MINNESOTA
PUBLIC UTILITIES COMMISSION

Staff Briefing Papers

Meeting Date	June 6, 2019		Agenda Item 10**
Company	Otter Tail Power Company		
Docket No.	**E-017/D-18-568**		
	In the Matter of Otter Tail Power Company's Petition for Approval of its 2018 Five-Year Review of Depreciation Certification		
Issues	1. Should the Commission approve the proposed depreciation parameters and the resulting rates for Otter Tail Power Company's five-year depreciation study? 2. Should the Commission grant Otter Tail Power's request to include its Software Amortization account and amortization period in its annual depreciation certification filings? If so, over what length of time should the software be amortized?		
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✓ **Relevant Documents**	**Date**
OTP – Initial Filing	August 31, 2018
OTP – Correction to Initial Filing	November 28, 2018
OAG – Comments (TS)	December 31, 2018

The attached materials are work papers of the Commission Staff. They are intended for use by the Public Utilities Commission and are based upon information already in the record unless noted otherwise.

Relevant Documents	**Date**
Department – Comments	January 29, 2019
OTP – Reply Comments	February 20, 2019
Department – Response to Reply Comments	March 27, 2019
OTP – Reply Comments	April 10, 2019
OAG – Reply Comments	April 10, 2019
OTP – Response to Reply Comments	April 29, 2019

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I. Statement of the Issues

Should the Commission approve the proposed depreciation parameters and the resulting rates for Otter Tail Power Company's five-year depreciation study?

Should the Commission grant Otter Tail Power's request to include its Software Amortization account and amortization period in its annual depreciation certification filings? If so, over what length of time should the software be amortized?

II. Introduction

Public utilities in Minnesota are required to acquire Commission approval for their depreciation practices pursuant to Minn. Stat. §216B.11 and Minn. Rules, parts 7825.0500-7825.0900. Utilities must also file depreciation studies at least every five years and must use straight-line depreciation unless they can justify a different method.

Because Otter Tail Power uses the remaining life method for depreciating group property accounts, the underlying life and salvage factors may not change, but depreciation rates are adjusted annually to reflect the passage of time on remaining lives, as well as the impact of plant additions and retirements. Annual depreciation study updates are required when the remaining-life method is used to allow the Commission the opportunity to approve changes in depreciation rates.

The Commission approved Otter Tail's 2018 annual remaining lives depreciation study in its January 11, 2018 Order in Docket No. E-017/D-17-652. In this docket, Otter Tail is asking the Commission to approve its 2018 five-year comprehensive depreciation study.

III. Background

A. Otter Tail Power – Initial Petition

On August 31, 2018, Otter Tail Power Company (OTP or Otter Tail) filed its 2018 Five-Year Petition for Depreciation Certification. Otter Tail has not proposed any changes to the depreciation parameters currently in effect. Its proposal is to adjust depreciation rates to reflect one year's passage of time, resulting in an increase of $643,904, or 1.21 percent, to annual depreciation expense. Otter Tail is requesting an effective date of January 1, 2019.

In this filing, Otter Tail is requesting permission to include two software amortization expense accounts and is requesting 5 and 10-year amortization periods for use in its amortization postings for 2019. If approved, Otter Tail proposed to include these two intangible software amortization accounts in its 2019 annual technical update depreciation filing. As of now the accounts have been outside the scope of OTP's depreciation studies because they are equated with amortization expense and were not included in its depreciation certification filings.

On November 28, 2018, Otter Tail submitted a correction to its original filing, replacing page 6 of Attachment 1 with a corrected version.

B. Office of the Attorney General - Comments

On December 31, 2018, the Minnesota Office of the Attorney General, Residential Utilities and antitrust division (OAG) submitted comments. The OAG recommended the Commission order the Company to:

- Take appropriate steps[1] to ensure that ratepayers are only paying for customer information systems that are used and useful;
- Use a 15-year amortization period for its new CISone software;
- Not use group accounting to amortize its new CISone software; and
- Discontinue the practice of group accounting for office buildings and production plants.

C. Department of Commerce - Comments

On January 29, 2019, the Minnesota Department of Commerce, Division of Energy Resources (Department) filed its analysis. The Department recommended the Commission approve OTP's proposed remaining lives and salvage rates for the Company's production, transmission, distribution and general plant accounts. The Department believes that Otter Tail's effective date of January 1, 2019 is reasonable.

The Department disagreed with OTP's request to use a 10-year amortization period for its new CISone software and instead recommended a 15 year amortization period.

The Department also believes Otter Tail did not justify its continued use of group depreciation for large assets like office buildings. The Department requested that OTP provide additional information about its group accounting procedures and assurance that if a large asset was to be removed from rate base that the Company's method of depreciation would allow it to do so.

D. Otter Tail Power – Reply Comments

On February 20, 2019, OTP filed reply comments and disagreed with the OAG's recommendation to reduce rate base in a future rate case for its legacy software because the software is fully amortized.

Otter Tail disagreed with the Department and the OAG's recommendation to use a 15-year amortization period for its new CISone software. The Company argued that the 10-year amortization period is reasonable and supported by the anticipated life of the asset.

OTP countered the OAG's argument that group accounting should not be used to amortize the Company's software. OTP argued that the Company can readily produce asset reports with each software's in-service date, accumulated cost, accumulated amortized reserve balance, and its net book value calculation.

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[1] Reduce rate base in a future rate case for any unamortized portion of OTP's legacy software.

OTP responded to the Department and the OAG's concern that group accounting should not be used for large assets like production plant and office buildings. The Company stated that it can produce any pertinent plant-in-service accounting transaction that the Commission may request regarding plant-in-service retirements either at, or before, the assets are fully depreciated.

E. Department of Commerce – Response Comments

On March 27, 2019, the Department filed response comments and continued to argue that a ten-year amortization period for the new CISone is too short and does not match the expected useful life of the software.

The Department accepted the information that Otter Tail provided in support of its group accounting request for large assets such as production plant and office buildings. The Department now believes the Company could respond to situations and/or concerns of the Department and Commission. The Department recommended the Commission approve Otter Tail's method of group accounting.

F. Office of the Attorney General – Reply Comments

On April 10, 2019, the OAG filed reply comments and was assured that by using the life-span category method the Company could perform the mechanical act of removing assets from rates if and when ordered it was to do so and was also convinced that the remaining life of the assets is independent of the remaining lives of other assets.

The OAG continued to express concern with group accounting for three specific building accounts. The OAG asked Otter Tail to confirm that the three building accounts are depreciated such that the remaining useful lives of those assets are determined by unit and completely independent of the remaining lives of any other large assets. If the Company cannot confirm this to be the case, the OAG recommended that the Commission order Otter Tail to account for the assets using the life-span category method.

The OAG recommended that the Commission require Otter Tail to account for the new CISone software individually, and not through group accounting. The OAG argued that while the Company would be able to perform the mechanical adjustment to remove the asset from rates if ordered to do so, the use of group accounting distorts the depreciation rate because it is a composite rate.

The OAG continued to recommend a 15-year amortization period for the Company's new CISone software.

The OAG stated it is satisfied that the legacy system software has been fully amortized and that no adjustment is necessary.

G. Otter Tail Power – Reply Comments & Response to Reply Comments

On April 10, 2019, Otter Tail requested that the Commission approve its 2018 depreciation petition with the conditions recommended by the Department, with the exception of a 15-year amortization period for the CISone software. OTP continued to argue that a 10-year amortization period is more appropriate.

On April 29, 2019, Otter Tail submitted reply comments in response to the OAG's request that the Company confirm its group accounting practices provide regulators with the necessary information to remove an asset from rate base. OTP also responded to the OAG's recommendation that its CISone software should be amortized over a 15-year period.

IV. Otter Tail Power's Petition

As shown in the table below, OTP's proposal would result in an increase of $643,904 in its annual depreciation expense. This does not include OTP's request to include two new amortization accounts for the Company's software.

Table 1

Summary of Proposed Depreciation Rates and Resulting Accruals

	Accrual Rate				2018 Annualized Accrual		
Function	Current	Proposed	Diff.		Current	Proposed	Difference
A	B	C	D=C-B		E	F	G=F-E
Steam Production	3.01%	3.15%	0.14%		$ 17,233,975	$ 18,034,768	$ 800,793
Hydraulic Production	8.94%	9.40%	0.46%		$ 629,337	$ 661,872	$ 32,535
Other Production	4.14%	4.34%	0.20%		$ 12,818,408	$ 13,433,816	$ 615,408
Transmission	1.69%	1.61%	-0.08%		$ 8,228,627	$ 7,845,575	$ (383,052)
Distribution	2.45%	2.36%	-0.09%		$ 11,791,425	$ 11,344,388	$ (447,037)
General Plant	4.60%	4.65%	0.05%		$ 2,467,067	$ 2,492,324	$ 25,257
Total	2.78%	2.82%	0.04%		$ 53,168,839	$ 53,812,743	$ 643,904

Source: OTP, Petition, Attachment 1, Page 8 of 104

V. Department of Commerce – Assessment of OTP's Depreciation Petition

The Minnesota Department of Commerce, Division of Energy Resources (Department) examined OTP's petition for compliance with filing requirements and previous Minnesota Public Utilities Commission (Commission) Orders, and for the reasonableness of the proposed remaining lives, salvage rates, and depreciation accruals.

(The OAG also submitted comments, but took no position on the merits of Otter Tail's petition other than the issues it specifically addressed in its comments.)

A. Reasonableness of Proposed Depreciation Parameters

1. Production Plant

a. Remaining Lives

In its petition, OTP proposed remaining life reductions of one year to reflect the passage of time for all production plant accounts. The Commission's Order in Docket No. E-017/D-17-652 (the 2017 Depreciation Docket) required OTP to include in future depreciation filings a table comparing asset lives used for the purposes of the Company's resource planning with the remaining lives proposed in the depreciation filings and explain any differences.

The Department noted from its review of OTP's comparison, that there are no significant differences between the 2018 Depreciation Study and OTP's most recent Resource Plan (Docket No. E017/RP-16-386) and concluded OTP's remaining life reductions of one year to reflect the passage of time are reasonable.

b. Salvage Rates

OTP proposed small decreases to the salvage rates of most of its Steam Production and Other Production plants (i.e. the salvage rates are more negative, which has the effect of increasing depreciation expense). The proposed salvage rates for steam production facilities (Big Stone, Coyote and Hoot Lake) were based on a demolition study of these three facilities commissioned by the Company in 2018. The Department noted that the demolition study provided estimates of the decommissioning costs of OTP's plants measured in 2017 dollars. OTP inflated those estimates to each plant's Average Year of Final Retirement (AYFR) using an assumed two percent inflation rate, and the inflated amounts served as the basis for the Company's proposed salvage rates.

The Department concluded that the proposed salvage rates for all production facilities are reasonable.

2. Transmission, Distribution, and General Plant

OTP proposed a number of changes to the lives and salvage rates of its transmission, distribution, and general plant (TD&G) accounts. Table 2, on the next page of the briefing papers, contains a listing of OTP's current and proposed 2019 remaining lives and salvage values for its TD&G accounts.

Table 2
2018 Annual Review of Depreciation
Current vs Proposed Remaining Lives and Salvage Values

Account Number	Class Of Utility Plant	Current Remaining Life (Yrs)	Current Net Salvage (%)	Proposed 2019 Remaining Life (Yrs)	Proposed 2019 Net Salvage (%)
Transmission Plant					
353.00	Station Equipment	53.63	-5.00%	55.72	-5.00%
354.00	Towers & Fixtures	65.34	-10.00%	70.63	-10.00%
355.00	Poles & Fixtures	54.21	-50.00%	58.91	-50.00%
356.00	Overhead Conductors and Devices	55.11	-30.00%	62.70	-30.00%
358.00	Underhead Conductors and Devices	8.92	-5.00%	14.97	-5.00%
Distribution Plant					
362.00	Station Equipment	32.00	5.00%	34.81	5.00%
364.00	Poles, Towers & Fixtures	47.20	-75.00%	48.98	-100.00%
365.00	Overhead Conductors & Devices	43.09	-100.00%	43.27	-75.00%
367.00	Underground Conductors & Devices	24.22	-5.00%	28.66	-5.00%
368.00	Line Transformers	28.05	50.00%	30.70	-30.00%
369.00	Overhead Services	31.60	-150.00%	31.01	-200.00%
369.10	Underground Services	29.63	-20.00%	34.03	-20.00%
370.00	Meters	20.73	0.00%	19.76	0.00%
370.10	Load Management Switches	1.59	0.00%	3.00	0.00%
371.20	Other Private Lighting	17.03	10.00%	24.39	0.00%
373.00	Street Lighting & Signal Systems	15.13	-5.00%	15.09	-5.00%
General Plant					
	Depreciable				
390.00	Structures & Improvements	30.07	10.00%	34.19	5.00%
390.10	General Office Buildings	13.26	49.60%	21.83	47.30%
390.20	Fleet Service Center Buildings	8.41	33.60%	17.09	31.20%
390.30	Central Stores Building	18.03	92.60%	26.47	79.00%
396.00	Power Operated Equipment	17.81	20.00%	17.09	5.00%
397.40	Communication Towers	23.32	5.00%	32.70	-5.00%

Source: OTP, Petition Attachment 1, p. 24 of 104

		Current Amortization Period (Years)	Proposed 2019 Amortization Period (Years)
	Amortizable		
391.00	Station Equipment	15	15
391.10	Poles, Towers & Fixtures	10	10
391.20	Overhead Conductor & Devices	10	10
391.50	Underground Conductors & Devices	5	5
391.60	Line Transformers	5	5
394.00	Overhead Services	15	15
394.20	Underground Services	15	15
397.00	Meters	15	15
397.10	Load Management Switches	10	10
397.20	Other Private Lighting	15	15
397.30	Street Lighting & Signal Systems	10	10

Source: OTP, Petition Attachment 1, p. 25 of 104

a. Remaining Lives

The Department concluded that all of the proposed changes to the remaining lives of OTP's TD&G accounts are reasonable.

b. Salvage Rates

OTP stated it used a five-year moving average analysis of the ratio of realized salvage and removal expense to the associated retirements used in the 2018 study for transmission, distribution and general plant categories to: a) estimate a realized net salvage rate; b) detect the emergence of historical trends; and c) establish a basis for estimating a future net salvage rate. OTP indicated that cost of removal and salvage opinions obtained from Company personnel were blended with judgement and historical net salvage indications in developing estimates of the future.

OTP proposed changes to the salvage rates of five of its distribution plant accounts and six of its general plant accounts, summarized in Table 3 on the next page.

DOC Table 3
Proposed Salvage Rate Changes
(%)

Account No.	Description	Salvage Rate Current	Salvage Rate Proposed	Difference
	Distribution Plant			
364.00	Poles, Towers & Fixtures	-75.00	-100.00	-25.00
365.00	Overhead Conductors and Devices	-100.00	-75.00	25.00
368.00	Line Transformers	50.00	30.00	-20.00
369.00	Overhead Services	-150.00	-200.00	-50.00
371.20	Other Private Lighting	10.00	0.00	-10.00
	General Plant			
390.00	Structures & Improvements	10.00	5.00	-5.00
390.10	General Office Buildings	49.60	47.30	-2.30
390.20	Fleet Service Center Building	33.60	31.20	-2.40
390.30	Central Stores Building	92.60	79.00	-13.60
396.00	Power Operated Equipment	20.00	5.00	-15.00
397.40	Communication Towers	5.00	-5.00	-10.00

Source: Petition Attachment 1, Pages 24 and 25 of 104

The Department concluded that the proposed salvage rates for the D&G accounts are reasonable.

B. Plant Balances, Additions, and Retirements

Table 4, on the next page, shows the changes to OTP's plant balances during 2017. The net effect of additions and retirements during the year is an increase in total plant of approximately $116 million, the majority of which was concentrated in the Company's transmission and distribution plant accounts.

Table 4
Primary Plant Account Balances
($)

Primary Plant Account Asset	Balance 12/31/2016	Additions	Retirements	Transfers	Balance 12/31/2017
Steam Production	566,536,413	7,254,997	914,817	-	572,876,593
Hydraulic Production	7,037,658	6,783	2,080	-	7,042,361
Other Production	309,802,012	610,032	552,582	-	309,859,462
Transmission Plant	396,178,561	91,667,356	1,977,892	-	485,868,025
Distribution Plant	464,956,890	19,036,789	2,677,850	-	481,315,829
General Plant	50,357,109	4,985,504	1,749,333	-	53,593,280
Totals	1,794,868,643	123,561,461	7,874,554	-	1,910,555,550

Source: 2018 Depreciation Study, Statement G.

C. Future Additions and Retirements

Minnesota Rules part 7825.0700, subpart 2, B. states 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. In Attachment No. 3 of its petition, OTP stated that it is "unaware of any major future additions that will materially affect this filing's certification results other than the request to include amortized intangible software accounts starting with next year's depreciation certification filing."

OTP's Attachment No. 3 described several existing and potential future additions and retirements that may affect future depreciation expense, including:

- Two transmission projects in the Big Stone area in conjunction with the Midcontinent Independent System Operator's (MISO) Candidate Multi-Value Portfolio Study (Big Stone – Brookings and Big Stone – Ellendale);
- EDF Renewable Development, Inc. (EDF) will develop and construct, and OTP will acquire, a 150-megawatt (MW) wind farm to be built near the southeastern North Dakota town of Merricourt (see the Commission's January 10, 2018 Order in Docket No. E-017/M-17-279); and
- OTP will build a new 250-MW simple cycle, natural gas-fired electricity generating station near Astoria in Deuel County, South Dakota.

This filing does not include any new peaking generators so there is no cost information to report with this filing.

The Department recommended that the Commission require OTP to provide the comparison of its last rate case's short-term peaking capacity costs to the peaking capacity costs of the new generators once OTP decides on the peaking option it will pursue.

D. Effective Date of Proposed Rates and Parameters

As noted above, OTP requested that the depreciation parameters and rates proposed in its petition, upon certification by the Commission, become effective January 1, 2019. The proposed effective date is consistent with the Commission's Orders in OTP's previous depreciation dockets, and the Department concluded that it is reasonable.

VI. Group Accounting

Both the Department and the OAG expressed concerns about Otter Tail 's group accounting practices. Both parties questioned if the Company could provide regulators with the necessary information in the event a particular asset might be identified for removal from rate base in a future rate case in order to protect ratepayers.

Otter Tail provided assurances that its method of group accounting is able to provide the necessary information to remove an asset from rate base and its associated accumulated depreciation if so ordered.

VII. Customer Information Systems – Amortization Period (Disputed Issue)

A. Otter Tail Power

The Company purchased a new CIS system from Cayenta Utilities called CISone. Otter Tail scheduled CISone to be put it into service on January 1, 2019. The cost of implementing CISone has been $14.1 million (total Company) and is forecasted to total $17.8 million ($8.8 million Minnesota jurisdiction).[2]

The Company explained that its current customer information system was developed by OTP internally and has been in use for over 30 years. It maintains customer information and serves as a billing engine. While it continues to work as a billing engine, it is difficult to maintain because of its age, architecture and lack of staff versed in the system's dated computer language. The current CIS also lacks the functionality of newer commercial off the shelf systems. After the transition to CISone, the Company will no longer have to rely on the old CIS system for day to day operational needs. The old system with all of its subsequent upgrades is fully amortized, so no current amortization expense is being realized.

If approved, Otter Tail proposed to include these two intangible accounts in its 2019 annual technical update depreciation filing. As of now the accounts have been outside the scope of OTP's depreciation studies because they are equated with amortization expense and were not included in its depreciation certification filings. If approved, the Company would include Software plant in service and the accumulated amortized reserve property records along with

[2] OAG Information Request 4, Exhibit A, 12/31/18 filing.

all the other accounts currently as part of the outsourced depreciation study. No party to this proceeding objected to Otter Tail's proposal to include the two intangible accounts in its 2019 depreciation filing.

In this filing, Otter Tail requested permission to include two software amortization accounts with 5-year and 10-year amortization periods to use in its amortization postings for 2019. Otter Tail stated that it is requesting an additional software amortization period of 10-years for larger, enterprise wide software applications. Otter Tail would continue to use its existing 5-year amortization period for other software. No party in this proceeding objected to the use of the 5-year amortization period for other software.

B. Department of Commerce & Office of the Attorney General

The Department and the OAG both argued that the proposed 10-year amortization period for the new CISone is too short, not supported and would result in intergenerational inequity as current ratepayers will subsidize future ratepayer's use of the system. The Department and OAG both believe the Company will likely use the CISone system for a time greater than 10 years. For an enterprise system this large and expensive, the Department and OAG believe the amortization period should match the software's useful life in order to ensure intergenerational equity.

The Department and the OAG based their views in part, on the 30-year service life of Otter Tail's legacy CIS. Despite a service life of more than three decades, Otter Tail amortized parts of that system over five-year periods. The Commission should protect today's ratepayers from intergenerational inequity by ordering a longer amortization period of at least 15 years for CISone, to reflect the useful life of the software.

The Department and the OAG cited MERC's 2015 rate case, where the Commission approved a 15-year useful life for MERC's CIS.[3] The OAG recommends that a longer useful life would more accurately reflect the probable useful service life of an enterprise software system such as CISone, and recommends that the amortization period be at least 15 years.

The Department also cited a recent Xcel Energy (Xcel) rate case in Docket No. E-002/GR-15-826, Xcel witness Lisa Perkett discussed in her Direct Testimony at 41 – 43, the following large base software systems that were expected to be in effect soon, and Xcel's recommended amortization periods:

> *First, we do know that a second large base software system will be in service late in 2016 and early in 2017. This system is the Work and Asset Management (WAM) system and … My testimony discusses the asset because we are requesting that the WAM system be*

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[3] In the Matter of the Application of Minnesota Energy Resources Corporation for Authority to Increase Rates for Natural Gas Service in Minnesota, MPUC Docket No. G011/GR-15-736, October 31, 2016 Minnesota Public Utilities Commission FINDINGS OF FACT, CONCLUSIONS, AND ORDER at Paragraph 2 (adopting the ALJ's recommendation), and August 19, 2016, Office of Administrative Hearings FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RECOMMENDATION at pp. 73-74 (recommending approval of ongoing O&M expenses and 15-year useful life for the new, core CIS).

assigned a 15-year amortization period, the same amortization period approved for the new general ledger system on SAP.

Also, there is the new general ledger system that will go into service in December 2015 and the Company is not recommending any change to the amortization period from what was approved in the last rate case for this 2015 project. In the last rate proceeding, the Company proposed a 15-year amortization period for the new general ledger system when it goes into effect in December 2015.

C. Otter Tail Power – Response

Otter Tail disagreed with the Department and OAG's recommendation and stated that a 10-year amortization period is reasonable. The Company argued that its proposal corresponds to what is currently expected from the Cayenta Utilities application as it is initially released. While it is possible the software's service life could be extended to 15-years, doing so would require a series of upgrades. Specifically, numerous software upgrades, involving feature enhancements to meet regulated industry requirements, operating system upgrades, and minimum software technical support platform requirements would all need to be addressed and completed to keep the Cayenta Utilities software viable for 15 years.

Otter Tail explained that its recent experiences with PowerPlan Fixed Assets software inform its views. Otter Tail installed its PowerPlan Fixed Assets software in 2006 for approximately $645,000. The software was upgraded in 2011 for approximately $320,000, with a Capital Budget module added in 2012 (new functionality, replacing spreadsheets) for approximately $205,000. Another necessary upgrade was completed in 2017 for approximately $590,000.

Otter Tail would expect a similar experience of system upgrades and functionality at periodic intervals for the Cayenta product. Until software life extending decisions and actions are committed to and paid for, Otter Tail's estimated initial 10-year service life is the most appropriate.

A 10-year amortization period is consistent with the fact that the Cayenta Utilities software is supported by a seven-year maintenance agreement.

This approach is also consistent with the amortization periods Otter Tail uses for this software in its other jurisdictions. The Commission has also supported a 10-year amortization period for similar software. Specifically, in Minnesota Power's recent depreciation filing the Commission granted Minnesota Power a 10- year service life for major software assets which were part of Minnesota Power's new CIS.[4]

[4] In the Matter of Minnesota Power's General Plant Depreciation Petition, Docket No. E-015/D-17-114.

VIII. Staff Analysis

Otter Tail proposed to include two intangible accounts in its 2019 annual technical update depreciation filing. As of now the accounts have been outside the scope of OTP's depreciation studies because they are equated with amortization expense and were not included in its depreciation certification filings. If the Commission were to approve Otter Tail's depreciation filing without including the two amortization accounts, the Company is requesting a $643,904 increase to its 2019 depreciation expense as shown in the table below.

Table 5
Summary of Proposed Depreciation Rates and Resulting Accruals

	Accrual Rate			2018 Annualized Accrual		
Function	Current	Proposed	Diff.	Current	Proposed	Difference
A	B	C	D=C-B	E	F	G=F-E
Steam Production	3.01%	3.15%	0.14%	$ 17,233,975	$ 18,034,768	$ 800,793
Hydraulic Production	8.94%	9.40%	0.46%	$ 629,337	$ 661,872	$ 32,535
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Total	2.78%	2.82%	0.04%	$ 53,168,839	$ 53,812,743	$ 643,904

Source: OTP Petition Attachment 1, Page 8 of 104

Amortization expense is the process of allocating a fixed amount, in this case, the total cost of the software over a fixed amount of time over the probable service life of the asset. The major difference is that amortized assets do not have a salvage value, which is the estimated resale value of an asset at the end of its useful life. Depreciated assets, by contrast, often have a salvage value. An asset's salvage value must be subtracted from its cost to determine the amount to depreciate.

Because there are representative levels of amortization and depreciation expense built into the Company's current rates, Otter Tail Power's request to include the amortization accounts would not impact customer rates until the Company files a general rate case. It would however impact the Company's income statement. Generally, if the Company is granted an increase in depreciation/amortization expense it shows a lower level of earnings as soon as the expense is effective. Decreases in depreciation/amortization expense allow the utility to show higher earnings and are said to be a "windfall" to the company. In this case, the Company is asking to increase its depreciation/amortization expense and will reflect lower earnings.

Otter Tail has indicated that it may file a rate case in November of 2019. If this is the case, the increase in amortization expense/decrease in net operating income would not be reflected in rates until interim rates go into effect. This would hold true no matter which amortization period the Commission decides is appropriate.

The Commission does not prescribe specific methods for estimating service lives and it is up to the utility to propose the service life of an asset, which is then reviewed by interested parties. Otter Tail has proposed a 10-year service life of the new CISone while the OAG and the Department argue that a 15-year service life is more appropriate. The estimation of the service life is not an exact science and it involves a large element of informed judgement. At the same time, it cannot be an arbitrary number selected for convenience, because the full cost of the CISone system should be allocated over the life of the asset in a systematic and rational manner.

Staff estimates that if the Commission determines a 10-year amortization period is reasonable, the amortization expense would increase by approximately $880,000. If the Commission determines a 15-year amortization period, the increase to amortization expense would be approximately $587,000. The Commission may want to verify the accuracy of this estimate with Otter Tail during the agenda meeting.

The Commission will need to decide which amortization period is most appropriate for Otter Tail Power's new CISone software. The Commission may want to give consideration that obsolescence and changes in technology may influence the length of time the software is in use by the utility. Obsolescence may bring about an unplanned retirement of software because of improvements in technology. The software developer may also contribute to obsolescence by discontinuing its support and maintenance of the product.

IX. Decision Alternatives

1. Approve the proposed service lives, salvage values and depreciation rates from Otter Tail's 2018 Depreciation Petition, except for the Amortization period for its legacy CISone;

2. Set the amortization period for the CISone software at 15 years, and subject to the following as to approval of group accounting:

    - Otter Tail may not argue in a subsequent rate case that group accounting alone would prohibit the Commission from making adjustments to the Company's rates, and
    - Otter Tail must continue to maintain information about each of the major components (such as buildings) in the Company's group accounting;

    or

3. Set the amortization period for the CISone software at 10 years, and subject to the following as to approval of group accounting:

    - Otter Tail may not argue in a subsequent rate case that group accounting alone would prohibit the Commission from making adjustments to the Company's rates, and
    - Otter Tail must continue to maintain information about each of the major components (such as buildings) in the Company's group accounting;

4. Require Otter Tail to file its next annual depreciation study by September 1, 2019;

5. Require Otter Tail to file its next five-year depreciation study by September 1, 2023;

6. Require Otter Tail in its next five-year depreciation study to include the supporting schedules for each of its transmission, distribution, and general plant accounts in future depreciation filings;

7. Require that Otter Tail in its first depreciation filing that includes new peaking generators, to compare the last rate case's short-term peaking capacity costs of the new generators;

8. Require OTP to include a comparison of the retirement estimates used in its most current IRP to remaining lives used in its depreciation filing and explain any differences.