE •	37.5	116,864	2.50	
	TOTAL FUEL HOLDERS, PRODUCERS & ACCESSORIES	5,637,936	1,237,995		4,399,941		35.2	124,956	2.22	
344.00	GENERATORS									
	JEFFREY	1,202,157	258,684	0	943,473	30-S3 •	12.5	75,478	6.28	
	TECUMSEH	4,652,992	5,122,858	0	(469,866)	30-S3 •	0.0	0	-	
	HUTCHINSON	26,251,046	27,869,255	0	(1,618,209)	30-S3 *	0.0	0	-	
	ABILENE	7,089,996	7,782,226	0	(692,230)	30-53 *	0.0	0	-	
	EVANS	84,590,308	12,246,866	0	72,343,442	30-S3 *	28.1	2,574,500	3.04	
	TOTAL GENERATORS	123,786,499	53,279,889		70,506,610		26.6	2,649,978	2.14	
345.00	ACCESSORY ELECTRIC EQUIPMENT									
	JEFFREY	73,170	16,754	0	56,416	40-S3 •	12.5	4,513	6.17	
	TECUMSEH	214,507	205,119	0	9,388	40-S3 *	8.5	1,104	0.51	
	HUTCHINSON	1,272,920	907,793	0	365,127	40-S3 *	9.9	36,882	2.90	
	ABILENE	609,729	600,349	0	9,380	40-\$3 *	9.5	987	0.16	
	EVANS	22,539,495	1,374,453	0	21,165,042	40-S3 •	34.0	622,501	2.76	
	TOTAL ACCESSORY ELECTRIC EQUIPMENT	24,709,822	3,104,468		21,605,354		32.4	665,988	2.70	
346.00	MISCELLANEOUS PLANT EQUIPMENT									
	JEFFREY	17,934	3,876	0	14,058	SQUARE *	12.5	1,125	6.27	
	TECUMSEH	807,751	1,031,602	0	(223,851)	SQUARE *	0.0	0	-	
	HUTCHINSON	80,361	99,627	0	(19,266)	SQUARE *	0.0	0	-	
	ABILENE	84,206	79,346	0	4,860	SQUARE *	9.5	512	0.61	
	EVANS	145,050	12,206	0	132,844	SQUARE *	37.5	3,543	2.44	
	TOTAL MISCELLANEOUS PLANT EQUIPMENT	1,135,302	1,226,657		(91,355)		(17.6)	5,179	0.46	
т	OTAL GAS TURBINE PLANT	167,322,371	60,402,387		106,919,984		28.6	3,732,756	2.23	

	ACCOUNT	ORIGINAL	BOOK RESERVE	GROSS SALVAGE	FUTURE	SURVIVOR	REMAINING	CAPITAL RE CALCUL ANNUAL A	COVERY ATED CCRUAL
	ACCOUNT	COST	LESS COR	PERCENT	ACCRUALS	CURVE	LIFE	AMOUNT	RATE
	(1)	(2)	(3)	(4)	(5)=(2)*(1-(4))-(3)	(6)	(7)	(8)=(5)/(7)	(9)=(8)/(2)
	TRANSMISSION PLANT								
352.00	STRUCTURES & IMPROVEMENTS	9,009,446	4,503,628	0	4,505,818	55-S2	40.4	111,530	1.24
353.00	STATION EQUIPMENT	131,589,301	53,600,344	5	71,409,492	50-R2.5	34.3	2.081.909	1.58
354.00	TOWERS & FIXTURES	2,911,904	1.212.423	2	1.641.243	60-R3	26.8	61.240	2.10
355.00	POLES & FIXTURES	98.677.201	41.329.966	3	54.386.919	42-S0	32.8	1.658.138	1.68
356.00	OVERHEAD CONDUCTORS & DEVICES	73.132.521	32,339,974	4	37.867.246	50-R1.5	35.5	1.066.683	1.46
357.00	UNDERGROUND CONDUIT	368.152	83,560	0	284.592	55-R3	46.4	6.133	1.67
358.00	UNDERGROUND CONDUCTOR & DEVICES	1,084,297	214,206	0	870,091	40-R3	35.9	24,237	2.24
	TOTAL TRANSMISSION PLANT	316,772,823	133,284,101		170,965,402		34.1	5,009,871	1.58
	DISTRIBUTION PLANT								
361.00	STRUCTURES & IMPROVEMENTS	7.435.832	3.060.131	0	4,375,701	45-R2.5	32.9	133.000	1.79
362.00	STATION EQUIPMENT	91,424,380	28,790,583	5	58.062.578	48-R1.5	36.3	1.599.520	1.75
364.00	POLES, TOWERS & FIXTURES	157,973,597	60.466.721	4	91 187 932	34-R0 5	28.3	3 222 188	2.04
365.00	OVERHEAD CONDUCTORS & DEVICES	91.389.093	36,405,088	5	50,414,550	40-R0.5	33.1	1.523.098	1.67
366.00	UNDERGROUND CONDUIT	19.507.626	4.335.802	Ō	15,171,824	55-R3	46.4	326,979	1.68
367.00	UNDERGROUND CONDUCTORS & DEVICES	46,665,491	13,760,561	1	32,438,275	41-R1.5	36.7	883.877	1.89
368.00	LINE TRANSFORMERS	148.391.031	78.130.061	3	65.809.240	37-R1	31.2	2,109,271	1.42
369.00	SERVICES	46,406,634	19,758,639	Ō	26.647.995	50-R1	46.8	569.402	1.23
370.00	METERS	41,239,246	19.498.674	Ō	21,740,572	33-01	29.6	734.479	1.78
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES	3.146.831	3.385.081	Ō	(238,250)	20-S3	0.0	0	-
372.00	LEASED PROPERTY ON CUSTOMERS' PREMISES	10 954 319	3 633 797	ō	7.320.522	20-01	16.7	438.355	4.00
373.00	STREET LIGHTING & SIGNAL SYSTEMS	22,649,807	12,616,277	2	9,580,533	27-01	25.3	378,677	1.67
	TOTAL DISTRIBUTION PLANT	687,183,887	283,841,415		382,511,473		32.1	11,918,845	1.73
	GENERAL PLANT								
390.00	STRUCTURES & IMPROVEMENTS	24.976.326	7.335.051	0	17.641.275	35-R3	21.8	809.233	3.24
391.00	OFFICE FURNITURE & EQUIPMENT	12,663,729	3.141.737	0	9.521.992	25-SQ	13.6	700.146	5.53
391.10	COMPUTER & OTHER ELECTRONIC EQUIPMENT	42,304,777	27,743,831	õ	14,560,946	5-SQ	3.6	4.044.707	9.56
392.00	TRANSPORTATION EQUIPMENT	2.034.260	482,814	5	1,449,733	15-L3	6.8	213,196	10.48
393.00	STORES FOUIPMENT	2,340,944	1.185.822	Ő	1,155,122	25-SQ	8.3	139.171	5.95
394.00	TOOLS SHOPS & GARAGE EQUIPMENT	6.852.216	3.304.691	õ	3.547.525	25-SQ	12.7	279.333	4.08
395.00	LABORATORY EQUIPMENT	2,722,108	845.910	Ō	1.876.198	25-SQ	8.1	231,629	8.51
396.00	POWER OPERATED EQUIPMENT	1.757.132	1.362.305	10	219.114	13-R4	10.7	20.478	1.17
397.00	COMMUNICATION EQUIPMENT	39.857.341	18,668,434	0	21,188,907	15-SQ	11.1	1.908.911	4.79
398.00	MISCELLANEOUS EQUIPMENT	275,042	161,910	ō	113,132	15-SQ	11.7	9,669	3.52
	TOTAL GENERAL PLANT	135,783,877	64,232,505		71,273,946		8.5	8,356,474	6.15
	TOTAL DEPRECIABLE PLANT	2,448,419,126	1,090,617,340		1,311,936,732		22.9	57,289,977	2.34
	NONDEPRECIABLE PLANT								
389.10	LAND IN FEE	216,706	500						
	TOTAL NONDEPRECIABLE PLANT	216,706	500						
	TOTAL ELECTRIC PLANT	2,448,635,832	1,090,617,840		1,311,936,732			57,289,977	

* Curve shown is interim survivor curve. Each facility in the account is assigned an individual probable retirement year.

Sources:

Cols. (2) and (6) from Depreciation Study, pages III-7 through III-9. Col. (3) from Exhibit___(MJM-13), pages 12-15. Col. (4) from response to CURB 29.

Col. (7) from "westarNorth-CURB227b.txt" These are the remaining lives without Spanos net salvage adjustment.

	ACCOUNT	ORIGINAL COST	DISCOUNTED FUTURE COR %	DISCOUNTED FUTURE COR \$	TOTAL COR In RESERVE	FUTURE ACCRUALS	REM. LIFE	COST OF ACCRUAL	REMOVAL RATE
	(1)	(2)	(3)	(4)=(2)*-(3)	(5)	(6)=(4)-(5)	(7)	(8)=(6)/(7)	(9)=(8)/(2)
211.00	EAM PRODUCTION PLANT								
311.00		152 496 620	11 00%	16 992 520	5 216 994	11 666 646	2/ 1	342 130	0.22
	JEFFRET	14 659 020	-11.00%	0,000,029	3,210,004	1 002 651	40 /	109 251	0.22
		14,000,000	-17.00%	2,491,000	490,214	1,993,031	10.4	00,331	0.74
		22,07 1,212 E E A 7 667	-14.00%	3,201,970	199 561	2,424,090	14.2	90,134	1 16
	HUTCHINSON		-20.00%	1,109,533	100,001	920,973	14.5	04,404	1.10
	TOTAL STRUCTURES & IMPROVEMENTS	196,563,540		23,686,898	6,681,032	17,005,866		605,018	
312.00	BOILER PLANT EQUIPMENT								
	JEFFREY	291,979,243	-15.00%	43,796,886	(13.437.928)	57.234.815	29.9	1.914.208	0.66
	TECUMSEH	48,157,901	-22.00%	10,594,738	(2,216,399)	12,811,137	17.4	736,272	1.53
	LAWRENCE	92,419,175	-17.00%	15,711,260	(4,253,461)	19,964,720	24.9	801,796	0.87
	HUTCHINSON	16,007,287	-24.00%	3,841,749	(736,713)	4,578,461	13.5	339,145	2.12
	TOTAL BOILER PLANT EQUIPMENT	448,563,606		73,944,633	(20,644,500)	94,589,133		3,791,421	
212 10	BOLLUTION CONTROL FOURMENT								
512.10		140 733 721	-25 0.0%	35 183 430	143 501	35 030 840	16.2	2 162 953	1 54
		8 635 762	-23.00%	2 331 656	8 811	2 322 845	13.2	175 973	2.04
	I AWRENCE	11 339 226	-22.00%	2 494 630	11.569	2,483,060	19.8	125,407	1.11
	TOTAL POLLUTION CONTROL EQUIPMENT	160,708,709		40,009,716	163,971	39,845,745		2,464,333	
312.20	BOILER PLANT EQUIPMENT - TRAIN CARS								
	JEFFREY	294,464	0.00%	-	0	0	21.0	0	-
	TECUMSEH	5,183,981	0.00%	-	0	0	16.2	0	-
	LAWRENCE	12,246,742	0.00%	-	0	0	21.1	0	-
	TOTAL BOILER PLANT EQUIPMENT - TRAIN CARS	17,725,187		-	0	0		0	
214.00									
514.00		120 840 042	14.00%	19 317 606	272 027	19 044 670	17.0	1 061 452	0.81
		21 727 970	-18.00%	3 011 035	45 324	3 865 711	0.2	420 186	1 03
		54 246 444	-15.00%	8 136 967	40,024	9 023 811	9.Z 14.7	545 837	1.95
	HUTCHINSON	11 874 764	-19.00%	2 256 205	24 770	2 221 435	67	333 050	2.80
	HO FORMASON	11,074,704	-13.0070	2,230,205	24,770	2,231,400	0.7	000,000	2.00
	TOTAL TURBOGENERATOR UNITS	218,689,220		32,621,812	456,176	32,165,636		2,360,525	
315.00	ACCESSORY ELECTRIC EQUIPMENT								
	JEFFREY	49,071,728	-5.00%	2,453,586	54,463	2,399,123	28.0	85,683	0.17
	TECUMSEH	11,194,779	-7.00%	783,635	12,425	771,210	17.6	43,819	0.39
	LAWRENCE	15,574,870	-5.00%	778,743	17,286	761,457	24.7	30,828	0.20
	HUTCHINSON	3,670,809	-7.00%	256,957	4,074	252,883	13.1	19,304	0.53
	TOTAL ACCESSORY ELECTRIC EQUIPMENT	79,512,186		4,272,921	88,248	4,184,673		179,634	

Exhibit (MJM-13) Page 8 of 29

	ACCOUNT	ORIGINAL	DISCOUNTED FUTURE COR %	DISCOUNTED FUTURE COR \$	TOTAL COR In RESERVE	FUTURE	REM.		REMOVAL RATE
	(1)	(2)	(3)	(4)=(2)*-(3)	(5)	(6)=(4)-(5)	(7)	(8)=(6)/(7)	(9)=(8)/(2)
316.00	MISCELLANEOUS POWER PLANT EQUIPMENT	40.055.000	0.00%	050 450	00.057	040 700	00.7	00.470	0.00
	JEFFREY	10,655,696	-8.00%	852,456	38,657	813,799	26.7	30,479	0.29
	TECUMSEH	3,320,277	-10.00%	332,028	12,045	319,982	16.5	19,393	0.58
	LAWRENCE	4,493,202	-9.00%	404,388	16,300	388,088	22.5	17,248	0.38
	HUTCHINSON	1,124,545	-12.00%	134,945	4,080	130,866	13.2	9,914	0.88
	TOTAL MISCELLANEOUS POWER PLANT EQUIPMENT	19,593,720		1,723,817	71,082	1,652,735		77,035	
т	DTAL STEAM PRODUCTION PLANT	1,141,356,168		176,259,797	(13,183,991)	189,443,788		9,477,967	
0	THER PRODUCTION PLANT								
341.00	STRUCTURES & IMPROVEMENTS								
041.00	JEFEREY	40 235	0.00%	_	0	n	12.5	D	-
	TECUMSEH	41,856	0.00%	-	ň	ů	85	ů	_
	HUTCHINSON	65,860	0.00%	-	ő	ő	0.0	Ő	-
		556 460	0.00%	_	Õ	ů	0.0	ů	_
	EVANS	11 348 300	0.00%		ů	0	37.5	0	_
	EVANO		. 0.0078				57.5	0	
	TOTAL STRUCTURES & IMPROVEMENTS	12,052,811		-	0	0		0	
342.00	FUEL HOLDERS, PRODUCERS & ACCESSORIES								
	TECUMSEH	144,399	0.00%	-	0	0	0.0	0	-
	HUTCHINSON	696,810	0.00%	-	0	0	11.5	0	-
	ABILENE	129,627	0.00%	-	0	0	0.0	0	-
	EVANS	4,667,101	. 0.00%		0	0	37.5	0	-
	TOTAL FUEL HOLDERS, PRODUCERS & ACCESSORIES	5,637,936		-	0	0		0	
344.00	GENERATORS								
	JEFEREY	1 202 157	0.00%	-	0	0	12.5	0	-
	TECUMSEH	4,652,992	0.00%	-	0	Ő	0.0	0	-
	HUTCHINSON	26,251,046	0.00%	-	õ	0 0	0.0	õ	-
	ABILENE	7 089 996	0.00%	-	Ő	õ	0.0	ñ	-
	EVANS	84,590,308	0.00%		0	0	28.1	0	-
	TOTAL GENERATORS	123,786,499		-	0	0		0	
245.00									
345.00		70 470	0.000/		~	•	40 5	•	
		/3,1/0	0.00%	-	0	0	12.5	0	-
	TECUMSEH	214,507	0.00%	-	0	0	8.5	0	-
	HUTCHINSON	1,2/2,920	0.00%	-	0	0	9.9	0	-
	ABILENE	609,729	0.00%	-	0	0	9.5	0	-
	EVANS	22,539,495	0.00%		0_	0	34.0	0	-
	TOTAL ACCESSORY ELECTRIC EQUIPMENT	24,709,822		-	0	0		0	

	ACCOUNT (1)	ORIGINAL	DISCOUNTED FUTURE	DISCOUNTED FUTURE	TOTAL COR In	FUTURE	REM.	COSTOF	REMOVAL RATE
		<u></u>	(3)	$(4)=(2)^{*}-(3)$	(5)	(6)=(4)-(5)	(7)	$\frac{ACCRUAL}{(8)=(6)/(7)}$	$\frac{RAIE}{(9)=(8)/(2)}$
	()	(*)	(0)	(+)-(2) -(3)	(3)	(*)-(+)-(3)	(7)	(0)-(0)/(7)	(3)=(0)/(2)
346.00	MISCELLANEOUS PLANT EQUIPMENT								
	JEFFREY	17,934	0.00%	-	0	0	12.5	0	-
	TECUMSEH	807,751	0.00%	-	0	0	0.0	0	-
	HUTCHINSON	80,361	0.00%	-	0	0	0.0	0	-
	ABILENE	84,206	0.00%	-	0	0	9.5	0	-
	EVANS	145,050	0.00%	<u> </u>	0	0	37.5	0_	-
	TOTAL MISCELLANEOUS PLANT EQUIPMENT	1,135,302		-	0	0		0	
Т	OTAL GAS TURBINE PLANT	167,322,371		-	0	0		0	
т	RANSMISSION PLANT								
352.00	STRUCTURES & IMPROVEMENTS	9,009,446	-3.00%	270,283	173,897	96,386	40.4	2,386	0.03
353.00	STATION EQUIPMENT	131,589,301	-5.00%	6,579,465	246,019	6,333,446	34.3	184,649	0.14
354.00	TOWERS & FIXTURES	2,911,904	-14.00%	407,667	634,463	(226,796)	26.8	(8,463)	(0.29)
355.00	POLES & FIXTURES	98,677,201	-11.00%	10,854,492	5,124,601	5,729,891	32.8	174,692	0.18
356.00	OVERHEAD CONDUCTORS & DEVICES	73,132,521	-7.00%	5,119,276	(151,775)	5,271,051	35.5	148,480	0.20
357.00	UNDERGROUND CONDUIT	368,152	0.00%	-	0	0	46.4	0	-
358.00	UNDERGROUND CONDUCTOR & DEVICES	1,084,297	. 0.00%	-	0	0	35.9	0	-
Т	OTAL TRANSMISSION PLANT	316,772,823		23,231,184	6,027,205	17,203,97 9		501,744	
D	ISTRIBUTION PLANT								
361.00	STRUCTURES & IMPROVEMENTS	7,435,832	-4.00%	297,433	(246,151)	543,584	32.9	16,522	0.22
362.00	STATION EQUIPMENT	91,424,380	-7.00%	6,399,707	355,398	6,044,309	36.3	166,510	0.18
364.00	POLES, TOWERS & FIXTURES	157,973,597	-15.00%	23,696,040	322,089	23,373,950	28.3	825,935	0.52
365.00	OVERHEAD CONDUCTORS & DEVICES	91,389,093	-17.00%	15,536,146	(8,236,325)	23,772,471	33.1	718,202	0.79
366.00	UNDERGROUND CONDUIT	19,507,626	-3.00%	585,229	35,043	550,186	46.4	11,857	0.06
367.00	UNDERGROUND CONDUCTORS & DEVICES	46,665,491	-9.00%	4,199,894	187,356	4,012,538	36.7	109,333	0.23
368.00	LINE TRANSFORMERS	148,391,031	-9.00%	13,355,193	628,255	12,726,937	31.2	407,915	0.27
369.00	SERVICES	46,406,634	-6.00%	2,784,398	7,670,432	(4,886,034)	46.8	(104,402)	(0.22)
370.00	METERS	41,239,246	0.00%	-	961,192	(961,192)	29.6	(32,473)	(0.08)
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES	3,146,831	0.00%	-	0	0	0.0	0	-
372.00	LEASED PROPERTY ON CUSTOMERS' PREMISES	10,954,319	0.00%	-	0	0	16.7	0	-
373.00	STREET LIGHTING & SIGNAL SYSTEMS	22,649,807	-8.00%	1,811,985	963,671	848,314	25.3	33,530	0.15
т	OTAL DISTRIBUTION PLANT	687,183,887		68,666,024	2,640,960	66,025,063		2,152,929	

		ORIGINAL	DISCOUNTED	DISCOUNTED	TOTAL COR In	FUTURE	REM.	COST OF	
	ACCOUNT	COST	COR %	COR \$	RESERVE	ACCRUALS	LIFE	ACCRUAL	RATE
	(1)	(2)	(3)	(4)=(2)*-(3)	(5)	(6)=(4)-(5)	(7)	(8)=(6)/(7)	(9)=(8)/(2)
G	ENERAL PLANT								
390.00	STRUCTURES & IMPROVEMENTS	24,976,326	-3.00%	749,290	0	749,290	21.8	34,371	0.14
391.00	OFFICE FURNITURE & EQUIPMENT	12,663,729	0.00%	-	0	0	13.6	0	-
391.10	COMPUTER & OTHER ELECTRONIC EQUIPMENT	42,304,777	0.00%	-	0	0	3.6	0	-
392.00	TRANSPORTATION EQUIPMENT	2,034,260	0.00%	-	0	0	6.8,	0	-
393.00	STORES EQUIPMENT	2,340,944	0.00%	-	0	0	8.3	0	-
394.00	TOOLS, SHOPS & GARAGE EQUIPMENT	6,852,216	0.00%	-	0	0	12.7	0	-
395.00	LABORATORY EQUIPMENT	2,722,108	0.00%	-	0	0	8.1	0	-
396.00	POWER OPERATED EQUIPMENT	1,757,132	0.00%	-	0	0	10.7	0	-
397.00	COMMUNICATION EQUIPMENT	39,857,341	0.00%	-	0	0	11.1	0	-
398.00	MISCELLANEOUS EQUIPMENT	275,042	0.00%		0	0	11.7	0	-
т	OTAL GENERAL PLANT	135,783,877		749,290	0	749,290		34,371	
т	OTAL DEPRECIABLE PLANT	2,448,419,126		268,906,294	(4 ,515, 826)	273,422,120		12,167,011	

Sources:

Col. (2) from Depreciation Study, pages III-7 through III-9.

Col. (3) from Exhibit___(MJM-12). Col. (5) from Exhibit___(MJM-13), pages 12-15, based on response to CURB 238. Col. (7) from "westarNorth-CURB227b.txt" These are the remaining lives without Spanos net salvage adjustment.

	ACCOUNT	ORIGINAL COST	BOOK RESERVE	1980-2002 COR In RESERVE 1/	2003 COR In RESERVE 1/	TOTAL COR In RESERVE	BOOK RESERVE LESS COR
	(1)	(2)	(3)	(4)	(5)	(6)=(4)+(5)	(7)=(3)-(6)
S	TEAM PRODUCTION PLANT						
311.00	STRUCTURES & IMPROVEMENTS						
	JEFFREY	153,486,630,47	86.646.698	4,782,093	434,791	5,216,884	81,429,814
	TECUMSEH	14,658,030.35	9,537,848	456,692	41,523	498,214	9,039,634
	LAWRENCE	22,871,212.24	14,637,515	712,585	64,789	777,374	13,860,141
	HUTCHINSON	5,547,666.56	4,467,553	172,845	15,715	188,561	4,278,992
	TOTAL STRUCTURES & IMPROVEMENTS	196,563,539.62	115,289,614	6,124,215	556,817	6,681,032	108,608,582
312.00	BOILER PLANT EQUIPMENT						
	JEFFREY	291,979,243.05	145,190,719	(12,232,738)	(1,205,190)	(13,437,928)	158,628,647
	TECUMSEH	48,157,901.09	25,568,106	(2,017,619)	(198,779)	(2,216,399)	27,784,505
	LAWRENCE	92,419,174.73	49,676,673	(3,871,986)	(381,475)	(4,253,461)	53,930,134
	HUTCHINSON	16,007,286.97	7,691,592	(670,640)	(66,073)	(736,713)	8,428,305
	TOTAL BOILER PLANT EQUIPMENT	448,563,605.84	228,127,090	(18,792,984)	(1,851,516)	(20,644,500)	248,771,590
312.10	POLLUTION CONTROL EQUIPMENT						
	JEFFREY	140,733,721.32	66,653,373	170,641	(27,051)	143,591	66,509,782
	TECUMSEH	8,635,761.92	3,381,243	10,471	(1,660)	8,811	3,372,432
	LAWRENCE	11,339,226.03	2,781,834	13,749	(2,180)	11,569	2,770,265
	TOTAL POLLUTION CONTROL EQUIPMENT	160,708,709.27	72,816,450	194,861	(30,890)	163,971	72,652,479
312.20	BOILER PLANT EQUIPMENT - TRAIN CARS						
	JEFFREY	294,464.00	71,672	0	0	0	71,672
	TECUMSEH	5,183,981.40	1,060,221	0	0	0	1,060,221
	LAWRENCE	12,246,741.55	2,482,142	0	0_	0	2,482,142
	TOTAL BOILER PLANT EQUIPMENT - TRAIN CARS	17,725,186.95	3,614,035	0	0	0	3,614,035
314.00	TURBOGENERATOR UNITS						
	JEFFREY	130,840,041.67	42,440,075	0	272,927	272,927	42,167,148
	TECUMSEH	21,727,970.32	8,078,557	0	45,324	45,324	8,033,233
	LAWRENCE	54,246,443.90	19,231,264	0	113,156	113,156	19,118,108
	HUTCHINSON	11,874,764.46	8,078,100	0	24,770	24,770	8,053,330
	TOTAL TURBOGENERATOR UNITS	218,689,220.35	77,827,996	0	456,176	456,176	77,371,820

	ACCOUNT	ORIGINAL COST	BOOK RESERVE	1980-2002 COR In RESERVE 1/	2003 COR In RESERVE 1/	TOTAL COR in RESERVE	BOOK RESERVE LESS COR
	(1)	(2)	(3)	(4)	(5)	(6)=(4)+(5)	(7)=(3)-(6)
315.00							
515.00	IEFEREV	49 071 728 36	22 182 304	0	54 463	54 463	22 127 841
	TECHNOEH	11 194 778 94	3 592 524	0	12 / 25	12 425	3 580 099
		15 574 869 72	3,002,024	0	17 286	17 286	2 985 099
	HUTCHINSON	3,670,808.83	2,475,735	Ő	4,074	4,074	2,471,661
	TOTAL ACCESSORY ELECTRIC EQUIPMENT	79,512,185.85	31,252,948	0	88,248	88,248	31,164,700
316.00	MISCELLANEOUS POWER PLANT FOUIPMENT						
010.00	JEFEREY	10 655 696 43	4,733,931	0	38.657	38.657	4.695.274
	TECUMSEH	3.320.277.16	1,161,861	Ő	12.045	12.045	1,149,816
	LAWRENCE	4.493.201.83	133,549	0 0	16.300	16.300	117.249
	HUTCHINSON	1,124,544.82	715,467	0	4,080	4,080	711,387
	TOTAL MISCELLANEOUS POWER PLANT EQUIPMENT	19,593,720.24	6,744,808	0	71,082	71,082	6,673,726
тс	TAL STEAM PRODUCTION PLANT	1,141,356,168.12	535,672,941	(12,473,908)	(710,083)	(13,183,991)	548,856,932
01	HER PRODUCTION PLANT						
341.00	STRUCTURES & IMPROVEMENTS						
	JEFFREY	40.235.10	8.277	0	0	0	8.277
	TECUMSEH	41.855.98	41.474	0	0	Ō	41,474
	HUTCHINSON	65.859.76	80,475	0	0	Ó	80,475
	ABILENE	556,460,44	726,797	Ó	0	0	726,797
	EVANS	11,348,399.38	696,355	0_	0	0	696,355
	TOTAL STRUCTURES & IMPROVEMENTS	12,052,810.66	1,553,378	0	0	0	1,553,378
342.00	FUEL HOLDERS, PRODUCERS & ACCESSORIES						
	TECUMSEH	144,398.63	183,652	0	0	0	183,652
	HUTCHINSON	696,809.85	603,755	0	0	0	603,755
	ABILENE	129,626.75	165,894	0	0	0	165,894
	EVANS	4,667,101.25	284,694	0	0	0	284,694
	TOTAL FUEL HOLDERS, PRODUCERS & ACCESSORIES	5,637,936.48	1,237,995	0	0	0	1,237,995

	ACCOUNT	ORIGINAL COST	BOOK RESERVE	1980-2002 COR In RESERVE 1/	2003 COR In RESERVE 1/	TOTAL COR In RESERVE	BOOK RESERVE LESS COR
	(1)	(2)	(3)	(4)	(5)	(6)=(4)+(5)	(7)=(3)-(6)
344.00	GENERATORS						
	JEFFREY	1,202,157.28	258,684	0	0	0	258,684
	TECUMSEH	4,652,991.77	5,122,858	0	0	0	5,122,858
	HUTCHINSON	26,251,045.67	27,869,255	0	0	0	27,869,255
	ABILENE	7,089,996.25	7,782,226	0	0	0	7,782,226
	EVANS	84,590,308.16	12,246,866	0	0_	0	12,246,866
	TOTAL GENERATORS	123,786,499.13	53,279,889	0	0	0	53,279,889
345.00	ACCESSORY ELECTRIC EQUIPMENT						
	JEFFREY	73,170.47	16,754	0	0	0	16,754
	TECUMSEH	214,507.09	205,119	0	0	0	205,119
	HUTCHINSON	1,272,920.46	907,793	0	0	0	907,793
	ABILENE	609,729.07	600,349	0	0	0	600,349
	EVANS	22,539,495.36	1,374,453	0	0	0	1,374,453
	TOTAL ACCESSORY ELECTRIC EQUIPMENT	24,709,822.45	3,104,468	0	0	0	3,104,468
346.00	MISCELLANEOUS PLANT EQUIPMENT						
	JEFFREY	17,933.54	3,876	0	0	0	3,876
	TECUMSEH	807,751.27	1,031,602	0	0	0	1,031,602
	HUTCHINSON	80,360.89	99,627	0	0	0	99,627
	ABILENE	84,206.10	79,346	0	0	0	79,346
	EVANS	145,050.43	12,206	0_	0	0_	12,206
	TOTAL MISCELLANEOUS PLANT EQUIPMENT	1,135,302.23	1,226,657	0	0	0	1,226,657
т	OTAL GAS TURBINE PLANT	167,322,370.95	60,402,387	0	0	0	60,402,387
т	RANSMISSION PLANT						
352.00	STRUCTURES & IMPROVEMENTS	9,009,445.60	4,677,525	102,556	71,341	173,897	4,503,628
353.00	STATION EQUIPMENT	131,589,301.28	53,846,363	0	246,019	246,019	53,600,344
354.00	TOWERS & FIXTURES	2,911,904.36	1,846,886	580,164	54,299	634,463	1,212,423
355.00	POLES & FIXTURES	98,677,201.47	46,454,567	4,371,142	753,459	5,124,601	41,329,966
356.00	OVERHEAD CONDUCTORS & DEVICES	73,132,521.08	32,188,199	(590,192)	438,417	(151,775)	32,339,974
357.00	UNDERGROUND CONDUIT	368,152.01	83,560	0 [´]	0	0	83,560
358.00	UNDERGROUND CONDUCTOR & DEVICES	1,084,297.34	214,206	0	0	0	214,206
т	OTAL TRANSMISSION PLANT	316,772,823.14	139,311,306	4,463,670	1,563,535	6,027,205	133,284,101

	ACCOUNT	ORIGINAL	BOOK	1980-2002 COR in	2003 COR In DESERVE 1/	TOTAL COR In RESERVE	BOOK RESERVE
	(1)	(2)	(3)	(4)	(5)	(6)=(4)+(5)	(7)=(3)-(6)
		.,					
D	ISTRIBUTION PLANT						
361.00	STRUCTURES & IMPROVEMENTS	7,435,831.53	2,813,980	(303,064)	56,913	(246,151)	3,060,131
362.00	STATION EQUIPMENT	91,424,380.31	29,145,981	0	355,398	355,398	28,790,583
364.00	POLES, TOWERS & FIXTURES	157,973,596 <i>.</i> 80	60,788,810	(152,659)	474,748	322,089	60,466,721
365.00	OVERHEAD CONDUCTORS & DEVICES	91,389,092.64	28,168,763	(8,414,069)	177,744	(8,236,325)	36,405,088
366.00	UNDERGROUND CONDUIT	19,507,625.61	4,370,845	0	35,043	35,043	4,335,802
367.00	UNDERGROUND CONDUCTORS & DEVICES	46,665,491.35	13,947,917	0	187,356	187,356	13,760,56 1
368.00	LINE TRANSFORMERS	148,391,031.48	78,758,316	(91,441)	719,696	628,255	78,130,061
369.00	SERVICES	46,406,633.80	27,429,071	7,249,589	420,843	7,670,432	19,758,639
370.00	METERS	41,239,246.38	20,459,866	961,192	0	961,192	19,498,674
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES	3,146,830.92	3,385,081	0	0	0	3,385,081
372.00	LEASED PROPERTY ON CUSTOMERS' PREMISES	10,954,319.31	3,633,797	0	0	0	3,633,797
373.00	STREET LIGHTING & SIGNAL SYSTEMS	22,649,806.79	13,579,948	1,075,194	(111,523)	963,671	12,616,277
Т	OTAL DISTRIBUTION PLANT	687,183,886.92	286,482,375	324,742	2,316,218	2,640,960	283,841,415
G	ENERAL PLANT						
390.00	STRUCTURES & IMPROVEMENTS	24,976,325,88	7,335,051	0	0	0	7,335,051
391.00	OFFICE FURNITURE & EQUIPMENT	12,663,728.77	3,141,737	0	0	0	3,141,737
391.10	COMPUTER & OTHER ELECTRONIC EQUIPMENT	42,304,777.38	27,743,831	0	0	0	27,743,831
392.00	TRANSPORTATION EQUIPMENT	2.034.260.41	482,814	0	0	0	482,814
393.00	STORES EQUIPMENT	2.340.944.08	1.185.822	0	0	0	1,185,822
394.00	TOOLS SHOPS & GARAGE EQUIPMENT	6.852.216.35	3.304.691	0	0	0	3,304,691
395.00		2.722.108.30	845,910	0	0	0	845,910
396.00	POWER OPERATED EQUIPMENT	1.757.132.45	1.362.305	0	0	0	1,362,305
397.00	COMMUNICATION EQUIPMENT	39.857.341.14	18.668.434	0	0	0	18,668,434
398.00	MISCELLANEOUS EQUIPMENT	275,042.10	161,910	0_	0	0	161,910
т	OTAL GENERAL PLANT	135,783,876.86	64,232,505	0	0	0	64,232,505
т	OTAL DEPRECIABLE PLANT	2,448,419,125.99	1,086,101,514	(7,685,496)	3,169,670	(4,515,826)	1,090,617,340

Sources:

Cols. (2) and (3) from Depreciation Study, pages III-7 through III-9. Col. (4) from "CURB 238b kpi sfas 143 1980-2002(1).xls", Accrued COR less Incurred COR. Col (5) from "CURB 238b FASB 143 calc-2003(1).xls", Col. E - Col. F.

1/ For Steam Production plant, COR in Reserve (cols. 4 and 5) is allocated to plants based on Original Cost (col. 2).
		ORIGINAL	CAPITAL RE CALCUL	COVERY ATED CCRUAL	COSTOF				
	ACCOUNT	COST	AMOUNT	RATE	ACCRUAL	RATE	ACCRUAL	RATE	
	(1)	(2)	(3)	(4)=(3)/(2)	(5)	(6)=(5)/(2)	(7)=(3)+(5)	(8)=(4)+(6)	
SI	EAM PRODUCTION PLANT								
311.00	STRUCTURES & IMPROVEMENTS								
	JEFFREY	48,670,387	522,355	1.07	178,140	0.37	700,495	1.44	
	RIPLEY	2,111,828	(43,037)	-2.04	132.074	6.25	89,037	4.21	
	NEOSHO	2,683,172	75,444	2.81	136,731	5.10	212,175	7.91	
	MURRAY GILL	5,224,995	34,341	0.66	102,308	1.96	136,649	2.62	
	GORDAN EVANS	4.074.654	37,229	0.91	45,970	1.13	83,199	2.04	
	LACYGNE UNIT 1	25,508,581	463,810	1.82	129,484	0.51	593,294	2.33	
	LACYGNE UNIT 2	1,691,460	40,053	2.37	3,196	0.19	43,249	2.56	
	TOTAL STRUCTURES & IMPROVEMENTS	89,965,078	1,130,194	1.26	727,903	0.81	1,858,097	2.07	
312.00	BOILER PLANT EQUIPMENT								
	JEFFREY	92,602,293	1,583,394	1.71	521,944	0.56	2,105,337	2.27	
	RIPLEY	613,728	413,783	67.42	47,219	7.69	461,003	75.11	
	NEOSHO	5,302,976	236,952	4.47	328,713	6.20	565,665	10.67	
	MURRAY GILL	20,797,771	(101,950)	-0.49	541,380	2.60	439,431	2.11	
	GORDAN EVANS	29.092.095	441,350	1.52	420,563	1.45	861,913	2.97	
	LACYGNE UNIT 1	86.057.779	1.320.596	1.53	579,764	0.67	1,900,360	2.20	
	LACYGNE UNIT 2	23,880,703	605,086	2.53	66,265	0.28	671,351	2.81	
	TOTAL BOILER PLANT EQUIPMENT	258,347,346	4,499,211	1.74	2,505,849	0.97	7,005,060	2.71	
312.10	POLLUTION CONTROL EQUIPMENT								
	JEFFREY	43,513,437	796,133	1.83	765,059	1.76	1,561,193	3.59	
	LACYGNE UNIT 1	40,563,914	(10,050)	-0.02	341,970	0.84	331,920	0.82	
	TOTAL POLLUTION CONTROL EQUIPMENT	84,077,351	786,083	0.93	1,107,029	1.32	1,893,112	2.25	
312.20	BOILER PLANT EQUIPMENT - TRAIN CARS								
	JEFFREY	92,020	2,997	3.26	92	0.10	3,089	3.36	
	LACYGNE UNIT 2	1,286,716	(11,165)	-0.87	914	0.07	(10,251)	-0.80	
	TOTAL BOILER PLANT EQUIPMENT - TRAIN CARS	1,378,736	(8,168)	-0.59	1,006	0.07	(7,162)	-0.52	
314.00	TURBOGENERATOR UNITS								
	JEFFREY	42,501,768	1,844,061	4.34	396,709	0.93	2,240,769	5.27	
	NEOSHO	4,376,391	332,037	7.59	295,839	6.76	627,876	14.35	
	MURRAY GILL	23,125,022	379,353	1.64	388,408	1.68	767,761	3.32	
	GORDAN EVANS	22,735,282	115,172	0.51	204,720	0.90	319,891	1.41	
	LACYGNE UNIT 1	23,324,011	851,310	3.65	406,674	1.74	1,257,984	5.39	
	LACYGNE UNIT 2	5,606,664	172,277	3.07	13,396	0.24	185,672	3.31	
	TOTAL TURBOGENERATOR UNITS	121,669,137	3,694,208	3.04	1,705,746	1.40	5,399,954	4.44	

		ORIGINAL	CAPITAL RECOVERY CALCULATED ANNUAL ACCRUAL		COST OF	REMOVAL	COMBINED CALCULATED	
	ACCOUNT	COST	AMOUNT	RATE	ACCRUAL	RATE	ACCRUAL	RATE
	(1)	(2)	(3)	(4)=(3)/(2)	(5)	(6)=(5)/(2)	(7)=(3)+(5)	(8)=(4)+(6)
315.00	ACCESSORY ELECTRIC EQUIPMENT							
	JEFFREY	15,519,164	286,796	1.85	35,168	0.23	321,964	2.08
	WICHITA	196,685	0	-	-	0.00	-	0.00
	RIPLEY	658,792	(63,201)	-9.59	18,722	2.84	(44,479)	-6.75
	NEOSHO	1,937,671	72,835	3.76	37,202	1.92	110,037	5.68
	MURRAY GILL	5,919,304	78,791	1.33	48,641	0.82	127,432	2.15
	GORDAN EVANS	5,770,813	73,961	1.28	27,912	0.48	101,873	1.76
	LACYGNE UNIT 1	12,239,428	236,127	1.93	32,747	0.27	268,873	2.20
	LACYGNE UNIT 2	2,133,732	39,899	1.87	2,504	0.12	42,403	1.99
	TOTAL ACCESSORY ELECTRIC EQUIPMENT	44,375,588	725,208	1.63	202,896	0.46	928,103	2.09
316.00	MISCELLANEOUS POWER PLANT EQUIPMENT							
	JEFFREY	3,634,656	103,851	2.86	13,701	0.38	117,552	3.24
	RIPLEY	300,132	24,310	8.10	11,940	3.98	36,250	12.08
	NEOSHO	482,389	50,799	10.53	16,392	3.40	67,191	13.93
	MURRAY GILL	1,431,423	58,017	4.05	19,697	1.38	77,714	5.43
	GORDAN EVANS	1,349,651	41,390	3.07	10,450	0.77	51,840	3.84
	LACYGNE UNIT 1	4,210,990	112,268	2.67	16,337	0.39	128,605	3.06
	LACYGNE UNIT 2	1,253,341	23,462	1.87	1,509	0.12	24,971	1.99
	TOTAL MISCELLANEOUS POWER PLANT EQUIPMENT	12,662,581	414,097	3.27	90,026	0.71	504,123	3.98
т	DTAL STEAM PRODUCTION PLANT	612,475,817	11,240,834	1. 84	6,340,454	1.04	17,581,288	2.88
N	UCLEAR PRODUCTION PLANT							
321.00	STRUCTURES AND IMPROVEMENTS	399,941,190	5,963,717	1.49	212,735	0.05	6,176,452	1.54
322.00	REACTOR PLANT EQUIPMENT	626,162,397	10,341,772	1.65	719,727	0.11	11,061,499	1.76
323.00	TURBOGENERATOR UNITS	166,568,932	2,931,832	1.76	392,587	0.24	3,324,418	2.00
324.00	ACCESSORY ELECTRIC EQUIPMENT	131,138,532	2,741,340	2.09	-	0.00	2,741,340	2.09
325.00	MISCELLANEOUS POWER PLANT EQUIPMENT	61,643,030	1,884,904	3.06		0.00	1,884,904	3.06
т	OTAL NUCLEAR PRODUCTION PLANT	1,385,454,082	23,863,565	1.72	1,325,048	0.10	25,188,613	1.82
G	AS TURBINE PLANT							
341.00	STRUCTURES & IMPROVEMENTS							
	JEFFREY	10,491	659	6.28	-	0.00	659	6.28
344.00	GENERATORS			_				
	JEFFREY	376,494	24,325	6.46	-	0.00	24,325	6.46
	GORDAN EVANS	1,549,285	43,603	2.81		0.00	43,603	2.81
	TOTAL GENERATORS	1,925,779	67,928	3.53	-	0.00	67,928	3.53

		ORIGINAL	CALCULATED ANNUAL ACCRUAL		COST OF	REMOVAL	COMBINED CALCULATED	
	ACCOUNT	COST	AMOUNT	RATE	ACCRUAL	RATE	ACCRUAL	RATE
	(1)	(2)	(3)	(4)=(3)/(2)	(5)	(6)=(5)/(2)	(7)=(3)+(5)	(8)=(4)+(6)
345.00	ACCESSORY ELECTRIC EQUIPMENT							
	JEFFREY	22,776	1,429	6.27	-	0.00	1,429	6.27
346.00	MISCELLANEOUS PLANT EQUIPMENT							
	JEFFREY	5,545	349	6.30		0.00		6.30
T	DTAL GAS TURBINE PLANT	1,964,591	70,365	3.58	-	0.00	70,365	3.58
Т	RANSMISSION PLANT							
352.00	STRUCTURES & IMPROVEMENTS	4,508,216	60,043	1.33	(1,001)	-0.02	59,042	1.31
353.00	STATION EQUIPMENT	116,243,326	1,324,702	1.14	100,210	0.09	1,424,912	1.23
354.00	TOWERS & FIXTURES	6,891,043	58,737	0.85	14,010	0.20	72,747	1.05
355.00	POLES & FIXTURES	85,569,105	914,080	1.07	137,108	0.16	1,051,188	1.23
356.00	OVERHEAD CONDUCTORS & DEVICES	60,772,529	1,152,915	1.90	154,834	0.25	1,307,750	2.15
357.00	UNDERGROUND CONDUIT	419,469	6,118	1.46	-	0.00	6,118	1.46
358.00	UNDERGROUND CONDUCTOR & DEVICES	490,540	10,819	2.21	-	0.00	10,819	2.21
359.00	ROADS & TRAILS	19,910	266	1.33		0.00	266	1.33
Т	OTAL TRANSMISSION PLANT	274,914,138	3,527,680	1.28	405,161	0.15	3,932,841	1.43
D	ISTRIBUTION PLANT							
361.00	STRUCTURES & IMPROVEMENTS	3,496,570	48,328	1.38	(514)	-0.01	47,814	1.37
362.00	STATION EQUIPMENT	54,632,243	618,529	1.13	59,422	0.11	677,951	1.24
364.00	POLES, TOWERS & FIXTURES	100,204,589	1,795,864	1.79	376,265	0.38	2,172,130	2.17
365.00	OVERHEAD CONDUCTORS & DEVICES	81,262,390	1,231,256	1.52	370,843	0.46	1,602,099	1.98
366.00	UNDERGROUND CONDUIT	35,516,093	532,676	1.50	46,503	0.13	579,179	1.63
367.00	UNDERGROUND CONDUCTORS & DEVICES	64,032,273	1 ,154,12 8	1.80	173,486	0.27	1,327,615	2.07
368.00	LINE TRANSFORMERS	137,521,034	2,176,089	1.58	138,321	0.10	2,314,411	1.68
369.00	SERVICES	62,182,754	290,595	0.47	112,435	0.18	403,030	0.65
370.00	METERS	41,300,588	1,055,419	2.56	-	0.00	1,055,419	2.56
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES	1,776,650	99,227	5.59	-	0.00	99,227	5.59
372.00	LEASED PROPERTY ON CUSTOMERS' PREMISES	6,304,347	399,991	6.34	-	0.00	399,991	6.34
373.00	STREET LIGHTING & SIGNAL SYSTEMS	22,893,863	1,150,308	5.02	185,050	0.81	1,335,358	5.83
т	OTAL DISTRIBUTION PLANT	611,123,393	10,552,411	1.73	1,461,812	0.24	12,014,224	1.97

		ORIGINAL	CAPITAL RE CALCUL ANNUAL AC	COVERY ATED CCRUAL	COSTOF	REMOVAL		
	ACCOUNT	COST	AMOUNT	RATE	ACCRUAL	RATE	ACCRUAL	RATE
	(1)	(2)	(3)	(4)=(3)/(2)	(5)	(6)=(5)/(2)	(7)=(3)+(5)	(8)=(4)+(6)
G	ENERAL PLANT							
390.00	STRUCTURES & IMPROVEMENTS	13,633,024	555,022	4.07	24,201	0.18	579,222	4.25
391.00	OFFICE FURNITURE & EQUIPMENT	5,078,757	322,762	6.36	-	0.00	322,762	6.36
391.10	COMPUTER & OTHER ELECTRONIC EQUIPMENT	12,755,104	2,252,942	17.66	-	0.00	2,252,942	17.66
392.00	TRANSPORTATION EQUIPMENT	1,454,533	0	-	-	0.00	-	0.00
393.00	STORES EQUIPMENT	1,071,717	58,660	5.47	-	0.00	58,660	5.47
394.00	TOOLS, SHOPS & GARAGE EQUIPMENT	3,713,962	214,544	5.78	-	0.00	214,544	5.78
395.00	LABORATORY EQUIPMENT	2,595,828	178,961	6.89		0.00	178,961	6.89
396.00	POWER OPERATED EQUIPMENT	841,791	13,103	1.56	-	0.00	13,103	1.56
397.00	COMMUNICATION EQUIPMENT	38,537,911	3,597,617	9.34	(597,258)	-1.55	3,000,358	7.79
398.00	MISCELLANEOUS EQUIPMENT	182,207	2,443	1. 34		0.00	2,443	1.34
т	OTAL GENERAL PLANT	79,864,834	7,196,055	9.01	(573,058)	-0.72	6,622,997	8.29
Т	OTAL DEPRECIABLE PLANT	2,965,796,856	56,450,910	1.90	8,959,418	0.30	65,410,328	2.20
N								
303.00	INTANGIBLE MISCELLANEOUS PLANT	(692,038)						
310.10	LAND	(34,487)						
314.00	TURBOGENERATOR UNITS - RIPLEY	-						
340.10	LAND	2						
350 10	LAND	(26,805)						
350.20	LAND	73.936						
360.10	IAND	45.931						
360.20		172 684						
380.10		(309 749)						
300.10		158 619						
390.20		100,010						
T	OTAL NONDEPRECIABLE PLANT	(701,907)						
т	OTAL ELECTRIC PLANT	2,965,094,949	56,450,910		8,959,418		65,410,328	

• Curve shown is interim survivor curve. Each facility in the account is assigned an individual probable retirement year.

Sources: Col. (2) from Depreciation Study, pages III-4 through III-6. Col. (3) from Exhibit___(MJM-13), pages 20-22. Col. (5) from Exhibit___(MJM-13), pages 23-25.

WESTAR SOUTH CALCULATION OF SNAVELY KING RECOMMENDED CAPITAL RECOVERY RATE AS OF DECEMBER 31, 2003

		ORIGINAL	BOOK		FUTURE	SURVIVOR		CAPITAL RE CALCUL	COVERY ATED CRUAL
	ACCOUNT	COST	LESS COR	PERCENT	ACCRUALS	CURVE	LIFE	AMOUNT	RATE
	(1)	(2)	(3)	(4)	(5)=(2)*(1-(4))-(3)	(6)	(7)	(8)=(5)/(7)	(9)=(8)/(2)
S	FEAM PRODUCTION PLANT								
311.00	STRUCTURES & IMPROVEMENTS								
	JEFFREY	48.670.387	30,805,835	0	17.864.552	75-R3 *	34.2	522,355	1.07
	RIPLEY	2,111,828	2,301,193	0	(189,365)	75-R3 *	4.4	(43,037)	-2.04
	NEOSHO	2.683.172	2.275.772	0	407.400	75-R3 *	5.4	75,444	2.81
	MURRAY GILL	5,224,995	4.830.072	0	394,923	75-R3 *	11.5	34.341	0.66
	GORDAN EVANS	4.074.654	3,430,595	0	644,059	75-R3 *	17.3	37,229	0.91
	LACYGNE UNIT 1	25,508,581	12.243.629	Ō	13.264.952	75-R3 *	28.6	463,810	1.82
	LACYGNE UNIT 2	1,691,460	521,923	0	1,169,537	75-R3 *	29.2 1/	40,053	2.37
	TOTAL STRUCTURES & IMPROVEMENTS	89,965,078	56,409,020		33,556,058		29.7	1,130,194	1.26
312.00	BOILER PLANT EQUIPMENT								
	JEFFREY	92,602,293	44,332,801	1	47,343,469	55-R1 *	29.9	1,583,394	1.71
	RIPLEY	613,728	(1,213,057)	1	1,820,647	55-R1 *	4.4	413,783	67.42
	NEOSHO	5,302,976	3,994,102	1	1,255,845	55-R1 *	5.3	236,952	4.47
	MURRAY GILL	20,797,771	21,680,653	1	(1,090,860)	55-R1 *	10.7 2/	(101,950)	-0.49
	GORDAN EVANS	29,092,095	21,518,896	1	7,282,278	55-R1 *	16.5	441,3 5 0	1.52
	LACYGNE UNIT 1	86,057,779	50,201,411	1	34,995,790	55-R1 *	26.5	1,320,596	1.53
	LACYGNE UNIT 2	23,880,703	6,756,782	0	17,123,921	55-R1 *	28.3 1/	605,086	2.53
	TOTAL BOILER PLANT EQUIPMENT	258,347,346	147,271,588		108,731,091		24.2	4,499,211	1.74
312.10	POLLUTION CONTROL EQUIPMENT								
	JEFFREY	43,513,437	28,716,313	4	3/ 13,056,587	35-R2.5 *	16.4	796,133	1.83
	LACYGNE UNIT 1	40,563,914	39,201,650	4	3/ (260,293)	35-R2.5 *	25.9	(10,050)	-0.02
	TOTAL POLLUTION CONTROL EQUIPMENT	84,077,351	67,917,963		12,796,294		16.3	786,083	0.93
312.20	BOILER PLANT EQUIPMENT + TRAIN CARS			_					
	JEFFREY	92,020	29,075	0	62,945	25-R2	21.0	2,997	3.26
	LACYGNE UNIT 2	1,286,716	1,616,085	0	(329,369)	25-R2 *	29.5 1/	(11,165)	-0.87 4/
	TOTAL BOILER PLANT EQUIPMENT - TRAIN CARS	1,378,736	1,645,160		(266,424)			(8,168)	-0.59
314.00	TURBOGENERATOR UNITS								
	JEFEREY	42.501.768	10.984.122	3	30,242,593	30-S2 *	16.4	1,844,061	4.34
	NEOSHO	4,376,391	3,149,379	3	1,095,721	30-S2 *	3.3	332,037	7.59
	MURRAY GILL	23,125,022	18,296,323	3	4,134,949	30-S2 *	10.9	379,353	1.64
	GORDAN EVANS	22,735,282	20,095,307	3	1,957,916	30-S2 *	17.0	115,172	0.51
	LACYGNE UNIT 1	23,324,011	13,685,538	3	8,938,753	30-52 *	10.5	851,310	3.65
	LACYGNE UNIT 2	5,606,664	1,058,563	0	4,548,101	30-S2 *	26.4 1/	172,277	3.07
	TOTAL TURBOGENERATOR UNITS	121,669,137	67,269,231		50,918,032		13.8	3,694,208	3.04
315.00	ACCESSORY ELECTRIC EQUIPMENT								
	JEFFREY	15,519,164	7,304,996	1	8,058,976	50-S1.5 *	28.1	286,796	1.85
	WICHITA	196,685	229,332	1	(34,614)	50-S1.5 *	0.00	0	•
	RIPLEY	658,792	905,008	1	(252,804)	50-S1.5 *	4.0	(63,201)	-9.59
	NEOSHO	1,937,671	1,524,987	1	393,307	50-S1.5 *	5.4	72,835	3.76
	MURRAY GILL	5,919,304	4,961,890	1	898,220	50-S1.5 *	11.4	78,791	1.33
	GORDAN EVANS	5,770,813	4,433,580	1	1,279,525	50-S1.5 *	17.3	73,961	1.28
	LACYGNE UNIT 1	12,239,428	6,497,221	1	5,619,813	50-S1.5 *	23.8	236,127	1.93
	LACYGNE UNIT 2	2,133,732	988,636	0	1,145,096	50-S1.5 *	28.7 1/	39,899	1.87
	TOTAL ACCESSORY ELECTRIC EQUIPMENT	44,375,588	26,845,650		17,107,519		23.6	725,208	1.63

Exhibit (MJM-13) Page 20 of 29

WESTAR SOUTH CALCULATION OF SNAVELY KING RECOMMENDED CAPITAL RECOVERY RATE AS OF DECEMBER 31, 2003

		ORIGINAL	BOOK RESERVE	GROSS SALVAGE FUTURE		SURVIVOR	REMAINING	CAPITAL RE CALCUL ANNUAL A	CAPITAL RECOVERY CALCULATED ANNUAL ACCRUAL	
	ACCOUNT	COST	LESS COR	PERCENT	ACCRUALS	CURVE	LIFE	AMOUNT	RATE	
	(1)	(2)	(3)	(4)	(5)=(2)*(1-(4))-(3)	(6)	(7)	(8)=(5)/(7)	(9)=(8)/(2)	
316.00	MISCELLANEOUS POWER PLANT EQUIPMENT									
	JEFFREY	3,634,656	996,848	2	2,565,115	35-R2	* 24.7	103,851	2.86	
	RIPLEY	300,132	194,457	2	99,672	35-R2	* 4.1	24,310	8.10	
	NEOSHO	482,389	228,904	2	243,836	35-R2	* 4.8	50,799	10.53	
	MURRAY GILL	1,431,423	799,418	2	603,376	35-R2	* 10.4	58,017	4.05	
	GORDAN EVANS	1,349,651	664,562	2	658,096	35-R2	* 15.9	41,390	3.07	
	LACYGNE UNIT 1	4,210,990	1,432,331	2	2,694,439	35-R2	* 24.0	112,268	2.67	
	LACYGNE UNIT 2	1,253,341	608,136	0	645,205_	35-R2	* 27.5	1/23,462	1.87	
	TOTAL MISCELLANEOUS POWER PLANT EQUIPMENT	12,662,581	4,924,657		7,509,740		18.1	414,097	3.27	
-	TOTAL STEAM PRODUCTION PLANT	612,475,817	372,283,269		230,352,310		20.5	11,240,834	1.84	
1	NUCLEAR PRODUCTION PLANT									
321.00	STRUCTURES AND IMPROVEMENTS	399,941,190	175,705,417	0	224,235,773	90 - \$0.5	* 37.6	5,963,717	1.49	
322.00	REACTOR PLANT EQUIPMENT	626,162,397	260,007,110	1	359,893,663	60-R2	• 34.8	10,341,772	1.65	
323.00	TURBOGENERATOR UNITS	166,568,932	74,496,461	3	87,075,403	50-S1.5	• 29.7	2,931,832	1.76	
324.00	ACCESSORY ELECTRIC EQUIPMENT	131,138,532	49,172,453	0	81,966,079	50 - S1.5	* 29.9	2,741,340	2.09	
325.00	MISCELLANEOUS POWER PLANT EQUIPMENT	61,643,030	8,677,240	0	52,965,790	40-R0-5	* 28.1	1,884,904	3.06	
1	TOTAL NUCLEAR PRODUCTION PLANT	1,385,454,082	568,058,681		806,136,709		33.8	23,863,565	1.72	
(GAS TURBINE PLANT									
341.00	STRUCTURES & IMPROVEMENTS									
	JEFFREY	10,491	2,253	0	8,238	SQUARE	* 12.5	659	6.28	
344.00	GENERATORS									
	JEFFREY	376,494	75,593	0	300,901	30-S3	* 12.4	24,325	6.46	
	GORDAN EVANS	1,549,285	324,048	0	1,225,237	30-S3	* 28.1	43,603	2.81	
	TOTAL GENERATORS	1,925,779	399,641		1,526,138		22.5	67,928	3.53	
345.00	ACCESSORY ELECTRIC EQUIPMENT									
	JEFFREY	22,776	4,912	0	17,864	40-S3	* 12.5	1,429	6.27	
346.00	MISCELLANEOUS PLANT EQUIPMENT									
	JEFFREY	5,545	1,181	0	4,364	SQUARE	• 12.5	349	6.30	
-	TOTAL GAS TURBINE PLANT	1,964,591	407,987		1,556,604		22.1	70,365	3.58	
-	TRANSMISSION PLANT									
352.00	STRUCTURES & IMPROVEMENTS	4,508,216	2,040,441	0	2,467,775	55-S2	41.1	60,043	1.33	
353.00	STATION EQUIPMENT	116,243,326	48,964,969	5	61,466,191	58-R1.5	46.4	1, 324,702	1.14	
354.00	TOWERS & FIXTURES	6,891,043	4,485,986	2	2,267,236	65-R3	38.6	58,737	0.85	
355.00	POLES & FIXTURES	85,569,105	44,336,434	3	38,665,598	50-R1.5	42.3	914,080	1.07	
356.00	OVERHEAD CONDUCTORS & DEVICES	60,772,529	22,140,082	4	36,201,546	50-R2	31.4	1,152,915	1.90	
357.00	UNDERGROUND CONDUIT	419,469	196,792	0	222,677	65-R3	36.4	6,118	1.46	
358.00	UNDERGROUND CONDUCTOR & DEVICES	490,540	240,619	0	249,921	49-R4	23.1	10,819	2.21	
359.00	ROADS & TRAILS	19,910	12,975	0	6,935	65-R4	26.1	266	1.33	
-	TOTAL TRANSMISSION PLANT	274,914,138	122,418,298		141,547,879		40. 1	3,527,680	1.28	

WESTAR SOUTH CALCULATION OF SNAVELY KING RECOMMENDED CAPITAL RECOVERY RATE AS OF DECEMBER 31, 2003

	ACCOUNT	ACCOUNT COST LESS COR (1) (2) (3)	BOOK RESERVE	GROSS SALVAGE	FUTURE	SURVIVOR	REMAINING	CAPITAL RE CALCUL ANNUAL A	COVERY ATED CCRUAL
	ACCOUNT	COST	LESS COR	PERCENT	ACCRUALS	CURVE	LIFE	AMOUNT	RATE
	(1)	(2)	(3)	(4)	(5)=(2)*(1-(4))-(3)	(6)	(7)	(8)=(5)/(7)	(9)=(8)/(2)
τ	ISTRIBUTION PLANT								
361.00	STRUCTURES & IMPROVEMENTS	3,496,570	1,452,316	0	2,044,254	55-R3	42.3	48,328	1.38
362.00	STATION EQUIPMENT	54,632,243	24,437,956	5	27,462,674	55-R2	44.4	618,529	1. 13
364.00	POLES, TOWERS & FIXTURES	100,204,589	36,573,714	4	59,622,691	42-R1	33.2	1,795,864	1.79
365.00	OVERHEAD CONDUCTORS & DEVICES	81,262,390	34,967,174	5	42,232,097	45-R1.5	34.3	1,231,256	1.52
366.00	UNDERGROUND CONDUIT	35,516,093	7,017,927	0	28,498,166	65-R2.5	53.5	532,676	1.50
367.00	UNDERGROUND CONDUCTORS & DEVICES	64,032,273	15,894,019	2	46,857,609	49-R2	40.6	1,154,128	1.80
368.00	LINE TRANSFORMERS	137,521,034	50,991,168	2	83,779,445	50-R2	38.5	2,176,089	1.58
369.00	SERVICES	62,182,754	48,321,362	0	13,861,392	51-S1.5	47.7	290,595	0.47
370.00	METERS	41,300,588	17,342,587	0	23,958,001	35-L2.5	22.7	1,055,419	2.56
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES	1,776,650	1,091,982	0	684,668	20-52.5	6.9	99,227	5.59
372.00	LEASED PROPERTY ON CUSTOMERS' PREMISES	6,304,347	1,144,458	0	5,159,889	19-51	12.9	399,991	6.34
373.00	STREET LIGHTING & SIGNAL SYSTEMS	22,893,863	6,791,795	2	15,644,191	19-L0.5	13.6	1,150,308	5.02
ד	OTAL DISTRIBUTION PLANT	611,123,393	246,026,458		349,805,077		33.1	10,552,411	1.73
c	ENERAL PLANT								
390.00	STRUCTURES & IMPROVEMENTS	13,633,024	4,253,156	0	9,379,868	35-R3	16.9	555,022	4.07
391.00	OFFICE FURNITURE & EQUIPMENT	5,078,757	1,980,246	0	3,098,511	25-SQ	9.6	322, 7 62	6.36
391.10	COMPUTER & OTHER ELECTRONIC EQUIPMENT	12,755,104	7,573,337	0	5,181,767	5-SQ	2.3	2,252,942	17.66
392.00	TRANSPORTATION EQUIPMENT	1,454,533	2,162,370	15	(926,017)	9-R1	0.00	0	-
393.00	STORES EQUIPMENT	1,071,717	244,609	0	827,108	25-SQ	14.1	58,660	5.47
394.00	TOOLS, SHOPS & GARAGE EQUIPMENT	3,713,962	1,0 10,706	0	2,703,256	25-SQ	12.6	214,544	5.78
395.00	LABORATORY EQUIPMENT	2,595,828	967,279	0	1,628,549	25-SQ	9.1	178,961	6.89
396.00	POWER OPERATED EQUIPMENT	841,791	445,275	25	186,069	16-S0	14.2	13,103	1.56
397.00	COMMUNICATION EQUIPMENT	38,537,911	10,836,263	0	27,701,648	15-SQ	7.7	3,597,617	9.34
398.00	MISCELLANEOUS EQUIPMENT	182,207	169,502	0	12,705	15-SQ	5.2	2,443	1,34
T	OTAL GENERAL PLANT	79,864,834	29,642,743		49,793,463		6.9	7,196,055	9.01
г	OTAL DEPRECIABLE PLANT	2,965,796,856	1,338,837,436		1,579,192,042		28.0	56,450,910	1.90
M	IONDEPRECIABLE PLANT								
303.00	INTANGIBLE MISCELLANEOUS PLANT	(692,038)							
310.10	LAND	(34,487)	(2,130)						
314.00	TURBOGENERATOR UNITS - RIPLEY	-	(909,823)						
340.10	LAND	2							
350.10	LAND	(26,805)							
350.20	LAND	73,936							
360.10	LAND	45,931	(274)						
360.20	LAND	172,684							
389.10	LAND	(399,749)							
390.20	LEASEHOLD IMPROVEMENTS	158,619							
1	OTAL NONDEPRECIABLE PLANT	(701,907)	(912,227)						
1	OTAL ELECTRIC PLANT	2,965,094,949	1,337,925,209		1,579,192,042			56,450,910	

* Curve shown is interim survivor curve. Each facility in the account is assigned an individual probable retirement year.

Sources:

Cols. (2) and (6) from Depreciation Study, pages III-4 through III-6.

Col. (3) from Exhibit___(MJM-13), pages 26-29. Col. (4) from response to CURB 29.

Col. (7) from "westarSouth-CURB227a.txt" These are the remaining lives without Spanos net salvage adjustment.

1/ Based on 6-2033 FRY - same as LaCygne #1.

2/ Spanos did not provide the unadjusted remaining life for this account. 10.7 is his adjusted remaining life.

3/ CURB 29 showed a 0% gross salvage ratio and a -44% COR ratio. However, to achieve a 40% net salvage ratio, the gross salvage ratio must be 4%.

WESTAR SOUTH CALCULATION OF SNAVELY KING RECOMMENDED COST OF REMOVAL RATE AS OF DECEMBER 31, 2003

	ACCOUNT	ORIGINAL	DISCOUNTED FUTURE		TOTAL COR In		REM.	COST OF	
		(2)	/3)	(A)=(2)*-(3)		(6)=(4)-(5)	(7)	(8)=(6)/(7)	(9)=(8)/(2)
	(1)	(2)	(3)	(4)-(2) -(3)	(5)	(0)=(4)-(3)	(7)	(0)-(0)/(7)	(3)-(0)/(2)
SI	EAM PRODUCTION PLANT								
311.00	STRUCTURES & IMPROVEMENTS								
	JEFFREY	48,670,387	-11.00%	5,353,743	(738,639)	6,092,382	34.2	178,140	0.37
	RIPLEY	2,111,828	-26.00%	549,075	(32,050)	581,125	4.4	132,074	6.25
	NEOSHO	2,683,172	-26.00%	697,625	(40,721)	738,345	5.4	136,731	5.10
	MURRAY GILL	5,224,995	-21.00%	1.097,249	(79,296)	1,176,545	11.5	102,308	1.96
	GORDAN EVANS	4,074,654	-18.00%	733,438	(61,838)	795,276	17.3	45,970	1.13
	LACYGNE UNIT 1	25,508,581	-13.00%	3.316.116	(387,127)	3,703,243	28.6	129,484	0.51
	LACYGNE UNIT 2	1,691,460	-4.00%	67,658_	(25,670)	93,329	29.2 1	/ 3,196	0.19
	TOTAL STRUCTURES & IMPROVEMENTS	89,965,078		11,814,903	(1,365,342)	13,180,245		727,903	
312.00	BOILER PLANT EQUIPMENT								
	JEFFREY	92,602,293	-15.00%	13,890,344	(1,715,772)	15,606,116	29.9	521,944	0.56
	RIPLEY	613,728	-32.00%	196,393	(11,371)	207,764	4.4	47,219	7.69
	NEOSHO	5,302,976	-31.00%	1,643,923	(98,256)	1,742,178	5.3	328,713	6.20
	MURRAY GILL	20,797,771	-26.00%	5,407,421	(385,349)	5,792,770	10.7 2	2/ 541,380	2.60
	GORDAN EVANS	29,092,095	-22.00%	6,400,261	(539,030)	6,939,291	16.5	420,563	1.45
	LACYGNE UNIT 1	86,057,779	-16.00%	13,769,245	(1,594,513)	15,363,757	26.5	579,764	0.67
	LACYGNE UNIT 2	23,880,703	-6.00%	1,432,842	(442,471)	1,875,313	28.3	/66,265	0.28
	TOTAL BOILER PLANT EQUIPMENT	258,347,346		42,740,428	(4,786,762)	47,527,190		2,505,849	
312.10	POLLUTION CONTROL EQUIPMENT								
	JEFFREY	43,513,437	-27.00%	11,748,628	(798,345)	12,546,973	16.4	765,059	1.76
	LACYGNE UNIT 1	40,563,914	-20.00%	8,112,783	(744,229)	8,857,012	25.9	341,970	0.84
	TOTAL POLLUTION CONTROL EQUIPMENT	84,077,351		19,861,411	(1,542,574)	21,403,985		1,107,029	
312.20	BOILER PLANT EQUIPMENT - TRAIN CARS								
	JEFFREY	92,020	0.00%	-	(1,929)	1,929	21.0	92	0.10
	LACYGNE UNIT 2	1,286,716	0.00%		(26,969)	26,969	29.5	1/ 914	0.07
	TOTAL BOILER PLANT EQUIPMENT - TRAIN CARS	1,378,736		-	(28,898)	28,898		1,006	
314.00	TURBOGENERATOR UNITS								
	JEFFREY	42,501,768	-14.00%	5,950,247	(555,773)	6,506,020	16.4	396,709	0.93
	NEOSHO	4,376,391	-21.00%	919,042	(57,228)	976,270	3.3	295,839	6.76
	MURRAY GILL	23,125,022	-17.00%	3,931,254	(302,394)	4,233,647	10.9	388,408	1.68
	GORDAN EVANS	22,735.282	-14.00%	3,182,939	(297,297)	3,480,237	17.0	204,720	0.90
	LACYGNE UNIT 1	23,324,011	-17.00%	3,965,082	(304,996)	4,270,077	10.5	406,674	1.74
	LACYGNE UNIT 2	5,606,664	-5.00%	280,333	(73,315)	353,649	26.4	1/13,396	0.24
	TOTAL TURBOGENERATOR UNITS	121,669,137		18,228,898	(1,591,002)	19,819,900		1,705,746	

Exhibit (MJM-13) Page 23 of 29

WESTAR SOUTH CALCULATION OF SNAVELY KING RECOMMENDED COST OF REMOVAL RATE AS OF DECEMBER 31, 2003

	ACCOUNT	ORIGINAL COST	DISCOUNTED FUTURE COR %	DISCOUNTED FUTURE COR \$	TOTAL COR In RESERVE	FUTURE ACCRUALS	REM. Life	COST OF	REMOVAL RATE
	(1)	(2)	(3)	(4)=(2)*-(3)	(5)	(6)=(4)-(5)	(7)	(8)=(6)/(7)	(9)=(8)/(2)
315.00									
515.00		15 510 164	-5.00%	775 958	(212 256)	988 214	28.1	35 168	0.23
		106 695	11 00%	21 635	(2,600)	24 325	0.00	00,100	-
		659 702	-11.00%	65 970	(2,030)	74 890	4.0	18 722	2 84
	RIPLET	000,/92	-10.00%	174 200	(9,010)	200,902	4.0	37 202	1.02
	NEUSHU	1,937,071	-9.00%	174,390	(20,502)	200,092	5.4	37,202	1.92
	MURRAY GILL	5,919,304	-8.00%	473,544	(80,958)	554,503	11.4	48,641	0.82
	GORDAN EVANS	5,770,813	-7.00%	403,957	(78,928)	482,884	17.3	27,912	0.48
	LACYGNE UNIT 1	12,239,428	-5.00%	611,971	(167,399)	77 9 ,370	23.8	32,747	0.27
	LACYGNE UNIT 2	2,133,732	-2.00%	42,675	(29,183)	71,858	28.7 1	/2,504	0.12
	TOTAL ACCESSORY ELECTRIC EQUIPMENT	44,375,588		2,570,010	(606,926)	3,176,936		202,896	
316.00	MISCELLANEOUS POWER PLANT EQUIPMENT								
	JEFFREY	3,634,656	-8.00%	290,772	(47,645)	338,418	24.7	13,701	0.38
	RIPLEY	300,132	-15.00%	45,020	(3,934)	48,954	4.1	11,940	3.98
	NEOSHO	482,389	-15.00%	72,358	(6,323)	78,682	4.8	16, 39 2	3.40
	MURRAY GILL	1,431,423	-13.00%	186,085	(18,764)	204,849	10.4	19,697	1.38
	GORDAN EVANS	1.349.651	-11.00%	148,462	(17,692)	166,154	15.9	10,450	0.77
	LACYGNE UNIT 1	4,210,990	-8.00%	336.879	(55,200)	392.079	24.0	16,337	0.39
	LACYGNE UNIT 2	1,253,341	-2.00%	25,067	(16,430)	41,496	27.5 1	/1,509	0.12
	TOTAL MISCELLANEOUS POWER PLANT EQUIPMENT	12,662,581		1,104,643	(165,989)	1,270,632		90,026	
т	OTAL STEAM PRODUCTION PLANT	612,475,817		96,320,293	(10,087,493)	106,407,786		6,340,454	
Ν	UCLEAR PRODUCTION PLANT								
321.00	STRUCTURES AND IMPROVEMENTS	399.941.190	-2.00%	7.998.824	0	7.998.824	37.6	212,735	0.05
322.00		626 162 397	-4 00%	25 046 496	0	25,046,496	34.8	719.727	0.11
323.00		166 568 932	-7.00%	11 659 825	n n	11 659 825	29.7	392,587	0.24
323.00		100,000,002	0.00%	11,000,020	ů	11,000,020	20.7	002,000	-
324.00		64 642 020	0.00%	-	0	0	29.5	ŏ	_
325.00	MISCELLANEOUS POWER PLANT EQUIPMENT	61,643,030	- 0.00%		0	0	20.1	0	-
т	OTAL NUCLEAR PRODUCTION PLANT	1,385,454,082		44,705,145	-	44,705,145		1,325,048	
c	SAS TURBINE PLANT								
341.00	STRUCTURES & IMPROVEMENTS								
	JEFFREY	10,491	0.00%	-	0	0	12.5	0	-
344.00	GENERATORS								
	JEFFREY	376,494	0.00%	-	0	0	12.4	0	-
	GORDAN EVANS	1,549,285	0.00%		0	0	28.1	0	-
	TOTAL GENERATORS	1,925,779		-	0	0		0	
345.00	ACCESSORY ELECTRIC EQUIPMENT								
	JEFFREY	22,776	0.00%	-	0	0	12.5	0	-
346.00	MISCELLANEOUS PLANT EQUIPMENT								
	JEFFREY	5,545	0.00%		0	0	12.5	0	-
٦	TOTAL GAS TURBINE PLANT	1,964,591		-	-	-		-	

TRANSMISSION PLANT

Exhibit (MJM-13) Page 24 of 29

WESTAR SOUTH CALCULATION OF SNAVELY KING RECOMMENDED COST OF REMOVAL RATE AS OF DECEMBER 31, 2003

	ACCOUNT	ORIGINAL	DISCOUNTED FUTURE	DISCOUNTED FUTURE	TOTAL COR in RESERVE		REM.		
	(1)	(2)	(3)	(4)=(2)*-(3)	(5)	(6)=(4)-(5)	(7)	(8)=(6)/(7)	(9)=(8)/(2)
352.00	STRUCTURES & IMPROVEMENTS	4,508,216	-3.00%	135,246	176,397	(41,151)	41.1	(1,001)	(0.02)
353.00	STATION EQUIPMENT	116,243,326	-4.00%	4,649,733	0	4,649,733	46.4	100,210	0.09
354.00	TOWERS & FIXTURES	6,891,043	-10.00%	689,104	148,305	540,799	38.6	14,010	0.20
355.00	POLES & FIXTURES	85,569,105	-8.00%	6,845,528	1,045,870	5,799,658	42.3	137,108	0.16
356.00	OVERHEAD CONDUCTORS & DEVICES	60,772,529	-8.00%	4,861,802	0	4,861,802	31.4	154,834	0.25
357.00	UNDERGROUND CONDUIT	419,469	0.00%	-	0	0	36.4	0	-
358.00	UNDERGROUND CONDUCTOR & DEVICES	490,540	0.00%	•	0	0	23.1	0	-
359.00	ROADS & TRAILS	19,910	0.00%	<u> </u>	0	0	26.1	0	-
т	OTAL TRANSMISSION PLANT	274,914,138		17,181,415	1,370,572	15,810,843		405,161	
٥	ISTRIBUTION PLANT								
361.00	STRUCTURES & IMPROVEMENTS	3,496,570	-3.00%	104,897	126,639	(21,742)	42.3	(514)	(0.01)
362.00	STATION EQUIPMENT	54,632,243	-5.00%	2,731,612	93,260	2,638,352	44.4	59,422	0.11
364.00	POLES, TOWERS & FIXTURES	100,204,589	-13.00%	13,026,597	534,582	12,492,015	33.2	376,265	0.38
365.00	OVERHEAD CONDUCTORS & DEVICES	81,262,390	-16.00%	13,001,982	282,067	12,719,915	34.3	370,843	0.46
366.00	UNDERGROUND CONDUIT	35,516,093	-7.00%	2,486,127	(1,773)	2,487,900	53.5	46,503	0.13
367.00	UNDERGROUND CONDUCTORS & DEVICES	64,032,273	-11.00%	7,043,550	0	7,043,550	40.6	173,486	0.27
368.00	LINE TRANSFORMERS	137,521,034	-4.00%	5,500,841	175,470	5,325,371	38.5	138,321	0.10
369.00	SERVICES	62,182,754	-10.00%	6,218,275	855,114	5,363,161	47.7	112,435	0.18
370.00	METERS	41,300,588	0.00%	-	0	0	22.7	0	-
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES	1,776,650	0.00%	-	0	0	6.9	0	-
372.00	LEASED PROPERTY ON CUSTOMERS' PREMISES	6,304,347	0.00%	-	0	0	12.9	0	-
373.00	STREET LIGHTING & SIGNAL SYSTEMS	22,893,863	-11.00%	2,518,325	1,649	2,516,676	13.6	185,050	0.81
т	OTAL DISTRIBUTION PLANT	611,123,393		52,632,206	2,067,008	50,565,198		1,461,812	
G	ENERAL PLANT								
390.00	STRUCTURES & IMPROVEMENTS	13,633,024	-3.00%	408,991	0	408,991	16.9	24,201	0.18
391.00	OFFICE FURNITURE & EQUIPMENT	5,078,757	0.00%	-	0	0	9.6	0	-
391.10	COMPUTER & OTHER ELECTRONIC EQUIPMENT	12,755,104	0.00%	-	0	0	2.3	0	-
392.00	TRANSPORTATION EQUIPMENT	1,454,533	0.00%	-	0	0	0.00	0	-
393.00	STORES EQUIPMENT	1,071,717	0.00%	-	0	0	14.1	0	-
394.00	TOOLS, SHOPS & GARAGE EQUIPMENT	3,713,962	0.00%	-	0	0	12.6	0	-
395.00	LABORATORY EQUIPMENT	2,595,828	0.00%	-	0	0	9.1	0	-
396.00	POWER OPERATED EQUIPMENT	841,791	0.00%	-	0	0	14.2	0	-
397.00	COMMUNICATION EQUIPMENT	38,537,911	0.00%	-	4,598,889	(4,598,889)	7.7	(597,258)	(1.55)
398.00	MISCELLANEOUS EQUIPMENT	182,207	0.00%	<u> </u>	0	0	5.2	0	-
т	OTAL GENERAL PLANT	79,864,834		408,991	4,598,889	(4,189,898)		(573,058)	
т	OTAL DEPRECIABLE PLANT	2,965,796,856		211,248,050	(2,051,024)	213,299,074		8,959,418	

Sources:

Col. (2) from Depreciation Study, pages III-4 through III-6.

Col. (3) from response to CURB 29.

Col. (5) from Exhibit (MJM-13), pages 26-29, based on response to CURB 238.

Col. (7) from "westarSouth-CURB227a.txt" These are the remaining lives without Spanos net salvage adjustment.

	ACCOUNT	ORIGINAL COST	BOOK RESERVE	1980-2002 COR In RESERVE 1/	2003 COR In RESERVE 1/	TOTAL COR in RESERVE	BOOK RESERVE LESS COR
	(1)	(2)	(3)	(4)	(5)	(6)=(4)+(5)	(7)=(3)-(6)
ST	EAM PRODUCTION PLANT						
311.00	STRUCTURES & IMPROVEMENTS						
	JEFFREY	48.670.387	30.067.196	(1.020.124)	281.485	(738,639)	30,805,835
	RIPLEY	2,111,828	2,269,143	(44 264)	12 214	(32,050)	2 301 193
	NEOSHO	2 683 172	2 235 051	(56,239)	15 518	(40,721)	2 275 772
	MURRAY GILL	5 224 995	4 750 776	(109,515)	30,219	(79,296)	4 830 072
	GORDAN EVANS	4 074 654	3 368 757	(85,404)	23 566	(61,838)	3 430 595
	LACYGNE LINIT 1	25 508 581	11 856 502	(534,656)	147 529	(387 127)	12 243 629
	LACYGNE UNIT 2	1.691.460	496,253	(35,453)	9 783	(25.670)	521,923
				(00,1007			011,020
	TOTAL STRUCTURES & IMPROVEMENTS	89,965,078	55,043,678	(1,885,655)	520,313	(1,365,342)	56,409,020
312.00	BOILER PLANT EQUIPMENT						
	JEFFREY	92,602,293	42,617,029	(1,940,930)	225,158	(1,715,772)	44,332,801
	RIPLEY	613,728	(1,224,428)	(12,864)	1,492	(11,371)	(1,213,057)
	NEOSHO	5,302,976	3,895,846	(111,150)	12,894	(98,256)	3,994,102
	MURRAY GILL	20,797,771	21,295,304	(435,918)	50,569	(385,349)	21,680,653
	GORDAN EVANS	29,092,095	20,979,866	(609,766)	70,736	(539,030)	21,518,896
	LACYGNE UNIT 1	86,057,779	48,606,898	(1,803,758)	209,246	(1,594,513)	50,201,411
	LACYGNE UNIT 2	23,880,703	6,314,311	(500,536)	58,065	(442,471)	6,756,782
	TOTAL BOILER PLANT EQUIPMENT	258,347,346	142,484,826	(5,414,922)	628,160	(4,786,762)	147,271,588
312.10	POLITION CONTROL FOUIPMENT						
0.20	JEFEREY	43 513 437	27 917 968	(912.035)	113 691	(798.345)	28 716 313
	LACYGNE UNIT 1	40,563,914	38,457,421	(850,214)	105,984	(744,229)	39,201,650
	TOTAL POLLUTION CONTROL EQUIPMENT	84,077,351	66,375,389	(1,762,249)	219,675	(1,542,574)	67,917,963
312.20	BOILER PLANT EQUIPMENT - TRAIN CARS						
	JEFFREY	92,020	27,146	(1,929)	0	(1,929)	29,075
	LACYGNE UNIT 2	1,286,716	1,589,116	(26,969)	0	(26,969)	1,616,085
	TOTAL BOILER PLANT EQUIPMENT - TRAIN CARS	1,378,736	1,616,262	(28,898)	0	(28,898)	1,645,160
314.00	TURBOGENERATOR UNITS						
	JEFFREY	42.501.768	10.428.349	(890.831)	335.058	(555,773)	10.984.122
	NEOSHO	4.376.391	3,092,151	(91.729)	34.501	(57.228)	3,149.379
	MURRAY GILL	23,125,022	17,993,929	(484,697)	182,304	(302,394)	18,296,323
	GORDAN EVANS	22,735,282	19,798,010	(476,528)	179,231	(297,297)	20,095,307
	LACYGNE UNIT 1	23,324,011	13,380,542	(488,868)	183.872	(304,996)	13,685,538
	LACYGNE UNIT 2	5,606,664	985,248	(117,515)	44,200	(73,315)	1,058,563
	TOTAL TURBOGENERATOR UNITS	121,669,137	65,678,229	(2,550,167)	959,165	(1,591,002)	67,269,231

	ACCOUNT	ORIGINAL COST	BOOK RESERVE	1980-2002 COR In RESERVE 1/	2003 COR In RESERVE 1/	TOTAL COR in RESERVE	BOOK RESERVE LESS COR
	(1)	(2)	(3)	(4)	(5)	(6)=(4)+(5)	(7)=(3)-(6)
315.00	ACCESSORY ELECTRIC EQUIPMENT						
	JEFFREY	15,519,164	7,092,740	(325,279)	113,023	(212,256)	7,304,996
	WICHITA	196,685	226,642	(4,122)	1,432	(2,690)	229,332
	RIPLEY	658,792	895,998	(13,808)	4,798	(9,010)	905,008
	NEOSHO	1,937,671	1,498,485	(40,613)	14,112	(26,502)	1,524,987
	MURRAY GILL	5,919,304	4,880,932	(124,068)	43,109	(80,958)	4,961,890
	GORDAN EVANS	5,770,813	4,354,652	(120,955)	42,028	(78,928)	4,433,580
	LACYGNE UNIT 1	12,239,428	6,329,822	(256,537)	89,138	(167,399)	6,497,221
	LACYGNE UNIT 2	2,133,732	959,453	(44,723)	15,540	(29,183)	988,636
	TOTAL ACCESSORY ELECTRIC EQUIPMENT	44,375,588	26,238,724	(930,106)	323,180	(606,926)	26,845,650
316.00	MISCELLANEOUS POWER PLANT EQUIPMENT						
	JEFFREY	3,634,656	949,203	(76,182)	28,537	(47,645)	996,848
	RIPLEY	300,132	190,523	(6,291)	2,356	(3,934)	194,457
	NEOSHO	482,389	222,581	(10,111)	3,787	(6,323)	228,904
	MURRAY GILL	1,431,423	780,654	(30,002)	11,238	(18,764)	799,418
	GORDAN EVANS	1,349,651	646,870	(28,288)	10,596	(17,692)	664,562
	LACYGNE UNIT 1	4,210,990	1,377,131	(88,262)	33,062	(55,200)	1,432,331
	LACYGNE UNIT 2	1,253,341	591,706	(26,270)	9,840	(16,430)	608,136
	TOTAL MISCELLANEOUS POWER PLANT EQUIPMENT	12,662,581	4,758,668	(265,406)	99,417	(165,989)	4,924,657
тс	DTAL STEAM PRODUCTION PLANT	612,475,817	362,195,776	(12,837,403)	2,749,910	(10,087,493)	372,283,269
N	JCLEAR PRODUCTION PLANT						
321.00	STRUCTURES AND IMPROVEMENTS	399,941,190	175,705,417	0	0	0	175,705,417
322.00	REACTOR PLANT EQUIPMENT	626,162,397	260,007,110	0	0	0	260,007,110
323.00	TURBOGENERATOR UNITS	166,568,932	74,496,461	0	0	0	74,496,461
324.00	ACCESSORY ELECTRIC EQUIPMENT	131,138,532	49,172,453	0	0	0	49,172,453
325.00	MISCELLANEOUS POWER PLANT EQUIPMENT	61,643,030	8,677,240	0	0	0	8,677,240
тс	DTAL NUCLEAR PRODUCTION PLAN	1,385,454,082	568,058,681	0	0	0	568,058,681

		ORIGINAL	воок	1980-2002 COR In	2003 COR In	TOTAL COR In	BOOK RESERVE
	ACCOUNT	COST	RESERVE	RESERVE 1/	RESERVE 1/	RESERVE	LESS COR
	(1)	(2)	(3)	(4)	(5)	(6)=(4)+(5)	(7)=(3)-(6)
G	GAS TURBINE PLANT						
341.00	STRUCTURES & IMPROVEMENTS						
	JEFFREY	10,491	2,253	0	0	0	2,253
344.00	GENERATORS						
		376,494	75,593	0	0	0	75,593
	GORDAN EVANS	1,549,285	324,048	0	0	U	324,048
	TOTAL GENERATORS	1,925,779	399,641	0	0	0	399,641
345.00	ACCESSORY ELECTRIC EQUIPMENT						
	JEFFREY	22,776	4,912	0	0	0	4,912
346.00	MISCELLANEOUS PLANT EQUIPMENT			_			
	JEFFREY	5,545	1,181	0_	0	0	1,181
т	OTAL GAS TURBINE PLANT	1,964,591	407,987	0	0	0	407,987
т	RANSMISSION PLANT						
352.00	STRUCTURES & IMPROVEMENTS	4,508,216	2,216,838	132,437	43,960	176,397	2,040,441
353.00	STATION EQUIPMENT	116,243,326	48,964,969	0	0	0	48,964,969
354.00	TOWERS & FIXTURES	6,891,043	4,634,291	52,903	95,402	148,305	4,485,986
355.00	POLES & FIXTURES	85,569,105	45,382,304	257,880	787,990	1,045,870	44,336,434
356.00	OVERHEAD CONDUCTORS & DEVICES	60,772,529	22,140,082	0	0	0	22,140,082
357.00	UNDERGROUND CONDUIT	419,469	196,792	0	0	0	196,792
358.00	UNDERGROUND CONDUCTOR & DEVICES	490,540	240,619	0	0	0	240,619
359.00	ROADS & TRAILS	19,910	12,975	0_	0_	0	12,975
т	OTAL TRANSMISSION PLANT	274,914,138	123,788,870	443,220	927,352	1,370,572	122,418,298
D	DISTRIBUTION PLANT						
361.00	STRUCTURES & IMPROVEMENTS	3,496,570	1,578,955	114,969	11,670	126,639	1,452,316
362.00	STATION EQUIPMENT	54,632,243	24,531,216	0	93,260	93,260	24,437,956
364.00	POLES, TOWERS & FIXTURES	100,204,589	37,108,296	0	534,582	534,582	36,573,714
365.00	OVERHEAD CONDUCTORS & DEVICES	81,262,390	35,249,241	0	282,067	282,067	34,967,174
366.00	UNDERGROUND CONDUIT	35,516,093	7,016,154	0	(1,773)	(1,773)	7,017,927
367.00	UNDERGROUND CONDUCTORS & DEVICES	64,032,273	15,894,019	0	0	0	15,894,019
368.00	LINE TRANSFORMERS	137,521,034	51,166,638	0	175,470	175,470	50,991,168
369.00	SERVICES	62,182,754	49,176,476	190,135	664,979	855,114	48,321,362
370.00	METERS	41,300,588	17,342,587	0	0	0	1 7,342,587
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES	1,776,650	1,091,982	0	0	0	1,091,982
372.00	LEASED PROPERTY ON CUSTOMERS' PREMISES	6,304,347	1,144,458	0	0	0	1,144,458
373.00	STREET LIGHTING & SIGNAL SYSTEMS	22,893,863	6,793,444	0	1,649	1,649	6,791,795
т	OTAL DISTRIBUTION PLANT	611,123,393	248,093,466	305,104	1,761,904	2,067,008	246,026,458

GENERAL PLANT

Exhibit (MJM-13) Page 28 of 29

	ACCOUNT	ORIGINAL	BOOK	1980-2002 COR in RESERVE 1/	2003 COR In RESERVE 1/	TOTAL COR (n RESERVE	BOOK RESERVE
	(1)	(2)	(3)	(4)	(5)	(6)=(4)+(5)	(7)=(3)-(6)
390.00	STRUCTURES & IMPROVEMENTS	13,633,024	4,253,156	0	0	0	4,253,156
391.00	OFFICE FURNITURE & EQUIPMENT	5,078,75 7	1,980,246	0	0	0	1,980,246
391.10	COMPUTER & OTHER ELECTRONIC EQUIPMENT	12,755,104	7,573,337	0	0	0	7,573,337
392.00	TRANSPORTATION EQUIPMENT	1,454,533	2,162,370	0	0	0	2,162,370
393.00	STORES EQUIPMENT	1,071,717	244,609	0	0	0	244,609
394.00	TOOLS, SHOPS & GARAGE EQUIPMENT	3,713,962	1,010,706	0	0	0	1,010,706
395.00	LABORATORY EQUIPMENT	2,595,828	967,279	0	0	0	967,279
396.00	POWER OPERATED EQUIPMENT	841,791	445,275	0	0	0	445,275
397.00	COMMUNICATION EQUIPMENT	38,537,911	15,435,152	4,598,889	0	4,598,889	10,836,263
398.00	MISCELLANEOUS EQUIPMENT	182,207	169,502	0	0	0	169,502
т	OTAL GENERAL PLANT	79,864,834	34,241,632	4,598,889	0	4,598,889	29,642,743
т	OTAL DEPRECIABLE PLANT	2,965,796,856	1,336,786,412	(7,490,190)	5,439,166	(2,051,024)	1,338,837,436

Sources:

Cols. (2) and (3) from Depreciation Study, pages III-4 through III-6.

Col. (4) from "CURB 238b kge sfas 143 1982-2002(1).xls", Accrued COR less Incurred COR (both '77-'81 and 21 Years).

Col (5) from "CURB 238b FASB 143 calc-2003(1).xis", Col. E - Col. F.

1/ For Steam Production plant, COR in Reserve (cols. 4 and 5) is allocated to plants based on Original Cost (col. 2).

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REQUEST Cools, UC. EASY Access Management System	
Home Page Change Password	Wednesday, September 07, 2005 Logged in as: [Margaret Kenney] Logout
Docket: [05-WSEE-981-RTS] 2005 Rate Case	
Requestor: [CURB] [David Springe] Data Request: CURB 239 :: SFAS No. 143 and FERC Date: 2005-08-01	Order No. 631

a. No. b. Yes. c. Accumulated Depreciation is the return of invested capital over time. The invested capital was made by shareholders.

No Digital Attachments Found.

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CERTIFICATE OF SERVICE

05-WSEE-981-RTS

I, the undersigned, hereby certify that a true and correct copy of the above and foregoing document was placed in the United States mail, postage prepaid, or hand-delivered this 9th day of September, 2005, to the following:

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CERTIFICATE OF SERVICE

05-WSEE-981-RTS

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