2019 Technical Update





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EXECUTIVE SUMMARY

INTRODUCTION

This report presents the findings and recommendations developed in a 2019 technical update of depreciation rates for Otter Tail Power Company prepared by Foster Associates Consultants, LLC. The parameters (*i.e.*, projection curves, projection lives and future net salvage rates) used in the update were developed in the Company's 2018 Depreciation Study based on December 31, 2017 plant and reserve balances. Age distributions of surviving plant on December 31, 2018 were used in the 2019 update to derive composite service life statistics and theoretical depreciation reserves.

The purpose of a technical update is to adjust depreciation rates for changes in the variables associated with a remaining life accrual rate. The variables for an account include the age distribution of surviving plant, the recorded depreciation reserve and the average net salvage rate used in the calculation of a theoretical reserve. A technical update retains the parameters developed and/or approved in the most recent full depreciation study and adjusts depreciation rates for subsequent changes in plant, reserves and realized net salvage activity.

The principal findings from this review are summarized in the attached statements. Statement A provides a comparative summary of current and updated annual depreciation rates for each rate category. Statement B provides a comparison of current and updated annual depreciation accruals. Statement C provides a comparison of recorded and computed depreciation reserves for each rate category. Statement D provides a summary of the components used to obtain a weighted-average net salvage rate for each plant account. Statement E provides a computation of estimated future net salvage rates for life-span categories. Statement F provides a comparative summary of current and updated parameters and statistics including projection life, projection curve, average service life, average remaining life, and average and future net salvage rates.

SCOPE OF UPDATE

The principal activities undertaken in the course of conducting the 2019 technical update included:

- · Collection of plant and net salvage data;
- · Reconciliation of data to the official records of the Company;
- Development of continuity schedules;
- · Computation of average net salvage rates; and
- Development of adjusted accrual rates for each rate category.

Accrual rates currently used by the Company were developed from parameters approved in Docket No. E-017/D-18-568 (Order Dated July 17, 2019). Depreciation accruals and reserve activity recorded in 2018 were posted to December 31, 2018 reserves to obtain appropriate reserve ratios for the 2019

technical update.

Notwithstanding that Otter Tail responsibly rebalanced depreciation reserves (with Commission approval) in each full study and each technical update for nearly twenty (20) years, the Department asserted in Docket No. E-017/D-11-886 that: "... the only clear effect of OTP's practice of redistributing reserves is to create a layer of confusion on OTP's depreciation calculations." The Commission accepted the Department's comment and ordered that: "OTP shall discontinue redistributing its depreciation reserves effective with this filing." The stability in accrual rates and control of amortization accounts that Otter Tail achieved by rebalancing depreciation reserves has been eliminated by Commission order and removed from all future studies and technical updates.

UPDATED DEPRECIATION RATES

Table 1 provides a summary of the changes in annual rates and accruals resulting from the 2019 technical update. Rates updated for each primary account (with the exception of amortization accounts) have been developed including authorized allowances for net salvage.

		Accrual Ra	ate	2019 /	Annualized Acc	rual
Function	Current	Updated	Difference	Current	Updated	Difference
A	В	C	D=C-B	E	F	G=F-E
Intangible Plant	19.90%	19.90%	0.00%	\$ 1,765,934	\$ 1,765,934	\$ -
Steam Production	3.15%	3.29%	0.14%	18,224,747	19,031,863	807,116
Hydraulic Production	9.40%	10.19%	0.79%	661,069	717,110	56,041
Other Production	4.33%	4.36%	0.03%	13,492,462	13,583,197	90,735
Transmission	1.62%	1.61%	-0.01%	7,986,460	7,960,015	(26,445)
Distribution	2.35%	2.35%	0.00%	11,785,727	11,780,141	(5,586)
General Plant			0.01%	2,440,542	2,446,917	6,375
Total Utility	2.88%	2.93%	0.05%	\$56,356,941	\$ 57,285,177	\$928,236

Table 1. Current and Updated Rates and Accruals

Adjustments developed in the technical update produce a composite depreciation rate of 2.93 percent. Depreciation expense is currently accrued at an equivalent rate of 2.88 percent. The updated change in the composite depreciation rate is, therefore, an increase of 0.05 percentage points.

A continued application of rates derived from currently approved parameters would produce annual depreciation expense of \$56,356,941 compared with an annual expense of \$57,285,177 using the rates developed in the update. The increase of \$928,236 is largely attributable to changes in the mix of plant investments among primary accounts and changes in the age distributions of surviving plant. (The change in accruals would be an increase of \$449,583 if Otter Tail was permitted to rebalance depreciation reserves). The portion of the \$928,236 increase allocated to the Minnesota jurisdiction is \$508,283.

STATEMENTS

INTRODUCTION

This section provides a comparative summary of depreciation rates, annual depreciation accruals, recorded and computed depreciation reserves, and current and updated service life and net salvage parameters for Otter Tail Power Company. The content of these statements is briefly described below.

- Statement A provides a comparative summary of current and updated annual depreciation rates for calendar year 2019 using the straight-line method, vintage group procedure, remaining-life technique.
- Statement B provides a comparison of the current and updated annualized depreciation accruals for calendar year 2019 based upon the rates developed in Statement A.
- Statement C provides a comparison of recorded and computed reserves for each rate category.
- Statement D provides a summary of the components used to obtain a weighted average net salvage rate for each rate category.
- Statement E provides a computation of the estimated future net salvage rate for life-span categories.
- Statement F provides a comparative summary of current and updated parameters including projection life, projection curve and future net salvage rates. The statement also contains current and updated statistics including average service life, average remaining life, and average net salvage rates.

Current depreciation accruals shown on Statement B are the product of the plant investment (Column B) and the current depreciation rates (Column D) shown on Statement A. Similarly, updated depreciation accruals shown on Statement B are the product of the plant investment and updated depreciation rates (Column H) shown on Statement A. Remaining life accrual rates are given by:

$$Accrual \, Rate = \frac{1.0 - Reserve \, Ratio - Future \, Net \, Salvage \, Rate}{Remaining \, Life}$$

Minnesota State Agency Rules 7825.0700, Subpart 1 provide that each utility shall file the following schedules (for each year since the last certification) in the form prescribed by the Commission.

- 1. Plant in service (by primary account):
 - a) Beginning and ending plant balances;
 - b) Additions and retirements; and
 - c) Adjustments and transfers.
- 2. Analysis of depreciation reserve (by primary account):
 - a) Beginning and ending reserve balances;
 - b) Depreciation accruals and plant retirements;
 - c) Cost of removal and gross salvage value; and
 - d) Transfers, adjustments and other debits (credits).
- 3. Summary of annual depreciation accruals (by primary account):
 - a) Plant balance;
 - b) Estimated net salvage;
 - c) Depreciation reserve;
 - d) Probable service life; and
 - e) Depreciation accrual and rate.

While the Agency rules do not require submission of continuity schedules in a technical update, this section includes the following statements which set forth the above information for calendar year 2018:

- 1. Statement G Plant Activity;
- 2. Statement H Analysis of Depreciation Reserve; and
- 3. Statement I Summary of Annual Depreciation Accruals.

Minnesota State Agency Rules 7825.0700, Subpart 2-B provide that each utility shall disclose a list of any major future additions or retirements to the plant accounts that the utility believes may have a material effect on the current certification results. Any future additions or retirements that would materially affect the current certification results are discussed in the Company's application.

Comparison of Current and Updated Accrual Rates
Current: VG Procedure / RL Technique
Updated: VG Procedure / RL Technique

Statement A

			Current			Upo	dated	
		Rem.	Fut. Net	Accrual	Rem.	Fut. Net	Reserve	Accrua
	Account Description	Life	Salvage	Rate	Life	Salvage	Ratio	Rate
	Α	В	С	D	E	F	G	н
	SIBLE PLANT					5 \(\)		
303.91		← 5 Y	ear Amortiz	ation →		← 5 Year A	mortization -	\rightarrow
	Software - 10 Year tal Intangible Plant			19.90%	2.92		36.62%	19.909
				19.90%	2.92		30.02 %	19.907
	PRODUCTION		=	0 ==0/		7.00/	4= =00/	0.50
311.00	Structures and Improvements	25.31	-7.2%	2.55%	24.24	-7.2%	47.79%	2.53
312.00	Boiler Plant Equipment	20.46 32.08	-8.0%	3.55% 2.25%	19.83 31.16	-7.9%	39.32% 29.92%	3.76° 2.25°
312.10 314.00	Boiler Plant Equipment - Landfill Turbogenerator Units	19.43	-8.7%	2.60%	18.47	-8.7%	66.74%	2.73
	-	23.64	-7.6%	2.49%	22.53	-7.6%	54.72%	2.73
	Miscellaneous Power Plant Equipment	16.91	-8.7%	3.73%	15.93	-8.6%	52.50%	4.16
	tal Steam Production Plant		- 0.1 70	3.15%	20.76	-7.7%	45.12%	3.29
	ULIC PRODUCTION							
331.00	Structures and Improvements	3.48		6.74%	2.49		81.80%	7.31
332.00		3.48		10.78%	2.49		70.87%	11.70
333.00		3.48		6.12%	2.49		83.46%	6.64
334.00	•	3.48		6.31%	2.49		82.96%	6.84
335.00		3.48		12.49%	2.49		66.40%	13.49
Tot	tal Hydraulic Production Plant			9.40%	2.49		74.62%	10.19
OTHER	PRODUCTION							
341.00		16.51	-3.5%	3.85%	15.69	-3.4%	41.93%	3.93
342.00	Fuel Holders and Accessories	17.90	-3.6%	2.73%	16.94	-3.6%	56.46%	2.74
343.00	Prime Movers	18.52	-3.1%	2.65%	17.65	-3.0%	54.13%	2.73
344.00	Generators	15.18	-4.3%	4.60%	14.22	-4.3%	38.64%	4.62
345.00	,	15.29	-4.2%	4.38%	14.34	-4.2%	41.26%	4.39
346.00		<u>17.44</u>	-3.2%	3.78%	16.49	-3.2%	40.61%	3.79
	tal Other Production Plant			4.33%	14.57	-4.1%	40.72%	4.36
	MISSION PLANT							
353.00		55.72	-5.0%	1.58%	55.33	-5.0%	18.26%	1.57
354.00		70.63	-10.0%	1.46%	69.84	-10.0%	8.13%	1.46
355.00		58.91	-50.0%	1.80%	59.02	-50.0%	42.90%	1.81
356.00		62.70	-30.0%	1.61%	61.24	-30.0%	32.34%	1.59
	Underground Conductors and Devices tal Transmission Plant	14.97	5.0%	<u>0.68%</u> 1.62%	<u>14.32</u> 60.95	-5.0% -24.1%	95.91% 25.84%	<u>0.63</u>
	BUTION PLANT			1.02 /6	00.95	-24.170	20.0470	1.01
		34.81	5.0%	1 040/	24.62	E 00/	07 700/	1.04
362.00 364.00		48.98	-100.0%	1.94% 2.91%	34.63 48.80	5.0% -100.0%	27.78% 57.85%	1.94 2.91
365.00		43.27	-75.0%	2.23%	43.13	-75.0%	78.50%	2.24
367.00		28.66	-5.0%	2.00%	28.94	-5.0%	46.59%	2.02
368.00	Line Transformers	30.70	30.0%	1.79%	30.71	30.0%	14.89%	1.79
369.00		31.01	-200.0%	5.87%	30.41	-200.0%	120.13%	5.91
369.10		34.03	-20.0%	2.24%	33.62	-20.0%	44.74%	2.24
370.00	9	19.76		3.38%	20.02		31.67%	3.41
370.10		3.00		2.81%	2.70		94.33%	2.10
371.20	Other Private Lighting	24.39		3.22%	24.42		17.21%	3.39
373.00		_15.09	-5.0%	3.52%	15.68	-5.0%	46.43%	3.74
To	tal Distribution Plant			2.35%	31.13	-23.9%	43.55%	2.35

Statement A

OTTER TAIL POWER COMPANY

Comparison of Current and Updated Accrual Rates

Current: VG Procedure / RL Technique Updated: VG Procedure / RL Technique

			Current				lated	
		Rem.	Fut. Net	Accrual	Rem.	Fut. Net	Reserve	Accrua
	Account Description	Life	Salvage	Rate	Life	Salvage	Ratio	Rate
	A	В	С	D	E	F	G	н
	RAL PLANT							
	preciable Structures and Improvements	34.19	5.0%	1.94%	33.73	5.0%	30.28%	1.92%
390.00	•	21.83	47.3%	0.52%	20.89	47.3%	40.93%	0.569
	Fleet Service Center Building	17.09	31.2%	0.52%	16.14	31.2%	56.57%	0.769
390.20		26.47	79.0%	-0.78%	25.55	76.2%	38.27%	-0.579
	Power Operated Equipment	17.09	5.0%	4.04%	18.80	5.0%	19.64%	4.019
	Communication Towers	32.70	-5.0%	1.71%	32.06	-5.0%	50.69%	1.699
	tal Depreciable	32.10	-5.0 /6	1.36%	28.75	21.5%	34.70%	1.38
	nortizable			1.0070	20.70	21.070	01.7070	1.00
391.00		. 15\	rear Amortiz	otion .		← 15 Year A	modization	
391.10			rear Amortiz			← 15 fear A ← 10 Year A		
391.10			rear Amortiz			← 10 Year A ← 10 Year A		
391.50			rear Amortiz				mortization	
391.60			rear Amortiz				mortization	
394.00			rear Amortiz			← 15 Year A		
	Automated Meter Reading Equipment		rear Amortiz			← 15 Year A		
	Communication Equipment		rear Amortiz			← 15 Tear A		
397.10			rear Amortiz			← 10 Year A		
397.20			rear Amortiz			← 15 Year A		
397.30			rear Amortiz			← 10 Year A		
	tal Amortizable		icai Amortiz	10.18%	5.19	- 10 10017	45.07%	10.18
То	tal General Plant			4.55%	11.51	13.7%	38.44%	4.56
	OTAL UTILITY			2.88%	25.42	-14.8%	39.02%	2.939
	PRODUCTION			,			00.0270	
Big Sto								
	Structures and Improvements	27.46	-5.9%	2.86%	26.53	-5.8%	32.17%	2.789
312.00		27.47	-5.9%	3.16%	26.54	-5.8%	18.19%	3.30
312.10		21.41	-0.070	3.1070	20.04	-0.070	10.1370	5.50
314.00		27.44	-5.9%	1.65%	26.51	-5.8%	61.99%	1.659
315.00		27.46	-5.9%	2.59%	26.53	-5.8%	39.16%	2.519
316.00		27.44	-5.9%	2.06%	26.52	-5.8%	43.15%	2.36
	tal Big Stone	21.44	-0.070	2.91%	26.53	-5.8%	27.05%	2.97
	ake Units 2 and 3					0.070	21.0070	
311.00		3.48	-15.5%	3.82%	2.49	-15.6%	104.66%	4.39
312.00		3.48	-15.5%	9.47%	2.49	-15.6%	89.28%	10.57
312.10		32.08		2.25%	31.16		29.92%	2.25
314.00		3.48	-15.5%	5.59%	2.49	-15.6%	99.94%	6.29
	Accessory Electric Equipment	3.48	-15.5%	5.01%	2.49	-15.6%	101.52%	5.65
	Miscellaneous Power Plant Equipment	3.48	15.5%	9.94%	2.49	-15.6%	87.20%	11.41
То	tal Hoot Lake Units 2 and 3			7.09%	4.70	-13.3%	83.98%	7.90
Coyote	2							
311.00	Structures and Improvements	22.75	-9.0%	1.60%	21.81	-9.0%	73.96%	1.61
312.00	Boiler Plant Equipment	22.77	-9.0%	2.14%	21.83	-9.0%	61.83%	2.16
312.10	Boiler Plant Equipment - Landfill							
314.00	Turbogenerator Units	22.78	-9.0%	2.37%	21.84	-9.0%	56.78%	2.39
315.00	Accessory Electric Equipment	22.76	-9.0%	1.72%	21.82	-9.0%	71.10%	1.74
315.00								
316.00	Miscellaneous Power Plant Equipment	22.78	-9.0%	2.80%	21.84	-9.0%	47.24%	2.83

Comparison of Current and Updated Accrual Rates
Current: VG Procedure / RL Technique
Updated: VG Procedure / RL Technique

Statement A

			Current			Up	dated	
		Rem.	Fut. Net	Accrual	Rem.	Fut. Net	Reserve	Accrual
	Account Description	Life	Salvage	Rate	Life	Salvage	Ratio	Rate
	A	В	С	D	E	F	G	Н
HYDRA	AULIC PRODUCTION							
Hoot La								
331.00	Structures and Improvements	3.48		0.30%	2.49		99.19%	0.33%
332.00	Reservoirs, Dams and Waterways	3.48		2.69%	2.49		92.73%	2.92%
333.00	Water Wheels, Turbines & Generators	3.48		1.83%	2.49		95.06%	1.98%
334.00	Accessory Electric Equipment	3.48		2.52%	2.49		93.20%	2.73%
335.00	Miscellaneous Power Plant Equipment	3.48		14.29%	2.49		61.39%	15.51%
To	tal Hoot Lake			3.24%	2.49		91.25%	3.52%
Wright								
331.00		3.48		3.80%	2.49		89.74%	4.12%
332.00		3.48		12.86%	2.49		65.24%	13.96%
333.00	•	3.48		4.76%	2.49		87.13%	5.17%
334.00		3.48		6.94%	2.49		81.26%	7.53%
335.00	Miscellaneous Power Plant Equipment	3.48		10.34%	2.49		72.07%	11.22%
To	tal Wright			9.43%	2.49		74.50%	10.24%
Pisgah								
331.00	•	3.48		3.03%	2.49		91.82%	3.29%
332.00		3.48		9.82%	2.49		73.46%	10.66%
333.00		3.48		8.45%	2.49		77.18%	9.16%
334.00		3.48		7.96%	2.49		78.49%	8.64%
335.00	Miscellaneous Power Plant Equipment	3.48		15.01%	2.49		59.45%	16.29%
	tal Pisgah			9.59%	2.49		74.10%	10.40%
	Hollow							
331.00		3.48		13.28%	2.49		64.14%	14.40%
	Reservoirs, Dams and Waterways	3.48		12.98%	2.49		64.94%	14.08%
	Water Wheels, Turbines & Generators	3.48		8.32%	2.49		77.52%	9.03%
	Accessory Electric Equipment	3.48		5.80%	2.49		84.34%	6.29%
	Miscellaneous Power Plant Equipment	3.48		13.83%	2.49		62.63%	15.01%
	tal Dayton Hollow	0.10		11.70%	2.49		68.39%	12.70%
Taplin				, ,			00.0070	12.1070
_		3.48		1.15%	2.49		06 000/	1.25%
	Structures and Improvements Reservoirs, Dams and Waterways	3.48		7.88%	2.49		96.88% 78.72%	8.55%
	Water Wheels, Turbines & Generators	3.48		1.00%	2.49		97.30%	1.08%
334.00		3.48		5.07%	2.49		86.31%	5.50%
	Miscellaneous Power Plant Equipment	3.48		10.95%	2.49		71.02%	11.64%
	tal Taplin Gorge			7.62%	2.49		79.49%	8.24%
				/0	2.40		, 5.45/0	U.E-T /0
Bemid 331.00	_	0.40		0.000/	0.40		70 400/	40 7704
331.00		3.48		9.93%	2.49		73.19%	10.77%
332.00		3.48		10.58%	2.49		71.42%	11.48%
333.00	• • • • • • • • • • • • • • • • • • • •	3.48		7.35%	2.49		80.14%	7.98%
	Accessory Electric Equipment	3.48		7.32%	2.49		80.22%	7.94%
335.00	Miscellaneous Power Plant Equipment	3.48		9.70%	2.49		66.83% 73.81%	13.32%
10	iai beiliuji			9.70%	2.49		13.01%	10.52%

Statement A

OTTER TAIL POWER COMPANY

Comparison of Current and Updated Accrual Rates
Current: VG Procedure / RL Technique
Updated: VG Procedure / RL Technique

			Current				dated	
		Rem.	Fut. Net	Accrual	Rem.	Fut. Net	Reserve	Accrual
	Account Description	Life	Salvage	Rate	Life	Salvage	Ratio	Rate
	A	В	С	D	E	F	G	н
	ODUCTION							
<u>Jamestowi</u>								
	ructures and Improvements	15.18	-5.9%	1.93%	14.22	-5.9%	76.17%	2.09%
	iel Holders and Accessories	15.19	-5.9%	2.88%	14.23	-5.9%	64.61%	2.90%
	ime Movers	15.18	-5.9%	1.69%	14.22	-5.9%	81.54%	1.719
	enerators							
	ccessory Electric Equipment	15.18	-5.9%	2.57%	14.22	-5.9%	69.00%	2.599
	scellaneous Power Plant Equipment	15.19	-5.9%	3.54%	14.23	-5.9%	55.14%	3.579
	Jamestown			1.81%	14.22	-5.9%	79.80%	1.849
Jamestow								
	ructures and Improvements	15.18	-5.9%	1.83%	14.22	-5.9%	77.40%	2.009
	uel Holders and Accessories	15.19	-5.9%	3.03%	14.23	-5.9%	62.51%	3.059
	ime Movers	15.18	-5.9%	1.96%	14.22	-5.9%	77.75%	1.989
	enerators							
	ccessory Electric Equipment	15.16	-5.9%	1.77%	14.21	-5.9%	80.45%	1.799
	scellaneous Power Plant Equipment	<u> 15.19</u>	5.9%	3.68%	14.23	-5.9%	53.14%	3.719
Total .	Jamestown Unit 1			2.08%	14.22	-5.9%	75.83%	2.119
Jamestow	n Unit 2							
341.00 St	ructures and Improvements	15.19	-5.9%	3.06%	14.23	-5.9%	61.97%	3.09
342.00 Fu	uel Holders and Accessories	15.17	-5.9%	1.36%	14.21	-5.9%	86.28%	1.389
343.00 Pr	rime Movers	15.18	-5.9%	1.49%	14.22	-5.9%	84.47%	1.519
344.00 G	enerators							
345.00 Ad	ccessory Electric Equipment	15.19	-5.9%	4.30%	14.23	-5.9%	44.42%	4.329
346.00 M	iscellaneous Power Plant Equipment	15.17	-5.9%	-0.20%	14.21	-5.9%	108.54%	-0.199
Total .	Jamestown Unit 2			1.55%	14.22	-5.9%	83.65%	1.579
Lake Prest	ton							
341.00 St	tructures and Improvements	15.18	-6.9%	1.54%	14.22	-6.9%	83.84%	1.629
342.00 Fu	uel Holders and Accessories	15.18	-6.9%	1.73%	14.22	-6.9%	82.03%	1.759
343.00 Pr	rime Movers	15.18	-6.9%	1.55%	14.22	-6.9%	84.54%	1.579
344.00 G	enerators							
	ccessory Electric Equipment	15.18	-6.9%	1.62%	14.22	-6.9%	83.57%	1.649
346.00 M	iscellaneous Power Plant Equipment	15.17	-6.9%	0.97%	14.21	-6.9%	92.91%	0.989
Total I	Lake Preston			1.57%	14.22	-6.9%	84.26%	1.599
Ashtabula	Wind Generation							
	tructures and Improvements	15.19	-3.5%	4.44%	14.23	-3.4%	40.16%	4.44
342.00 Fu	uel Holders and Accessories							
343.00 Pr	rime Movers							
344.00 G	enerators	15.19	-3.5%	4.56%	14.23	-3.4%	38.37%	4.57
345.00 A	ccessory Electric Equipment	15.19	-3.5%	4.50%	14.23	-3.4%	39.23%	4.519
	iscellaneous Power Plant Equipment	15.20	-3.5%	5.28%	14.23	-3.4%	28.13%	5.29
	Ashtabula Wind Generation			4.55%	14.23	-3.4%	38.46%	4.56
Langdon V	Nind Generation							
	tructures and Improvements	14.23	-4.0%	4.51%	13.27	-4.0%	43.90%	4.53
	uel Holders and Accessories	. 1.20	-1.070		. 5.27	1.070	.0.0070	1.00
	rime Movers							
344.00 G		14.23	-4.0%	4.63%	13.27	-4.0%	42.21%	4.66
	ccessory Electric Equipment	14.23	-4.0%	4.59%	13.27	-4.0%	42.81%	4.61
	iscellaneous Power Plant Equipment	14.23	-4.0%	5.56%	13.27	-4.0%	29.95%	5.58
	Langdon Wind Generation			4.62%	13.27	-4.0%	42.31%	4.65

Statement A

Comparison of Current and Updated Accrual Rates
Current: VG Procedure / RL Technique
Updated: VG Procedure / RL Technique

			Current			Upo	dated	
		Rem.	Fut. Net	Accrual	Rem.	Fut. Net	Reserve	Accrual
	Account Description	Life	Salvage	Rate	Life	Salvage	Ratio	Rate
	A	В	С	D	E	F	G	н
Luverne	e Wind Generation							
341.00	Structures and Improvements	16.15	-5.9%	4.52%	15.19	-5.9%	37.01%	4.54%
342.00	Fuel Holders and Accessories							
343.00	Prime Movers							
344.00	Generators	16.15	-5.9%	4.62%	15.19	-5.9%	35.33%	4.65%
345.00	Accessory Electric Equipment	16.15	-5.9%	4.52%	15.19	-5.9%	36.98%	4.54%
346.00	Miscellaneous Power Plant Equipment	16.16	-5.9%	5.30%	15.20	-5.9%	25.00%	5.32%
Tot	al Luverne Wind Generation			4.61%	15.19	-5.9%	35.48%	4.64%
Solway	Combustion Turbine							
341.00	Structures and Improvements	19.96	-1.6%	3.03%	19.01	-1.5%	40.17%	3.23%
342.00	Fuel Holders and Accessories	19.96	-1.6%	2.99%	19.01	-1.5%	44.71%	2.99%
343.00	Prime Movers	19.96	-1.6%	3.09%	19.01	-1.5%	40.95%	3.19%
344.00	Generators							
345.00	Accessory Electric Equipment	19.96	-1.6%	3.20%	19.01	-1.5%	40.67%	3.20%
346.00	Miscellaneous Power Plant Equipment	19.96	-1.6%	3.24%	19.01	-1.5%	40.00%	3.24%
Tot	al Solway Combustion Turbine			3.08%	19.01	-1.5%	40.92%	3.19%
Fergus	Falls Control Center							
341.00	Structures and Improvements							
342.00	Fuel Holders and Accessories							
343.00	Prime Movers	12.29	-5.0%	3.47%	11.32	-5.0%	65.20%	3.52%
344.00	Generators							
345.00	Accessory Electric Equipment							
346.00	Miscellaneous Power Plant Equipment							
Tot	tal Fergus Falls Control Center			3.47%	11.32	-5.0%	65.20%	3.52%

Comparison of Current and Updated Accruals Current: VG Procedure / RL Technique Proposed: VG Procedure / RL Technique Statement B

			12/31/18	Minnesota		_										
			Plant	Allocation	_	Current An			_	Updated Ar				Diffe		
	Account Description		Investment	Factor		Total	Mi	nnesota		Total	Mir	nesota		Total	Min	nesota
INITANI	A GIBLE PLANT		В	С		D		E=C*D		F		G=C*F		H=F-D		I=G-E
	Software - 5 Year	\$	8,829,670	0.49145661	\$	1,765,934	\$	867,880	\$	1,765,934	\$	867,880	\$	_	\$	
	Software - 10 Year	Ψ	0,023,070	0.43140001	Ψ	1,700,004	Ψ	007,000	Ψ	1,700,504	Ψ	007,000	Ψ		Ψ	
	tal Intangible Plant	\$	8,873,135		\$	1,765,934	\$	867,880	\$	1,765,934	\$	867,880	\$	-	\$	-
	PRODUCTION					,				.,						
311.00	Structures and Improvements	\$	119,993,612	0.54606695	\$	3,058,231	\$	1,669,999	\$	3,032,710	\$	1,656,063	\$	(25,521)	\$	(13,936)
312.00	Boiler Plant Equipment		340,331,009	0.54606695		12,089,381		6,601,611		12,805,232		6,992,515		715,851		390,904
312.10	Boiler Plant Equipment - Landfill		10,414,056	0.54606695		234,316		127,952		234,316		127,952				
314.00	Turbogenerator Units		65,812,502	0.54606695		1,714,181		936,058		1,799,804		982,813		85,623		46,755
315.00	Accessory Electric Equipment		35,548,098	0.54606695		883,917		482,678		887,321		484,537		3,404		1,859
316.00	Miscellaneous Power Plant Equipment		6,552,744	0.54606695	_	244,721	_	133,634		272,480	_	148,793		27,759		15,159
To	tal Steam Production Plant	\$	578,652,021		\$	18,224,747	\$	9,951,932	\$	19,031,863	\$	10,392,673	\$	807,116	\$	440,741
HYDRA	ULIC PRODUCTION															
331.00	Structures and Improvements	\$	351,712	0.54606695	\$	23,704	\$	12,945	\$	25,713	\$	14,041	\$	2,009	\$	1,096
332.00	Reservoirs, Dams and Waterways		4,277,055	0.54606695		461,239		251,866		500,493		273,302		39,254		21,436
333.00	Water Wheels, Turbines & Generators		1,373,867	0.54606695		84,099		45,922		91,280		49,845		7,181		3,923
334.00	Accessory Electric Equipment		597,103	0.54606695		37,672		20,572		40,869		22,318		3,197		1,746
335.00	Miscellaneous Power Plant Equipment	-	435,295	0.54606695	_	54,355	-	29,682	•	58,755	-	32,083	<u> </u>	4,400	-	2,401
	tal Hydraulic Production Plant	\$	7,035,032		\$	661,069	\$	360,987	\$	717,110	\$	391,589	\$	56,041	\$	30,602
	PRODUCTION									=0.4 = 4.0		00= 004		44.045	•	0.400
341.00	Structures and Improvements	\$	13,335,844	0.54505155	\$	513,495	\$	279,871	\$	524,710	\$	285,994	\$	11,215	\$	6,123
342.00	Fuel Holders and Accessories Prime Movers		1,748,265	0.54605703		47,685		26,038		47,832		26,119 497,074		147 24,871		81
343.00 344.00	Generators		33,356,309 241,850,906	0.54606594 0.54458631		885,411 11,116,426		483,493 6,053,853		910,282 11,167,642		6,081,745		51,216		13,581 27,892
345.00	Accessory Electric Equipment		20,688,763	0.54467490		905,695		493,310		908,922		495,067		3,227		1,757
346.00	Miscellaneous Power Plant Equipment		628,270	0.54555000		23,750		12,956		23,809		12,989		59		33
	al Other Production Plant	\$	311,608,357	0.0400000	\$	13,492,462	\$	7.349.521	\$	13,583,197	\$	7,398,988	\$	90,735	\$	49,467
TRANS	MISSION PLANT		,,							,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
353.00	Station Equipment	\$	125,116,170	0.49889617	\$	1,976,835	\$	986,235	\$	1,964,324	\$	979,994	\$	(12,511)	\$	(6,241)
354.00	Towers and Fixtures	Ψ.	114,207,269	0.49889617	۳	1,667,426	•	831,872	*	1,667,426	*	831,872	*	(.=,0)	*	(0,=)
355.00	Poles and Fixtures		123,728,553	0.49889617		2,227,114		1,111,099		2,239,487		1,117,271		12,373		6,172
356.00	Overhead Conductors and Devices		131,339,013	0.49889617		2,114,558		1,054,945		2,088,290		1,041,840		(26, 268)		(13, 105)
358.00	Underground Conductors and Devices		77,461	0.49889617		527		263		488		243		(39)		(20)
Tot	al Transmission Plant	\$	494,468,466		\$	7,986,460	\$	3,984,414	\$	7,960,015	\$	3,971,220	\$	(26,445)	\$	(13,194)
DISTRI	BUTION PLANT															
362.00	Station Equipment	\$	82,220,295	0.44138068	\$	1,595,074	\$	704,035	\$	1,595,074	\$	704,035	\$		\$	-
364.00	Poles, Towers and Fixtures		75,363,243	0.44138068		2,193,070		967,979		2,193,070		967,979				
365.00	Overhead Conductors and Devices		53,159,263	0.44138068		1,185,452		523,236		1,190,767		525,582		5,315		2,346
367.00	Underground Conductors and Devices		82,606,884	0.44138068		1,652,138		729,222		1,668,659		736,514		16,521		7,292
368.00	Line Transformers		103,417,431	0.44138068		1,851,172		817,072		1,851,172		817,072				

Statement B

OTTER TAIL POWER COMPANY

Comparison of Current and Updated Accruals Current: VG Procedure / RL Technique Proposed: VG Procedure / RL Technique

		40/04/40	Minnest												
		12/31/18 Plant	Minnesota Allocation		Current An	nuel	Accrual		Updated Ar	מומי	l Accrual		Diffe	rence	
Account Description		Investment	Factor	_	Total		nnesota	-	Total		nesota	-	Total		nesota
A		В	C		D		E=C*D		F		G=C*F		H=F-D		I=G-E
369.00 Overhead Services		13,287,178	0.44138068		779,957		344,258		785,272		346,604		5,315		2,346
369.10 Underground Services		43,548,794	0.44138068		975,493		430,564		975,493		430,564		,		,
370.00 Meters		27,166,163	0.44138068		918,216		405,283		926,366		408,880		8,150		3,597
370.10 Load Management Switches		8,907,627	0.44138068		250,304		110,479		187,060		82,565		(63,244)		(27,914)
371.20 Other Private Lighting		5,429,418	0.44138068		174,827		77,165		184,057		81,239		9,230		4,074
373.00 Street Lighting and Signal Systems		5,966,592	0.44138068		210,024		92,701		223,151		98,495		13,127		5,794
Total Distribution Plant	\$	501,072,888		\$	11,785,727	\$	5,201,994	\$	11,780,141	\$	5,199,529	\$	(5,586)	\$	(2,465)
GENERAL PLANT															
Depreciable															
390.00 Structures and Improvements	\$	20,230,767	0.49145661	\$	392,477	\$	192,885	\$	388,431	\$	190,897	\$	(4,046)	\$	(1,988)
390.10 General Office Buildings		6,066,473	0.49145661		31,546		15,503		33,972		16,696		2,426		1,193
390.20 Fleet Service Center Building		937,678	0.49145661		7,408		3,641		7,126		3,502		(282)		(139)
390.30 Central Stores Building		4,250,359	0.49145661		(33,153)		(16,293)		(24,227)		(11,907)		8,926		4,386
396.00 Power Operated Equipment		922,562	0.49145661		37,272		18,318		36,995		18,181		(277)		(137)
397.40 Communication Towers		1,861,238	0.49145661		31,827		15,642		31,455		15,459		(372)		(183)
Total Depreciable	\$	34,269,077		\$	467,377	\$	229,696	\$	473,752	\$	232,828	\$	6,375	\$	3,132
Amortizable															
391.00 Office Furniture	\$	816,310	0.49145661	\$	54,448	\$	26,759	\$	54,448	\$	26,759	\$	-	\$	-
391.10 Office Equipment		408,787	0.49145661		40,879		20,090		40,879		20,090				
391.20 Duplicating Equipment		303,558	0.49145661		30,356		14,919		30,356		14,919				
391.50 Computer Systems		3,516,830	0.49145661		703,366		345,674		703,366		345,674				
391.60 Computer Related Equipment		1,034,533	0.49145661		206,907		101,686		206,907		101,686				
394.00 Tools, Shop and Garage Equipment		4,048,897	0.49145661		270,061		132,723		270,061		132,723				
394.20 Automated Meter Reading Equipment		892,082	0.49145661		59,502		29,243		59,502		29,243				
397.00 Communication Equipment		2,722,368	0.49145661		181,582		89,240		181,582		89,240				
397.10 Radio Telecommunication Equipment		1,032,843	0.49145661		103,284		50,760		103,284		50,760				
397.20 Microwave Equipment		4,150,620	0.49145661		276,846		136,058		276,846		136,058				
397.30 Radio Load Control Equipment		459,343	0.49145661	_	45,934	_	22,575	_	45,934	_	22,575			_	
Total Amortizable	\$	19,386,171		\$	1,973,165	\$	969,727	\$	1,973,165	\$	969,727	\$	-	\$	-
Total General Plant	\$	53,655,248		\$	2,440,542	\$	1,199,423	\$	2,446,917	\$	1,202,555	\$	6,375	\$	3,132
TOTAL UTILITY	\$ 1	,955,321,682		\$	56,356,941	\$	28,916,151	\$	57,285,177	\$	29,424,434	\$	928,236	\$	508,283

Statement B

OTTER TAIL POWER COMPANY

Comparison of Current and Updated Accruals
Current: VG Procedure / RL Technique
Proposed: VG Procedure / RL Technique

		12/31/18	Minnesota		Current A-	m 1	Acerual		I ladatad A		I A semiol		D!#s	ronc	
Account Description		Plant Investment	Allocation	_	Current An			_	Updated A		nesota	_		rence	
Account Description		B	Factor		Total	IVIII	nnesota E=C*D	_	Total	IVIII	G=C*F		Total H=F-D	IVIII	nesota I=G-E
		ь	O		b		E-C D		,		G-0 F		H=F-0		I=G-E
STEAM PRODUCTION															
Big Stone				_											
311.00 Structures and Improvements	\$	79,607,321	0.54606695	\$	2,276,769	\$	1,243,268	\$	2,213,084	\$	1,208,492	\$	(63,685)	\$	(34,776)
312.00 Boiler Plant Equipment		199,342,937	0.54606695		6,299,237		3,439,805		6,578,317		3,592,202		279,080		152,397
B12.10 Boiler Plant Equipment - Landfill Turbogenerator Units		30,176,939	0.54606695		407.040		074 007		407.040		074 007				
315.00 Accessory Electric Equipment		20,858,135	0.54606695		497,919 540,226		271,897 295,000		497,919 523,539		271,897 285,887		(16,687)		(9,113)
316.00 Miscellaneous Power Plant Equipment		3,206,031	0.54606695		66,044		36,064		75,662		41,317		9,618		5,253
Total Big Stone	-\$	333,191,363	0.34000093	\$	9,680,195	\$	5,286,034	\$	9,888,521	\$	5,399,795	\$	208,326	\$	113,761
Hoot Lake Units 2 and 3	Ψ.	000,101,000		Ψ	0,000,100	Ψ	0,200,004	Ψ	0,000,021	Ψ	0,000,700	Ψ	200,020	Ψ	110,101
311.00 Structures and Improvements	\$	6,093,767	0.54606695	\$	232,782	\$	127,115	\$	267,516	\$	146,082	\$	34,734	\$	18,967
312.00 Boiler Plant Equipment	Ψ	37,830,819	0.54606695	Φ	3,582,579	Φ	1,956,328	φ	3,998,718	Ψ	2,183,568	Ψ	416,139	Ψ	227,240
312.10 Boiler Plant Equipment - Landfill		10,414,056	0.54606695		234,316		127,952		234,316		127,952		410,100		221,210
314.00 Turbogenerator Units		11,543,445	0.54606695		645,279		352,366		726,083		396,490		80,804		44,124
315.00 Accessory Electric Equipment		2,766,673	0.54606695		138,610		75,690		156,317		85,360		17,707		9,670
316.00 Miscellaneous Power Plant Equipment	_	1,190,054	0.54606695	_	118,291	_	64,595	_	135,785	_	74,148	_	17,494	_	9,553
Total Hoot Lake Units 2 and 3	\$	69,838,814		\$	4,951,857	\$	2,704,046	\$	5,518,735	\$	3,013,600	\$	566,878	\$	309,554
Coyote															
311.00 Structures and Improvements	\$	34,292,524	0.54606695	\$	548,680	\$	299,616	\$	552,110	\$	301,489	\$	3,430	\$	1,873
312.00 Boiler Plant Equipment		103,157,253	0.54606695		2,207,565		1,205,478		2,228,197		1,216,745		20,632		11,267
312.10 Boiler Plant Equipment - Landfill			0.54606695												
314.00 Turbogenerator Units		24,092,118	0.54606695		570,983		311,795		575,802		314,426		4,819		2,631
15.00 Accessory Electric Equipment		11,923,290	0.54606695		205,081		111,988		207,465		113,290		2,384		1,302
16.00 Miscellaneous Power Plant Equipment Total Coyote	\$	2,156,659 175,621,844	0.54606695	\$	60,386 3,592,695	\$	32,975 1,961,852	\$	61,033 3,624,607	\$	33,328 1,979,278	\$	647 31,912	\$	353 17,426
	Φ	175,621,644		Ф	3,592,695	Ф	1,961,652	Φ	3,624,607	Ф	1,979,276	Ф	31,912	Ф	17,420
YDRAULIC PRODUCTION															
loot Lake	•	00.054	0.54000005	•	000	•		•	000	•	105	•	04	•	
31.00 Structures and Improvements	\$	69,354		\$	208	\$	114	\$	229	\$	125	\$	21	\$	11
32.00 Reservoirs, Dams and Waterways 33.00 Water Wheels, Turbines & Generators		297,674 104,195	0.54606695 0.54606695		8,007 1.907		4,372 1.041		8,692 2,063		4,746 1,127		685 156		374 86
33.00 Water Wheels, Turbines & Generators 34.00 Accessory Electric Equipment		34,651	0.54606695		873		477		2,063 946		517		73		40
35.00 Miscellaneous Power Plant Equipment		48,801	0.54606695		6,974		3,808		7,569		4,133		595		325
Total Hoot Lake	\$	554,675	0.04000090	\$	17,969	\$	9,812	\$	19,499	\$	10,648	\$	1,530	\$	836
Vright	*	00 1,0.0		*	11,000	Ψ	0,012	*	10,100	*	. 0,0 10	*	1,000	*	000
31.00 Structures and Improvements	\$	19,026	0.54606695	\$	723	\$	395	\$	784	\$	428	\$	61	\$	22
32.00 Reservoirs, Dams and Waterways	Φ	892,711	0.54606695	Φ	114,803	Φ	62,690	Φ	124.622	Φ	68,052	Φ	9,819	Φ	5,362
33.00 Water Wheels, Turbines & Generators		545,392	0.54606695		25,961		14,176		28,197		15,397		2,236		1,221
34.00 Accessory Electric Equipment		202,552	0.54606695		14,057		7,676		15,252		8,329		1,195		653
		115,218	0.54606695		11,914		6,506		12,927		7,059				553
35.00 Miscellaneous Power Plant Equipment			() 54h()hhy5		11 914		n nun		17 977		/ ():54		1,013		

Comparison of Current and Updated Accruals
Current: VG Procedure / RL Technique
Proposed: VG Procedure / RL Technique

Statement B

		12/31/18	Minnesota		0				Hardaka d A		Accord		D'''-		
A		Plant	Allocation	_	Current An			_	Updated Ar			_		rence	
Account Description		nvestment	Factor		Total	Mini	nesota		Total	Minr	nesota		Total	Minn	nesota
A		В	С		D		E=C*D		F		G=C*F		H=F-D		I=G-E
<u>Pisgah</u>															
331.00 Structures and Improvements	\$	12,118	0.54606695	\$	367	\$	200	\$	399	\$	218	\$	32	\$	18
332.00 Reservoirs, Dams and Waterways		376,297	0.54606695		36,952		20,178		40,113		21,904		3,161		1,726
333.00 Water Wheels, Turbines & Generators		159,732	0.54606695		13,497		7,370		14,631		7,990		1,134		620
334.00 Accessory Electric Equipment		102,487	0.54606695		8,158		4,455		8,855		4,835		697		380
335.00 Miscellaneous Power Plant Equipment		62,744	0.54606695		9,418		5,143		10,221		5,581		803		438
Total Pisgah	\$	713,378		\$	68,392	\$	37,346	\$	74,219	\$	40,528	\$	5,827	\$	3,182
Dayton Hollow															
331.00 Structures and Improvements	\$	16,269	0.54606695	\$	2,161	\$	1,180	\$	2,343	\$	1,279	\$	182	\$	99
332.00 Reservoirs, Dams and Waterways		1,291,391	0.54606695		167,623		91,533		181,828		99,290		14,205		7,757
333.00 Water Wheels, Turbines & Generators		226,751	0.54606695		18,866		10,302		20,476		11,181		1,610		879
334.00 Accessory Electric Equipment		193,342	0.54606695		11,214		6,124		12,161		6,641		947		517
335.00 Miscellaneous Power Plant Equipment		111,159	0.54606695		15,373		8,395		16,685		9,111		1,312		716
Total Dayton Hollow	\$	1,838,912		\$	215,237	\$	117,534	\$	233,493	\$	127,502	\$	18,256	\$	9,968
Taplin Gorge															
331.00 Structures and Improvements	\$	35.140	0.54606695	\$	404	\$	221	\$	439	\$	240	\$	35	\$	19
332.00 Reservoirs, Dams and Waterways	Ψ	602,762	0.54606695	Ψ	47,498	Ψ	25,937	Ψ	51.536	Ψ	28,142	Ψ	4.038	Ψ	2,205
333.00 Water Wheels, Turbines & Generators		15,110	0.54606695		151		82		163		89		12		7
334.00 Accessory Electric Equipment		58,695	0.54606695		2,976		1.625		3,228		1,763		252		138
335.00 Miscellaneous Power Plant Equipment		96,303	0.54606695		10,545		5,758		11,210		6,121		665		363
Total Taplin Gorge	\$	808,010	0.04000030	\$	61,574	\$	33,623	\$	66,576	\$	36,355	\$	5,002	\$	2,732
	Ψ	000,010		•	01,014	Ψ	00,020	•	00,010	*	00,000	*	0,002	*	2,.02
Bemidji	\$	400.005	0.54000005	•	40.044	•	40.005	•	04.540	\$	11.751	\$	1.678	\$	916
331.00 Structures and Improvements	Ф	199,805	0.54606695 0.54606695	\$	19,841	\$	10,835	\$	21,519	Ф	51,168	Ф	7,346	Ф	4,012
332.00 Reservoirs, Dams and Waterways		816,220			86,356		47,156		93,702				. ,		
333.00 Water Wheels, Turbines & Generators		322,687	0.54606695		23,717		12,951		25,750		14,061 233		2,033 33		1,110
334.00 Accessory Electric Equipment		5,376	0.54606695		394		215		427		233 78				18 6
335.00 Miscellaneous Power Plant Equipment Total Bemidji	\$	1,070	0.54606695	\$	131 130,439	\$	71,229	\$	143 141,541	\$	77,291	\$	11,102	\$	6,062
	Ф	1,345,156		Φ	130,439	Φ	11,229	Φ	141,541	Φ	11,291	Φ	11,102	Φ	0,002
OTHER PRODUCTION															
<u>Jamestown</u>												_		_	
341.00 Structures and Improvements	\$	311,512	0.54606695	\$	6,007	\$	3,281	\$	6,501	\$	3,550	\$	494	\$	269
342.00 Fuel Holders and Accessories		415,964	0.54606695		11,990		6,547		12,072		6,592		82		45
343.00 Prime Movers		6,952,527	0.54606695		117,838		64,347		119,228		65,106		1,390		759
344.00 Generators															
345.00 Accessory Electric Equipment		227,590	0.54606695		5,858		3,199		5,903		3,224		45		25
346.00 Miscellaneous Power Plant Equipment		88,665	0.54606695	_	3,139	_	1,714	_	3,165	_	1,729	_	26	_	15
Total Jamestown	\$	7,996,258		\$	144,832	\$	79,088	\$	146,869	\$	80,201	\$	2,037	\$	1,113

Comparison of Current and Updated Accruals Current: VG Procedure / RL Technique Proposed: VG Procedure / RL Technique Statement B

			12/31/18	Minnesota										D.111		
	A Bd-tl		Plant	Allocation	_	Current An			_	Updated Ar					rence	
	Account Description		Investment	Factor		Total	Mi	nnesota		Total	Mir	nesota		Total	Min	nesota
	A		В	С		D		E=C*D		F		G=C*F		H=F-D		I=G-E
	own Unit 1 Structures and Improvements	•	000.050	0.54000005	•	5.040	•	0.005	•	F 700	•	0.404	•	407	•	00
42.00	Fuel Holders and Accessories	\$	286,659	0.54606695	\$	5,246	\$	2,865	\$	5,733	\$	3,131	\$	487	\$	26
	Prime Movers		379,195	0.54606695		11,490		6,274		11,565		6,315		75		4
44.00	Generators		3,030,866	0.54606695		59,405		32,439		60,011		32,770		606		33
	Accessory Electric Equipment		155,272	0.54606695		2,748		1 501		2 770		1 510		31		1
	Miscellaneous Power Plant Equipment		85,462	0.54606695		3,145		1,501 1,717		2,779 3,171		1,518 1,732		26		1
	al Jamestown Unit 1	\$	3,937,454	0.54606695	-\$	82,034	\$	44,796	\$	83,259	\$	45,466	\$	1,225	\$	67
		Φ	3,337,404		Φ	02,034	Φ	44,790	Φ	63,239	Φ	45,400	Φ	1,225	Φ	07
	own Unit 2															
	Structures and Improvements	\$	24,853	0.54606695	\$	761	\$	416	\$	768	\$	419	\$	7	\$	
42.00	Fuel Holders and Accessories		36,769	0.54606695		500		273		507		277		7		
43.00	Prime Movers		3,921,661	0.54606695		58,433		31,908		59,217		32,336		784		42
	Generators															
	Accessory Electric Equipment		72,318	0.54606695		3,110		1,698		3,124		1,706		14		
	Miscellaneous Power Plant Equipment	_	3,203	0.54606695	_	(6)	_	(3)	_	(6)		(3)				
Tota	al Jamestown Unit 2	\$	4,058,804		\$	62,798	\$	34,292	\$	63,610	\$	34,735	\$	812	\$	44
ake Pro	eston															
41.00	Structures and Improvements	\$	233,982	0.54606695	\$	3,603	\$	1,967	\$	3,791	\$	2,070	\$	188	\$	10
42.00	Fuel Holders and Accessories		328,705	0.54606695		5,687		3,105		5,752		3,141		65		3
43.00	Prime Movers		3,282,642	0.54606695		50,881		27,784		51,537		28,143		656		35
44.00	Generators															
45.00	Accessory Electric Equipment		400,094	0.54606695		6,482		3,540		6,562		3,583		80		4
	Miscellaneous Power Plant Equipment		21,607	0.54606695		210		115		212		116	7,000	2		
Tota	al Lake Preston	\$	4,267,030		\$	66,863	\$	36,511	\$	67,854	\$	37,053	\$	991	\$	54
shtabu	la Wind Generation															
41.00	Structures and Improvements	\$	3,248,290	0.54458631	\$	144,224	\$	78,542	\$	144,224	\$	78,542	\$	-	\$	
	Fuel Holders and Accessories		,,			,	•	,.	•	,	-	,				
43.00	Prime Movers															
44.00	Generators		106,694,618	0.54458631		4,865,275		2,649,562		4,875,944		2,655,372		10,669		5,81
45.00	Accessory Electric Equipment		6,479,774	0.54458631		291,590		158,796		292,238		159,149		648		35
	Miscellaneous Power Plant Equipment		28,417	0.54458631		1,500		817		1,503		819		3		
Tota	Ashtabula Wind Generation	\$	116,451,099		\$	5,302,589	\$	2,887,717	\$	5,313,909	\$	2,893,882	\$	11,320	\$	6,16
anadoi	Wind Generation															
	Structures and Improvements	\$	2,484,069	0.54458631	\$	112,032	\$	61.011	\$	112,528	\$	61,281	\$	496	\$	27
	Fuel Holders and Accessories	Ψ	2,404,000	0.04400001	Ψ	112,002	Ψ	01,011	Ψ	112,020	Ψ	01,201	Ψ	430	Ψ	21
	Prime Movers															
	Generators		69,305,149	0.54458631		3,208,828		1,747,484		3,229,620		1,758,807		20,792		11,32
	Accessory Electric Equipment		7,407,275	0.54458631		339,994		185,156		341,475		185,963		1,481		80
10.00	Miscellaneous Power Plant Equipment		65,210	0.54458631		3,626		1,975		3,639		1.982		13		00
46.00	MISCELLANEOUS POWER Plant Follinment															

Statement B

OTTER TAIL POWER COMPANY

Comparison of Current and Updated Accruals Current: VG Procedure / RL Technique Proposed: VG Procedure / RL Technique

		12/31/18	Minnesota												
		Plant	Allocation	_	Current An			_	Updated Ar					rence	
Account Description		Investment	Factor		Total	Min	nesota		Total	Min	inesota		Total	Minr	nesota
A		В	С		D		E=C*D		F		G=C*F		H=F-D		I=G-E
Luverne Wind Generation															
341.00 Structures and Improvements	\$	2,266,581	0.54458631	\$	102,449	\$	55,792	\$	102,903	\$	56,040	\$	454	\$	248
342.00 Fuel Holders and Accessories															
343.00 Prime Movers															
344.00 Generators		65,851,139	0.54458631		3,042,323		1,656,807		3,062,078		1,667,566		19,755		10,759
345.00 Accessory Electric Equipment		4,863,837	0.54458631		219,845		119,725		220,818		120,254		973		529
346.00 Miscellaneous Power Plant Equipment		74,045	0.54458631		3,924		2,137		3,939		2,145		15		8
Total Luverne Wind Generation	\$	73,055,602		\$	3,368,541	\$	1,834,461	\$	3,389,738	\$	1,846,005	\$	21,197	\$	11,544
Solway Combustion Turbine															
341.00 Structures and Improvements	\$	4,791,410	0.54606695	\$	145,180	\$	79,278	\$	154,763	\$	84,511	\$	9,583	\$	5,233
342.00 Fuel Holders and Accessories		1,003,596	0.54606695		30,008		16,386		30,008		16,386				
343.00 Prime Movers		22,529,502	0.54606695		696,162		380,151		718,691		392,453		22,529		12,302
344.00 Generators		,					,		, , , , , , , , , , , , , , , , , , , ,						
345.00 Accessory Electric Equipment		1,310,193	0.54606695		41,926		22,894		41,926		22,894				
346.00 Miscellaneous Power Plant Equipment		350,326	0.54606695		11,351		6.198		11,351		6,198				
Total Solway Combustion Turbine	\$	29,985,027		\$	924,627	\$	504,907	\$	956,739	\$	522,442	\$	32,112	\$	17,535
Fergus Falls Control Center															
341.00 Structures and Improvements	\$	_		\$	_	\$	-	\$	_	\$	_	\$	-	\$	
342.00 Fuel Holders and Accessories	•			*		*		*		*		•		*	
343.00 Prime Movers		591,638	0.54606695		20,530		11,211		20,826		11,372		296		161
344.00 Generators		001,000	010 100000		_0,000		,		_0,0_0		,				
345.00 Accessory Electric Equipment															
346.00 Miscellaneous Power Plant Equipment															
Total Fergus Falls Control Center	\$	591,638		\$	20,530	\$	11,211	\$	20,826	\$	11,372	\$	296	\$	161

Depreciation Reserve Summary Vintage Group Procedure December 31, 2018

Statement	C

Account Description		Plant Investment			Recorded Reserve			Computed Reserve			Reserve Imbalance		
				Œ	Amount	Ratio	Amount		Ratio	Amount		Multiple	
v stote	Α.		В		C	D=C/B		E	F=E/B		G=C-E	H=G/C	
INTANGIB	LE PLANT												
303.91 S	oftware - 5 Year	\$	8,829,670	\$	3,233,725	36.62%	\$	3,668,372	41.55%	\$	(434,647)	-13.449	
303.92 Se	oftware - 10 Year							2 . 2	- 1.				
Total	Intangible Plant	\$	8,829,670	\$	3,233,725	36.62%	\$	3,668,372	41.55%	\$	(434,647)	-13.449	
STEAM PR	RODUCTION												
311.00 St	tructures and Improvements	\$	119,993,612	\$	57,346,416	47.79%	\$	47,501,797	39.59%	\$	9,844,619	17.179	
312.00 B	oiler Plant Equipment		340,331,009		133,820,852	39.32%		127,729,539	37.53%		6,091,313	4.55%	
312.10 Bo	oiler Plant Equipment - Landfill		10,414,056		3,115,895	29.92%		1,377,521	13.23%		1,738,374	55.79%	
314.00 Tu	urbogenerator Units		65,812,502		43,923,036	66.74%		37,201,515	56.53%		6,721,522	15.30%	
315.00 Ad	ccessory Electric Equipment		35,548,098		19,452,762	54.72%		16,099,967	45.29%		3,352,795	17.249	
316.00 M	iscellaneous Power Plant Equipment		6,552,744		3,439,968	52.50%		3,266,380	49.85%		173,588	5.05%	
Total :	Steam Production Plant	\$	578,652,021	\$	261,098,930	45.12%	\$	233,176,718	40.30%	\$	27,922,212	10.69%	
HYDRAUL	IC PRODUCTION												
	ructures and Improvements	S	351,712	\$	287,707	81.80%	S	303,784	86.37%	\$	(16,077)	-5.59%	
	eservoirs, Dams and Waterways	-	4,277,055		3.030,991	70.87%	- 6	3,428,639	80.16%	10	(397,648)	-13.129	
	ater Wheels, Turbines & Generators		1,373,867		1,146,637	83.46%		1,097,827	79.91%		48,810	4.26%	
Andrew Co.	ccessory Electric Equipment		597,103		495,373	82.96%		519,464	87.00%		(24,091)	-4.86%	
E-0-110-1	iscellaneous Power Plant Equipment		435,295		289.032	66.40%		329.083	75.60%		(40,051)	-13.86%	
	Hydraulic Production Plant	\$	7,035,032	S	5,249,740	74.62%	\$	5,678,797	80.72%	\$	(429,057)	-8.17%	
OTHER PR	RODUCTION		300										
A 115 A 11 A 11	ructures and Improvements	S	13,335,844	S	5,592,031	41.93%	\$	5,744,001	43.07%	S	(151,970)	-2.72%	
	uel Holders and Accessories		1,748,265		987,110	56.46%		883,792	50.55%		103,318	10.47%	
700000 F	rime Movers		33,356,309		18,054,729	54.13%		16,806,777	50.39%		1,247,951	6.91%	
	enerators		241,850,906		93,454,882	38.64%		103,219,046	42.68%		(9,764,164)	-10.45%	
345.00 Ad	ccessory Electric Equipment		20,688,763		8,536,021	41.26%		9,068,939	43.84%		(532,918)	-6.24%	
	iscellaneous Power Plant Equipment		628,270		255,117	40.61%		246,097	39.17%		9.020	3.54%	
	Other Production Plant	\$	311,608,357	\$	126,879,889	40.72%	\$	135,968,652	43.63%	\$	(9,088,763)	-7.16%	
TRANSMIS	SSION PLANT												
	ation Equipment	\$	125,116,170	S	22,843,629	18.26%	\$	23,364,599	18.67%	S	(520,971)	-2.28%	
	owers and Fixtures		114,207,269	-20	9,288,599	8.13%		8,643,206	7.57%	-	645,393	6.95%	
	oles and Fixtures		123,728,553		53,076,626	42.90%		44,336,279	35.83%		8,740,347	16.47%	
	verhead Conductors and Devices		131,339,013		42,473,644	32.34%		34,867,151	26.55%		7,606,493	17.91%	
	nderground Conductors and Devices		77,461		74,294	95.91%		57,849	74.68%		16,445	22.13%	
	Transmission Plant	S	494,468,466	S	127,756,791	25.84%	S	111,269,084	22.50%	\$	16,487,707	12.91%	

Depreciation Reserve Summary Vintage Group Procedure December 31, 2018 Statement C

		Plant			Recorded Reserve			Computed Reserve			Reserve Imbalance		
	Account Description		Investment		Amount	Ratio		Amount	Ratio		Amount	Multiple	
	A		В		С	D=C/B		E	F=E/B		G=C-E	H=G/C	
DISTRI	BUTION PLANT												
362.00	Station Equipment	\$	82,220,295	\$	22,842,035	27.78%	\$	17,063,198	20.75%	\$	5,778,836	25.30%	
364.00	Poles, Towers and Fixtures		75,363,243		43,596,276	57.85%		45,491,134	60.36%		(1,894,858)	-4.35%	
365.00	Overhead Conductors and Devices		53,159,263		41,729,648	78.50%		31,579,113	59.40%		10,150,536	24.329	
367.00	Underground Conductors and Devices		82,606,884		38,484,131	46.59%		30,888,051	37.39%		7,596,080	19.74%	
368.00	Line Transformers		103,417,431		15,397,573	14.89%		21,133,857	20.44%		(5,736,284)	-37.25%	
369.00	Overhead Services		13,287,178		15,962,406	120.13%		17,663,638	132.94%		(1,701,232)	-10.66%	
369.10	Underground Services		43,548,794		19,484,769	44.74%		17,080,166	39.22%		2,404,603	12.349	
370.00	Meters		27,166,163		8,604,397	31.67%		8,540,084	31.44%		64,313	0.75%	
370.10	Load Management Switches		8,907,627		8,402,612	94.33%		7,340,813	82.41%		1,061,799	12.649	
371.20	Other Private Lighting		5,429,418		934,136	17.21%		433,037	7.98%		501,099	53.64%	
373.00	Street Lighting and Signal Systems	_	5,966,592		2,770,167	46.43%		1,975,553	33.11%	_	794,613	28.68%	
То	tal Distribution Plant	\$	501,072,888	\$	218,208,150	43.55%	\$	199,188,644	39.75%	\$	19,019,506	8.729	
GENEF	RAL PLANT												
De	preciable												
390.00	Structures and Improvements	\$	20,230,767	\$	6,124,929	30.28%	\$	7,003,634	34.62%	\$	(878,705)	-14.35%	
390.10	General Office Buildings		6,066,473		2,482,843	40.93%		1,208,396	19.92%		1,274,448	51.33%	
390.20	Fleet Service Center Building		937,678		530,429	56.57%		352,724	37.62%		177,705	33.50%	
390.30	Central Stores Building		4,250,359		1,626,817	38.27%		505,431	11.89%		1,121,386	68.93%	
396.00	Power Operated Equipment		922,562		181,181	19.64%		238,082	25.81%		(56,902)	-31.419	
397.40			1,861,238		943,462	50.69%		725,320	38.97%		218,142	23.129	
To	tal Depreciable	\$	34,269,077	\$	11,889,661	34.70%	\$	10,033,587	29.28%	\$	1,856,074	15.619	
An	nortizable												
391.00	Office Furniture	\$	816,310	\$	485,290	59.45%	\$	494,149	60.53%	\$	(8,859)	-1.83%	
391.10	Office Equipment		408,787		234,493	57.36%		242,749	59.38%		(8,256)	-3.52%	
391.20	Duplicating Equipment		303,558		157,552	51.90%		164,012	54.03%		(6,460)	-4.109	
391.50	Computer Systems		3,516,830		1,063,171	30.23%		1,362,815	38.75%		(299,644)	-28.189	
391.60	Computer Related Equipment		1,034,533		673,792	65.13%		741,492	71.67%		(67,700)	-10.059	
394.00	Tools, Shop and Garage Equipment		4,048,897		1,985,926	49.05%		2,010,070	49.64%		(24,144)	-1.229	
394.20	Automated Meter Reading Equipment		892,082		467,986	52.46%		468,567	52.53%		(581)	-0.129	
397.00	Communication Equipment		2,722,368		589,401	21.65%		671,963	24.68%		(82,562)	-14.019	
397.10	Radio Telecommunication Equipment		1,032,843		766,166	74.18%		789,993	76.49%		(23,827)	-3.119	
397.20	Microwave Equipment		4,150,620		2,071,836	49.92%		2,130,995	51.34%		(59,159)	-2.86%	
397.30		-	459,343	_	242,184	52.72%	_	274,172	59.69%	_	(31,988)	-13.219	
Tot	al Amortizable	\$	19,386,171	\$	8,737,797	45.07%	\$	9,350,977	48.24%	\$	(613,180)	-7.02%	
To	tal General Plant	\$	53,655,248	\$	20,627,458	38.44%	\$	19,384,564	36.13%	\$	1,242,894	6.03%	
	TAL UTILITY		1,955,321,682	\$	763,054,683	39.02%	\$	708,334,831	36.23%	\$	54,719,852	7.17%	

Depreciation Reserve Summary Vintage Group Procedure December 31, 2018 Statement C

		Plant		Recorded Reserve			Computed Re	eserve	Reserve Imbalance		
Account Description	Investment		-	Amount	Ratio	Amount		Ratio		Amount	Multiple
A		В		c	D=C/B		E	F=E/B	G=C-E		H=G/C
STEAM PRODUCTION											
Blg Stone											
311.00 Structures and Improvements	\$	79,607,321	\$	25,606,487	32.17%	\$	19,601,917	24.62%	\$	6.004,570	23.45%
312.00 Boiler Plant Equipment		199,342,937		36,261,758	18.19%	-	37,005,813	18.56%	-	(744,055)	-2.05%
312.10 Boiler Plant Equipment - Landfill		.,55/5/5/5/		00,201,700	10.1070		0.,000,010	79.80.10		11.1110001	8.00
314.00 Turbogenerator Units		30,176,939		18,707,887	61.99%		12,803,919	42.43%		5,903,968	31.56%
315.00 Accessory Electric Equipment		20,858,135		8,167,181	39.16%		6,094,136	29.22%		2,073,045	25.38%
316.00 Miscellaneous Power Plant Equipment		3,206,031		1,383,483	43.15%		1.166.854	36.40%		216.629	15.66%
Total Big Stone	S	333,191,363	S	90,126,797	27.05%	S	76,672,639	23.01%	\$	13,454,158	14.93%
		555,151,005	4	00,120,701	27.0070		10,012,000	20.0170	Ψ	10,404,100	14.507
Hoot Lake Units 2 and 3		0.000.707		0.077.000	404 0004		******	407 400		7207 2441	0.000
311.00 Structures and Improvements 312.00 Boiler Plant Equipment	2	6,093,767	5	6,377,603	104.66%	\$	6,544,714	107.40%	\$	(167,111)	-2.62%
312.10 Boiler Plant Equipment - Landfill		37,830,819		33,775,195	89.28%		35,960,705	95.06%		(2,185,510)	-6.47% 55.79%
314.00 Turbogenerator Units		10,414,056		3,115,895	29.92% 99.94%		1,377,521	13.23% 103.58%		1,738,374	-3.65%
315.00 Accessory Electric Equipment		11,543,445 2,766,673		11,536,138 2,808,599	101.52%		11,956,956 2,894,026	103.58%		(420,819) (85,428)	-3.05%
316.00 Miscellaneous Power Plant Equipment		1,190,054		1.037,746	87.20%		1.129.561	94.92%		(91,815)	-8.85%
Total Hoot Lake Units 2 and 3	\$	69,838,814	S	58,651,175	83.98%	\$	59,863,484	85.72%	\$	(1,212,308)	-2.07%
Coyote	-		-	20162 (17)	00,00,0	7	55,550,151	44.44		1.12.210.07	
311.00 Structures and Improvements	\$	24 202 524	S	05 000 005	73.96%		04 055 400	00.070/		4.007.400	15.80%
312.00 Boiler Plant Equipment	2	34,292,524	9	25,362,325		\$	21,355,166	62.27%	\$	4,007,160	
		103,157,253		63,783,899	61.83%		54,763,020	53.09%		9,020,878	14.14%
312.10 Boiler Plant Equipment - Landfill 314.00 Turbogenerator Units		04 000 440		40.070.044	FO 700/		40 440 000	54 646/		4 000 070	0.050
		24,092,118		13,679,011	56.78%		12,440,639	51.64%		1,238,372	9.05%
The state of the s		11,923,290		8,476,983	71.10%		7,111,805	59.65%		1,365,178	16.10%
316.00 Miscellaneous Power Plant Equipment Total Coyote		2,156,659	-	1,018,739	47.24%		969,965	44.98%	0	48,774	4.79%
	\$	175,621,844	Э	112,320,957	63.96%	\$	96,640,595	55.03%	\$	15,680,362	13.96%
HYDRAULIC PRODUCTION											
Hoot Lake					255.0						
331.00 Structures and Improvements	\$	69,354	\$	68,790	99.19%	\$	66,550	95.96%	\$	2,240	3.26%
332.00 Reservoirs, Dams and Waterways		297,674		276,035	92.73%		272,984	91.71%		3,052	1.11%
333.00 Water Wheels, Turbines & Generators		104,195		99,048	95.06%		97,052	93.14%		1,996	2.02%
334.00 Accessory Electric Equipment		34,651		32,295	93.20%		31,857	91.94%		438	1,36%
335.00 Miscellaneous Power Plant Equipment	-	48,801		29,960	61.39%		35,224	72.18%		(5,264)	-17.57%
Total Hoot Lake	\$	554,675	\$	506,128	91.25%	\$	503,666	90.80%	S	2,462	0.49%