Exhibit No. 209

MoPSC Staff – Exhibit 209
Cedric E. Cunigan, PE
Direct Testimony
File Nos. ER-2022-0129 & ER-2022-0130

Exhibit No.:	
Issue(s):	*Depreciation*
Witness:	*Cedric E. Cunigan, PE*
Sponsoring Party:	*MoPSC Staff*
Type of Exhibit:	*Direct Testimony*
Case Nos.:	*ER-2022-0129 and ER-2022-0130*
Date Testimony Prepared:	*June 8, 2022*

MISSOURI PUBLIC SERVICE COMMISSION

INDUSTRY ANALYSIS DIVISION

ENGINEERING ANALYSIS DEPARTMENT

DIRECT TESTIMONY

OF

CEDRIC E. CUNIGAN, PE

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2022-0129

Evergy Missouri West, Inc., d/b/a Evergy Missouri West
Case No. ER-2022-0130

Jefferson City, Missouri
June2022

DIRECT TESTIMONY

OF

CEDRIC E. CUNIGAN, PE

Evergy Metro, Inc., d/b/a Evergy Missouri Metro
Case No. ER-2022-0129

Evergy Missouri West, Inc., d/b/a Evergy Missouri West
Case No. ER-2022-0130

Q. Please state your name and business address.

A. My name is Cedric E. Cunigan. My business address is 200 Madison Street, Jefferson City, Missouri 65101.

Q. By whom are you employed and in what capacity?

A. I am employed by the Missouri Public Service Commission ("Commission") as a Professional Engineer in the Engineering Analysis Department, Industry Analysis Division.

Q. Please describe your educational background and work experience.

A. Please refer to Schedule CEC-d1 attached to this Direct testimony for my credentials and a list of cases which I have filed testimony or recommendations.

EXECUTIVE SUMMARY

Q. What is the purpose of your direct testimony?

A. I will be providing Staff's depreciation analysis and rates for Evergy Missouri West ("EMW")'s plant in service. Mr. David T. Buttig, PE will be covering Evergy Missouri Metro ("EMM").

Q. Do you provide input or workproduct to another Staff witness for the development of an issue?

A. Yes. I provided my recommended depreciation rates to Staff witnesses Mathew R. Young and Jared Giacone to use in the development of Staff's EMS run.

Q. Through this testimony, do you provide any recommendations that should be specifically reflected in the Commission's Report and Order in this case?

A. Yes. In this testimony I recommend that the Commission order the depreciation rates that Staff has prepared and recommended. Staff's depreciation rates have been included as Schedule CEC-d2.

DEPRECIATION

Q. Please explain what depreciation is.

A. Depreciation involves the application of a depreciation rate to the depreciable plant balance (for example, land is not considered depreciable) that results in the availability of depreciation expense for the utility's investors. The application of depreciation rates also results in the accumulation of a depreciation reserve, which offsets the original investment level for purposes of calculating rates.

For a regulated utility, depreciation expense is the return of investment to investors over time. A depreciation rate is calculated that, when applied to the level of depreciable plant investment approximates on an annual basis "the loss in service value, not restored by current maintenance, incurred in connection with the consumption or prospective retirement of utility plant in the course of service from causes which are known to be in current operation and against which the utility is not protected by insurance. Among the causes to be given consideration are wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art, changes in demand, and requirements of public authorities."[1] In Missouri, the depreciation rate

[1] 18 CFR Part 101 Uniform System of Accounts Prescribed for Public Utilities and Licensees Subject to Provision of the Federal Power Act Definition 12.

will also generally reflect an allowance for the net salvage value expected upon retirement of items in the plant account.

Q. How is depreciation calculated?

A. A depreciation study is performed in which the survival rates of assets, salvage rates, and associated costs of assets are tracked over time.

Q. Did Staff perform its own depreciation study?

A. Yes.

Q. How did Staff obtain data for the study?

A. Commission rule 20 CSR 4240-3.175 requires an electric utility to submit a depreciation study, database, and property unit catalog every 5 years. On June 24, 2021, EMW filed Case No. EE-2021-0424, for a variance from the provisions of Commission rule 20 CSR 4240-3.175 in order to delay its filing of a depreciation study, data base, and property unit catalog until its intended rate case filing in 2022. Staff recommended the Commission grant the waiver but require EMW to file its depreciation study, database, and property unit catalog as soon as it is finalized and no later than its rate case filing. The Commission granted the waiver with the requirement that EMW submit its depreciation study, database, and property unit catalog no later than October 1, 2021. EMW submitted the required information on October 1, 2021 in accordance with the Commission's Order. Mr. John Spanos also filed a copy of the depreciation study in his direct testimony in this case. In addition, Staff issued several data requests to EMW for additional information.

Q. By what method, procedure, and technique did Staff use to calculate the depreciation rates?

A. Depending on the account, Staff used different procedures to calculate the depreciation rates. Staff separated the accounts into three groups: production plant with probable retirement dates, general plant accounts utilizing general plant amortization, and all other plant accounts.

Q. What method, procedure, and technique did Staff use to calculate the depreciation rates for the production plant accounts with probable retirement dates?

A. For production plant accounts with probable retirement dates, Staff utilized the straight-line method, broad group-averaging life procedure, and remaining life technique.

Q. What is the straight-line method?

A. The straight-line method allocates expense evenly over the expected life of the assets in the individual accounts. The straight-line method is the most common method used for asset depreciation. Another method of depreciation could be the declining method, which would front load the depreciation expense at the early years of an assets life. This method does not work well for mass asset accounting.

Q. What is the broad group-averaging life procedure?

A. The broad group-averaging life procedure bases annual depreciation on the average service life of the account rather than looking at each individual installation year and analyzing them separately.

Q. What is the remaining life technique?

A. The remaining life technique uses the net plant of surviving plant less book depreciation reserve as the depreciable cost and uses the average remaining service life of the assets. The other technique that could be used is the whole life technique where the depreciation

cost is only the original cost spread out evenly over the average service life of the assets. I discuss Staff's use of this technique later in my testimony.

Q. Why did Staff use the straight-line method, broad group-averaging life procedure, and the remaining life technique for the production plant accounts with probable retirement years?

A. Staff chose this method, procedure, and technique because these assets have a retirement date listed in the study and included in Evergy Metro's Integrated Resource Plan ("IRP"). Staff calculated its proposed depreciation rates so that the accounts would be fully accrued by the plant retirement dates. This method minimizes generational cost subsidies associated with specific generation facilities. It is only applicable when there is a reasonable estimate of a termination date.

Q. Which plant accounts did staff apply general plant amortization to calculate the depreciation rates?

A. Staff utilized general plant amortization on Accounts 391.01 Office Furniture and Equipment, 391.02 Office - Computers, 393.00 Stores Equipment, 394.00 Tools Shop and Garage Equipment, 395.00 Laboratory Equipment, 397.00 Communication Equipment, and 398.00 Miscellaneous Equipment.

Q. What is general plant amortization?

A. General plant amortization expenses the full account value over a set amount of time. This means that all assets in a vintage year are retired together once they reach the age of the amortization period, as opposed to retiring individual assets.

Q. Has use of general plant amortization been previously ordered by the Commission?

A. Yes. General plant amortization was previously ordered for these accounts in EMM's (formerly Kansas City Power & Light) Case No. ER-2016-0285.

Q. Why did Staff decide to utilize general plant amortization for these accounts?

A. These accounts have a high volume of low value assets that experience a predictable retirement. The accounts where amortization is used would typically have high inventory and tracking costs relative to the value of the individual assets. The accounts are also given a salvage rate of zero percent and they are retired from use when the asset reaches the accounts average service life.

Q. What did Staff do to calculate the depreciation rates for the remaining accounts?

A. Staff utilized the straight-line method, broad group-averaging life procedure, and the whole life technique. Staff utilized this method for all other accounts not previously mentioned.

Q. You have already previously discussed the straight-line method and broad group-averaging life procedure, but what is the whole life technique?

A. The whole life technique applies the depreciation rate over the life of the assets. This procedure uses the average service life of the assets to calculate annual accrual rather than the average remaining life.

Q. Why did Staff use this method, procedure, and technique to calculate the depreciation rate for the remaining accounts?

A. Unlike the accounts using the remaining life technique, these accounts do not have a final retirement date of the accounts. By using the whole life technique for these accounts, the accounts will accrue depreciation reserve equal to its original cost and net salvage divided equally over its average life. This technique does not take into account the current status

of the accounts depreciation reserve as the remaining life technique does. Using the remaining life technique can lead to lower or higher depreciation rates as compared to those calculated using the whole life technique since it brings in the depreciation reserve and only spreads the depreciation cost over the average remaining life of the assets currently in the account. This could cause any new assets to have a depreciation rate applied to them that may lead to an over-accrual or under-accrual.

Q. What is average service life, and how does Staff calculate it?

Average service life is the mean or estimated life of an asset group. The mean life would be the point at which half of the asset group would be retired. You would expect some individual assets to retire before the mean point and some to retire after the mean point, but the mean provides a way to estimate the group as a whole. Average service life can be determined by plotting the percentage of assets surviving against the age of the assets in a survivor curve, and calculating the area under that curve. For an account in which all plant is retired, the full survivor curve is available and average service life can be calculated. Accounts with plant remaining have a partial curve, which is known as a stub curve. The average service life can be estimated by comparing a stub curve to Iowa curves and fitting the best matched curve. Iowa curves represent common survival rates and patterns of assets, and are widely used to estimate depreciation. Staff receives data in excel or notepad format for retirements and salvage information. The data includes installment year (vintage), FERC account, type of transaction, transaction year, amount of transaction, and group or location codes. Staff uses a version of Gannett Fleming Software to complete the following actions with the Company provided data. First the data is sorted and checked for errors. Next, the software allows Staff to analyze the amount of plant that has been retired at each age and plot the stub curve. Then, Staff matches

an appropriate Iowa curve to the stub curve data. Curves are fitted using a mixture of mathematical and visual fitting practices. Once a curve is chosen, Staff has an estimate of the average service life.

Q. Is the average service life the only estimation used?

A. No. Most generation facilities will have an expected retirement date when the entire plant will be closed. For these facilities a remaining life estimate can be used to calculate the rate instead of the average service life. Average service life is used for assets that do not have a known or estimated retirement date, such as transmission, distribution, or general plant accounts.

Q. How is depreciation expense calculated?

A. Annual Depreciation expense can be calculated using the following equations:

$$depreciation\ expense = \frac{Cost - net\ salvage\ value - accumulated\ depreciation}{life\ estimate}$$

$$depreciation\ rate\ = \frac{1 - net\ salvage\ percent - percent\ accumulated\ depreciation}{life\ estimate}$$

The life estimate in the above equations could be either the remaining life or the average service life.

Q. What is net salvage and how is it determined?

A. Net salvage is amount required to retire or recouped at the retirement of an asset. Some items will have dismantling costs, but there may also be recovery of funds through resale or recycling. Net salvage can be calculated using the following equation:

$$net\ salvage = gross\ salvage - cost\ of\ removal$$

Gross salvage is the removed market value of the retired asset. Cost of removal is the cost associated with the retirement and disposition of the asset from service. Staff determined

net salvage percentages dividing the experienced net cost of removal by the original cost of plant retired during the same time period to calculate the net cost of removal percentage. Staff then analyzes net salvage percentage using a 3-year or 5-year moving average to determine trends. Staff then used the life and net salvage estimates to calculate a depreciation rate for each account.

For the production plant accounts, Staff calculated its net salvage percentage based on the interim net salvage of those accounts. Staff did not include an additional adjustment for terminal net salvage.

Q. What is interim net salvage and terminal net salvage?

A. Interim net salvage is associated with the retirements the accounts would see during the life of the account. Terminal net salvage is associated with the final retirement of the account or plant and its associated costs. For example, you might expect to replace or repair individual components of a unit such as turbine blades or boiler tubes as a part of routine operations and maintenance. These costs would be considered interim salvage. Other costs associated with the final termination of the facility, such as closure of landfills, demolition of facilities, and end use costs would be considered terminal salvage.

Q. Why did Staff only consider the interim net salvage in its calculations?

A. The Commission has not generally granted net salvage for terminal net salvage. The inclusion of these terminal net salvage costs are speculative and they cannot be considered known and measurable.

Q. Has the Commission previously made a decision concerning terminal net salvage?

A. Yes. In Case No. ER-2016-0285, the Commission addressed the inclusion of terminal net salvage in depreciation rate calculations stating, "Because the cost of terminal net salvage is speculative, the Commission will not allow KCPL to recover those costs in this case."[2]

Q. What depreciation rates does Staff recommend the Commission order for use by EMW?

A. Staff is recommends the Commission order EMW to use the depreciation rates attached to this testimony in Schedule CEC-d2.

Q. Does this conclude your direct testimony?

A. Yes it does.

[2] Case No. ER-2016-0285 Report and Order issued May 3, 2017, page 38.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Evergy Metro, Inc. d/b/a Evergy Missouri Metro's Request for Authority to Implement a General Rate Increase for Electric Service	))))	Case No. ER-2022-0129
In the Matter of Evergy Missouri West, Inc. d/b/a Evergy Missouri West's Request for Authority to Implement a General Rate Increase for Electric Service	))))	Case No. ER-2022-0130

AFFIDAVIT OF CEDRIC E. CUNIGAN, PE

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW CEDRIC E. CUNIGAN, PE and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Direct Testimony of Cedric E. Cunigan, PE*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

CEDRIC E. CUNIGAN, PE

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 7th day of June 2022.

D. SUZIE MANKIN
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: April 04, 2025
Commission Number: 12412070

Notary Public

Cedric E. Cunigan, PE

PRESENT POSITION:

I am a Professional Engineer in the Engineering Analysis Department, Industry Analysis Division, of the Missouri Public Service Commission.

EDUCATIONAL BACKGROUND AND WORK EXPERIENCE:

In May 2011, I earned a Bachelor of Science in Biological Engineering from the University of Missouri, in Columbia. In May 2013, I earned a Master of Business Administration, also from the University of Missouri. I began work with the Missouri Department of Natural Resources Solid Waste Management Program in August 2013. I started as a Technician and was promoted to an Environmental Engineer I in January 2014. I transferred to the Hazardous Waste Program in September 2014. In January 2015, I was promoted to an Environmental Engineer II. I ended employment with the Department of Natural Resources in January of 2017 and began work with the Missouri Public Service Commission as a Utility Engineering Specialist III. I received my professional engineer's license in October 2021.

Summary of Case Involvement:

Case Number	Utility	Type	Issue
EO-2017-0267	Empire District Electric Company	Memorandum	RES Compliance Report and Plan
EO-2017-0270	KCP&L Greater Missouri Operations Company	Memorandum	RES Compliance Report
EO-2017-0272	KCP&L Greater Missouri Operations Company	Memorandum	RES Compliance Plan
EO-2018-0111	Macon Electric Cooperative & City of Marceline	Memorandum	Change of Supplier
EC-2018-0089	Union Electric Company d/b/a Ameren Missouri	Staff Report	Complaint Investigation
EO-2018-0285	Empire District Electric Company	Memorandum	RES Compliance Report and Plan
EO-2018-0289	KCP&L Greater Missouri Operations Company	Memorandum	RES Compliance Report

Case Number	Utility	Type	Issue
EO-2018-0291	KCP&L Greater Missouri Operations Company	Memorandum	RES Compliance Plan
ER-2018-0145 & ER-2018-0146	KCPL & KCP&L Greater Missouri Operations Company	Cost of Service Report, Rebuttal, & Surrebuttal	Renewable Energy
WR-2018-0328	Middlefork Water Company	Depreciation Workpapers	Depreciation
EA-2018-0202	Union Electric Company d/b/a Ameren Missouri	Staff Report	Certificate of Convenience and Necessity Application Requirements
EC-2018-0376	Union Electric Company d/b/a Ameren Missouri	Staff Report	Complaint Investigation
EA-2019-0010 & EA-2019-0118	Union Electric Company d/b/a Ameren Missouri	Staff Report	Certificate of Convenience and Necessity Application Requirements
EA-2019-0021	Union Electric Company d/b/a Ameren Missouri	Staff Report	Certificate of Convenience and Necessity Application Requirements
EE-2019-0305	Empire District Electric Company	Memorandum	RES Compliance Report and Plan
EO-2019-0320	Union Electric Company d/b/a Ameren Missouri	Memorandum	RES Compliance Report and Plan
EO-2019-0371	Union Electric Company d/b/a Ameren Missouri	Staff Report	Certificate of Convenience and Necessity Application Requirements
EE-2020-0411	Union Electric Company d/b/a Ameren Missouri	Memorandum	RES Compliance Plan
ET-2020-0259	Empire District Electric Company	Memorandum	Renewable Energy Tariff
EO-2020-0323	Empire District Electric Company	Memorandum	RES Compliance Report and Plan
EO-2020-0328	Union Electric Company d/b/a Ameren Missouri	Memorandum	RES Compliance Report and Plan
EA-2020-0371	Union Electric Company d/b/a Ameren Missouri	Staff Report	Certificate of Convenience and Necessity Application Requirements
WR-2020-0344	Missouri American Water Company	Cost of Service Report, Rebuttal, and Surrebuttal	Depreciation

Case Number	Utility	Type	Issue
SA-2021-0017	Missouri American Water Company	Staff Report	Depreciation
EO-2021-0032	Evergy	Staff Report	Solar Requirements 393.1665 RSMo
SA-2021-0120	Missouri American Water Company	Staff Report	Depreciation
EO-2021-0344	Empire District Electric Company	Memorandum	RES Compliance Report and Plan
EO-2021-0352	Union Electric Company d/b/a Ameren Missouri	Memorandum	RES Compliance Report and Plan
ER-2021-0240	Union Electric Company d/b/a Ameren Missouri	Cost of Service Report, Rebuttal, and Surrebuttal	Depreciation
ER-2021-0312	Empire District Electric Company	Cost of Service Report, Direct, Rebuttal, and Surrebuttal	Depreciation
WA-2021-0391	Missouri American Water Company	Staff Report	Depreciation
EO-2022-0282	Empire District Electric Company	Memorandum	RES Compliance Report and Plan

Evergy Missouri West
Schedule of Depreciation Rates
(Electric)
ER-2022-0130

Account Number	Account Description	Probable Retirement Date	Average Life	Net Salvage %	Depreciation Rate	Average Remaining Life	Average Age
311.00	IATAN UNIT 1	Jun-40	85	-5	3.82	18.3	
	IATAN UNIT 2	Jun-70	85	-13	2.46	45.3	
	IATAN COMMON	Jun-70	85	-11	2.41	45.5	
	JEFFREY ENERGY CENTER UNIT 1	Jun-40	85	-4	2.26	18.1	
	JEFFREY ENERGY CENTER UNIT 2	Jun-40	85	-5	2.27	18.1	
	JEFFREY ENERGY CENTER UNIT 3	Jun-40	85	-5	2.29	18.1	
	JEFFREY ENERGY CENTER COMMON	Jun-40	85	-3	3.73	18.6	
	LAKE ROAD BOILERS	Dec-35	85	-2	6.05	14.3	
	LAKE ROAD UNIT 1	Dec-35	85	-4	4.24	13.5	
	LAKE ROAD UNIT 2	Dec-35	85	-4	4.73	13.9	
	LAKE ROAD UNIT 3	Dec-35	85	-4	4.81	13.9	
	LAKE ROAD UNIT 4	Dec-35	85	-2	5.09	14.1	
	LAKE ROAD COMMON	Dec-35	85	-3	5.28	14.3	
312.00	BOILER PLANT EQUIPMENT						
	IATAN UNIT 1	Jun-40	55	-5	4.88	17.4	
	IATAN UNIT 2	Jun-70	55	-13	3.00	37.4	
	IATAN COMMON	Jun-70	55	-11	2.95	37.0	
	JEFFREY ENERGY CENTER UNIT 1	Jun-40	55	-4	1.49	16.6	
	JEFFREY ENERGY CENTER UNIT 2	Jun-40	55	-5	1.69	16.6	
	JEFFREY ENERGY CENTER UNIT 3	Jun-40	55	-5	1.56	16.6	
	JEFFREY ENERGY CENTER COMMON	Jun-40	55	-3	3.68	17.8	
	LAKE ROAD BOILERS	Dec-35	55	-3	6.44	13.8	
	LAKE ROAD UNIT 1	Dec-35	55	-4	6.76	14.0	
	LAKE ROAD UNIT 2	Dec-35	55	-4	6.43	14.1	
	LAKE ROAD UNIT 3	Dec-35	55	-4	7.13	14.1	
	LAKE ROAD UNIT 4	Dec-35	55	-2	6.17	13.6	
	LAKE ROAD COMMON	Dec-35	55	-3	5.39	13.1	
312.02	BOILER PLANT EQUIPMENT - AQC						
	IATAN UNIT 1	Jun-40	50	-5	9.68	17.6	
	JEFFREY ENERGY CENTER UNIT 1	Jun-40	50	-4	7.39	17.9	
	JEFFREY ENERGY CENTER UNIT 2	Jun-40	50	-5	11.27	17.8	
	JEFFREY ENERGY CENTER UNIT 3	Jun-40	50	-5	12.10	17.9	
	JEFFREY ENERGY CENTER COMMON	Jun-40	50	-3	7.74	17.8	
	LAKE ROAD BOILERS	Dec-35	50	-3	13.67	12.8	
	LAKE ROAD UNIT 4	Dec-35	50	-2	13.29	13.6	
	LAKE ROAD COMMON	Dec-35	50	-3	12.76	13.3	
312.05	BOILER PLANT EQUIPMENT - BAGS AND CATALYS						
	IATAN UNIT 1	Jun-40	10	-5	10.78	6.3	
	IATAN UNIT 2	Jun-70	10	-13	13.74	3.5	
	IATAN COMMON	Jun-70	10	-11	16.56	1.7	
314.00	TURBOGENERATOR UNITS						
	IATAN UNIT 1	Jun-40	55	-5	4.21	17.4	
	IATAN UNIT 2	Jun-70	55	-13	2.95	37.6	
	IATAN COMMON	Jun-70	55	-11	2.88	37.1	
	JEFFREY ENERGY CENTER UNIT 1	Jun-40	55	-4	2.25	17.4	
	JEFFREY ENERGY CENTER UNIT 2	Jun-40	55	-5	1.85	17.2	
	JEFFREY ENERGY CENTER UNIT 3	Jun-40	55	-5	2.02	17.2	
	JEFFREY ENERGY CENTER COMMON	Jun-40	55	-3	2.84	17.9	
	LAKE ROAD BOILERS	Dec-35	55	-2	6.12	14.2	

Account Number	Account Description	Probable Retirement Date	Average Life	Net Salvage %	Depreciation Rate	Average Remaining Life	Average Age
	LAKE ROAD UNIT 1	Dec-35	55	-4	4.41	13.1	
	LAKE ROAD UNIT 2	Dec-35	55	-4	4.51	13.2	
	LAKE ROAD UNIT 3	Dec-35	55	-4	3.08	13.7	
	LAKE ROAD UNIT 4	Dec-35	55	-2	4.45	13.4	
	LAKE ROAD COMMON	Dec-35	55	-3			
315.00	ACCESSORY ELECTRIC EQUIPMENT						
	IATAN UNIT 1	Jun-40	60	-5	4.53	17.8	
	IATAN UNIT 2	Jun-70	60	-13	2.80	39.2	
	IATAN COMMON	Jun-70	60	-11	2.70	39.0	
	JEFFREY ENERGY CENTER UNIT 1	Jun-40	60	-4	0.82	16.6	
	JEFFREY ENERGY CENTER UNIT 2	Jun-40	60	-5	2.74	17.7	
	JEFFREY ENERGY CENTER UNIT 3	Jun-40	60	-5	0.98	16.5	
	JEFFREY ENERGY CENTER COMMON	Jun-40	60	-3	2.97	18.0	
	LAKE ROAD BOILERS	Dec-35	60	-2	5.47	13.3	
	LAKE ROAD UNIT 1	Dec-35	60	-4	6.09	14.1	
	LAKE ROAD UNIT 2	Dec-35	60	-4	5.90	14.1	
	LAKE ROAD UNIT 3	Dec-35	60	-4	4.10	12.4	
	LAKE ROAD UNIT 4	Dec-35	60	-2	3.70	13.8	
	LAKE ROAD COMMON	Dec-35	60	-3	3.95	13.3	
316.00	MISCELLANEOUS POWER PLANT EQUIPMENT						
	IATAN UNIT 1	Jun-40	40	-5	5.31	16.5	
	IATAN UNIT 2	Jun-70	40	-13	3.51	31.0	
	IATAN COMMON	Jun-70	40	-11	3.42	31.5	
	JEFFREY ENERGY CENTER UNIT 1	Jun-40	40	-4	5.07	15.8	
	JEFFREY ENERGY CENTER UNIT 2	Jun-40	40	-5	5.14	15.9	
	JEFFREY ENERGY CENTER UNIT 3	Jun-40	40	-5	5.28	16.7	
	JEFFREY ENERGY CENTER COMMON	Jun-40	40	-3	4.84	16.0	
	LAKE ROAD BOILERS	Dec-35	40	-2	7.30	13.2	
	LAKE ROAD UNIT 4	Dec-35	40	-2	6.37	13.2	
	LAKE ROAD COMMON	Dec-35	40	-3	6.54	13.1	
341.00	STRUCTURES AND IMPROVEMENTS						
	GREENWOOD UNIT 1	Jun-35	60	-1	4.08	13.7	
	GREENWOOD UNIT 2	Jun-35	60	-1	4.14	13.8	
	GREENWOOD UNIT 3	Jun-35	60	-1	4.17	13.7	
	GREENWOOD UNIT 4	Jun-35	60	-1	3.78	13.8	
	GREENWOOD COMMON	Jun-35	60	-1	5.24	13.9	
	NEVADA PLANT	Jun-35	60	-1	4.74	13.8	
	SOUTH HARPER UNIT 1	Jun-50	60	-3	2.80	27.4	
	SOUTH HARPER UNIT 2	Jun-50	60	-3	2.80	27.4	
	SOUTH HARPER UNIT 3	Jun-50	60	-3	2.81	27.4	
	SOUTH HARPER COMMON	Jun-50	60	-2	2.85	27.5	
	CROSSROADS UNIT 1	Jun-47	60	-2	1.93	25.5	
	CROSSROADS UNIT 2	Jun-47	60	-2	1.88	25.5	
	CROSSROADS UNIT 3	Jun-47	60	-2	1.88	25.5	
	CROSSROADS UNIT 4	Jun-47	60	-2	1.88	25.5	
	CROSSROADS COMMON	Jun-47	60	-2	3.01	24.5	
	LAKE ROAD UNIT 5	Dec-35	60	-2	3.49	13.1	
	LAKE ROAD UNIT 6	Dec-35	60	-1	3.40	13.8	
	LAKE ROAD UNIT 7	Dec-35	60	-1	3.42	14.1	
	RALPH GREEN PLANT	Jun-35	60	-1	4.21	13.7	
	LANDFILL GAS TURBINE	Jun-42	60	-1	3.01	20.6	
341.10							
	GREENWOOD SOLAR	Jun-41	40	-2	4.38	19.9	
342.00	FUEL HOLDERS, PRODUCERS AND ACCESSOR	ES					

Account Number	Account Description	Probable Retirement Date	Average Life	Net Salvage %	Depreciation Rate	Average Remaining Life	Average Age
	GREENWOOD UNIT 1	Jun-35	60	-1	2.67	13.7	
	GREENWOOD UNIT 2	Jun-35	60	-1	2.12	13.9	
	GREENWOOD UNIT 3	Jun-35	60	-1	3.61	13.8	
	GREENWOOD UNIT 4	Jun-35	60	-1	3.24	13.8	
	GREENWOOD COMMON	Jun-35	60	-1	1.81	13.0	
	NEVADA PLANT	Jun-35	60	-1	2.80	13.7	
	SOUTH HARPER UNIT 1	Jun-50	60	-3	1.94	27.3	
	SOUTH HARPER UNIT 2	Jun-50	60	-3	1.94	27.3	
	SOUTH HARPER UNIT 3	Jun-50	60	-3	1.94	27.3	
	SOUTH HARPER COMMON	Jun-50	60	-2	1.91	27.3	
	CROSSROADS UNIT 1	Jun-47	60	-3	2.03	24.5	
	CROSSROADS UNIT 2	Jun-47	60	-3	2.46	25.0	
	CROSSROADS UNIT 3	Jun-47	60	-3	2.03	24.5	
	CROSSROADS UNIT 4	Jun-47	60	-3	2.03	24.5	
	CROSSROADS COMMON	Jun-47	60	-2	1.99	24.4	
	LAKE ROAD UNIT 5	Dec-35	60	-2	3.18	13.8	
	LAKE ROAD UNIT 7	Dec-35	60	-1	1.63	13.7	
	RALPH GREEN PLANT	Jun-35	60	-1	2.77	13.8	
	LANDFILL GAS TURBINE	Jun-42	60	-1	3.29	20.6	
343.00							
	GREENWOOD UNIT 1	Jun-35	55	-1	0.91	13.4	
	GREENWOOD UNIT 2	Jun-35	55	-1	0.89	13.4	
	GREENWOOD UNIT 3	Jun-35	55	-1	0.96	13.4	
	GREENWOOD UNIT 4	Jun-35	55	-1	0.87	13.4	
	GREENWOOD COMMON	Jun-35	55	-1	1.32	13.5	
	NEVADA PLANT	Jun-35	55	-1	0.23	13.3	
	SOUTH HARPER UNIT 1	Jun-50	55	-3	1.11	26.0	
	SOUTH HARPER UNIT 2	Jun-50	55	-3	1.15	26.0	
	SOUTH HARPER UNIT 3	Jun-50	55	-3	1.13	26.0	
	SOUTH HARPER COMMON	Jun-50	55	-2	2.54	27.1	
	CROSSROADS UNIT 1	Jun-47	55	-2	1.19	23.5	
	CROSSROADS UNIT 2	Jun-47	55	-2	1.16	23.4	
	CROSSROADS UNIT 3	Jun-47	55	-2	1.08	23.4	
	CROSSROADS UNIT 4	Jun-47	55	-2	1.07	23.4	
	LAKE ROAD UNIT 5	Dec-35	55	-2	2.10	13.8	
	LAKE ROAD UNIT 6	Dec-35	55	-1	Fully Accrued		
	LAKE ROAD UNIT 7	Dec-35	55	-1	Fully Accrued		
	RALPH GREEN PLANT	Jun-35	55	-1	1.40	13.6	
	LANDFILL GAS TURBINE	Jun-42	55	-1	3.80	20.3	
344.00	GENERATORS						
	GREENWOOD UNIT 1	Jun-35	50	-1	0.78	13.3	
	GREENWOOD UNIT 2	Jun-35	50	-1	0.37	13.1	
	GREENWOOD UNIT 3	Jun-35	50	-1	0.40	13.4	
	GREENWOOD UNIT 4	Jun-35	50	-1	Fully Accrued		
	NEVADA PLANT	Jun-35	50	-1	Fully Accrued		
	SOUTH HARPER UNIT 1	Jun-50	50	-3	1.58	25.6	
	SOUTH HARPER UNIT 2	Jun-50	50	-3	1.58	25.6	
	SOUTH HARPER UNIT 3	Jun-50	50	-3	1.58	25.6	
	CROSSROADS UNIT 1	Jun-47	50	-2	1.59	23.0	
	CROSSROADS UNIT 2	Jun-47	50	-2	1.59	23.0	
	CROSSROADS UNIT 3	Jun-47	50	-2	1.52	22.9	
	CROSSROADS UNIT 4	Jun-47	50	-2	1.59	23.0	
	CROSSROADS COMMON	Jun-47	50	-2	3.28	24.9	
	LAKE ROAD UNIT 5	Dec-35	50	-2	0.64	14.3	
	LAKE ROAD UNIT 6	Dec-35	50	-1	1.20	13.6	
	LAKE ROAD UNIT 7	Dec-35	50	-1	2.65	13.9	
	RALPH GREEN PLANT	Jun-35	50	-1	0.03	13.8	

Account Number	Account Description	Probable Retirement Date	Average Life	Net Salvage %	Depreciation Rate	Average Remaining Life	Average Age
	LANDFILL GAS TURBINE	Jun-42	50	-1	2.91	20.2	
344.00	GENERATORS - SOLAR						
	GREENWOOD SOLAR	Jun-41	30	-2	3.02	17.9	
345.00	ACCESSORY ELECTRIC EQUIPMENT						
	GREENWOOD UNIT 1	Jun-35	50	-1	2.86	13.2	
	GREENWOOD UNIT 2	Jun-35	50	-1	2.11	13.4	
	GREENWOOD UNIT 3	Jun-35	50	-1	2.97	13.3	
	GREENWOOD UNIT 4	Jun-35	50	-1	2.84	13.3	
	GREENWOOD COMMON	Jun-35	50	-1	3.51	13.5	
	NEVADA PLANT	Jun-35	50	-1	3.08	13.0	
	SOUTH HARPER UNIT 1	Jun-50	50	-3	2.33	25.6	
	SOUTH HARPER UNIT 2	Jun-50	50	-3	2.33	25.6	
	SOUTH HARPER UNIT 3	Jun-50	50	-3	2.33	25.6	
	SOUTH HARPER COMMON	Jun-50	50	-2	2.30	25.6	
	CROSSROADS UNIT 1	Jun-47	50	-2	2.70	23.1	
	CROSSROADS UNIT 2	Jun-47	50	-2	2.72	23.1	
	CROSSROADS UNIT 3	Jun-47	50	-2	2.73	23.0	
	CROSSROADS UNIT 4	Jun-47	50	-2	2.72	23.1	
	CROSSROADS COMMON	Jun-47	50	-2	3.32	24.6	
	LAKE ROAD UNIT 5	Dec-35	50	-2	5.58	14.2	
	LAKE ROAD UNIT 6	Dec-35	50	-1	3.81	13.9	
	LAKE ROAD UNIT 7	Dec-35	50	-1	4.29	14.0	
	RALPH GREEN PLANT	Jun-35	50	-1	2.47	12.7	
346.00	MISCELLANEOUS POWER PLANT EQUIPMENT						
	GREENWOOD COMMON	Jun-35	40	-1	6.28	13.7	
	NEVADA PLANT	Jun-35	40	-1	6.48	13.8	
	SOUTH HARPER COMMON	Jun-50	40	-2	2.40	23.3	
	CROSSROADS COMMON	Jun-47	40	-2			
	LAKE ROAD COMMON	Dec-35	40	-1	5.45	13.8	
	RALPH GREEN PLANT	Jun-35	40	-1	6.75	13.8	
	LANDFILL GAS TURBINE	Jun-42	40	-1	4.63	20.2	
352.00	STRUCTURES AND IMPROVEMENTS		70	-5	1.50		19.0
353.00	STATION EQUIPMENT		62	-10	1.77		16.1
353.03	STATION EQUIPMENT - COMMUNICATION EQUIPMENT		25	0	4.00		8.8
354.00	TOWERS AND FIXTURES		65	-20	1.85		42.1
354.05	TOWERS AND FIXTURES - SUBTRANSMISSION		65	-20	1.85		62.3
355.00	POLES AND FIXTURES		65	-75	2.70		11.4
355.05	POLES AND FIXTURES - SUBTRANSMISSION		65	-75	2.70		30.0
356.00	OVERHEAD CONDUCTORS AND DEVICES		70	-70	2.43		19.1
356.05	OVERHEAD CONDUCTORS AND DEVICES - SUBTRANS		70	-70	2.43		27.6
357.00	UNDERGROUND CONDUIT		45	0	2.22		28.9
358.00	UNDERGROUND CONDUCTORS AND DEVICES		50	0	2.00		42.5
358.05	UNDERGROUND CONDUCTORS AND DEVICES - SUBTRANS		50	0	1.99		31.3
361.00	STRUCTURES AND IMPROVEMENTS		70	-10	1.57		21.6
362.00	STATION EQUIPMENT		60	-10	1.84		16.6
364.00	POLES, TOWERS AND FIXTURES		58	-120	3.78		17.1
365.00	OVERHEAD CONDUCTORS AND DEVICES		61	-70	2.79		17.1
366.00	UNDERGROUND CONDUIT		50	-60	3.20		12.0
367.00	UNDERGROUND CONDUCTORS AND DEVICES		47	-55	3.30		12.4
368.00	LINE TRANSFORMERS		45	-25	2.77		17.4
369.01	SERVICES - OVERHEAD		65	-125	3.47		23.5
369.02	SERVICES - UNDERGROUND		42	-30	3.09		17.6
370.00	METERS		37	-50	4.05		18.5
370.01	METERS - LOAD RESEARCH METERS		20	0	5.00		28.1

Account Number	Account Description	Probable Retirement Date	Average Life	Net Salvage %	Depreciation Rate	Average Remaining Life	Average Age
370.02	METERS - AMI		20	0	5.00		2.5
371.00	INSTALLATIONS ON CUSTOMERS' PREMISES		35	-20	3.43		17.0
371.01	INSTALL ON CUSTOMERS' PREMISES - EV STATIONS		10	0	10.00		4.4
373.00	STREET LIGHTING AND SIGNAL SYSTEMS		30	-20	4.00		12.2
390.00	STRUCTURES AND IMPROVEMENTS		40	-15	2.87		17.9
391.01	OFFICE FURNITURE AND EQUIPMENT	AMORTIZED	20		5.00		
391.02	COMPUTERS	AMORTIZED	8		12.50		
392.00	TRANSPORTATION EQUIPMENT - AUTOS		8	20	10.00		5.5
392.01	TRANSPORTATION EQUIPMENT - LIGHT TRUCKS		9	20	8.89		3.9
392.02	TRANSPORTATION EQUIPMENT - HEAVY TRUCKS		12	20	6.66		5.6
392.03	TRANSPORTATION EQUIPMENT - TRACTORS		15	20	5.34		6.0
392.04	TRANSPORTATION EQUIPMENT - TRAILERS		19	20	4.21		15.7
393.00	STORES EQUIPMENT	AMORTIZED	25		4.00		
394.00	TOOLS, SHOP AND GARAGE EQUIPMENT	AMORTIZED	25		4.00		
395.00	LABORATORY EQUIPMENT	AMORTIZED	30		3.33		
396.00	POWER OPERATED EQUIPMENT		19	15	4.47		11.5
397.00	COMMUNICATION EQUIPMENT	AMORTIZED	27		3.70		
398.00	MISCELLANEOUS EQUIPMENT	AMORTIZED	25		4.00		