

December 26, 2019

Daniel P. Wolf
Executive Secretary
Minnesota Public Utilities Commission
121 7th Place East, Suite 350
Saint Paul, Minnesota 55101-2147

RE: **Response Comments of the Minnesota Department of Commerce, Division of Energy Resources**
Docket No. E017/D-19-547

Dear Mr. Wolf:

Attached are the Response Comments of the Minnesota Department of Commerce, Division of Energy Resources (Department), in the following matter:

Otter Tail Power Company's (OTP's) 2019 Annual Review of Depreciation Certification.

The Petition was filed on August 30, 2019 by:

Loyal K. Demmer, CMA
Senior Depreciation Accountant
Otter Tail Power Company
215 South Cascade Street
PO Box 496
Fergus Falls, MN 56538-0496

The Department continues to recommend that the Minnesota Public Utilities Commission (Commission) **approve OTP's request with modifications**. The Department is available to answer any questions that the Commission may have in this matter.

Sincerely,

/s/ DOROTHY MORRISSEY
Financial Analyst

DM/ar
Attachments



Before the Minnesota Public Utilities Commission
Response Comments of the Minnesota Department of Commerce
Division of Energy Resources

Docket No. E017/M-19-547

I. BACKGROUND

On August 30, 2019, Otter Tail Power Company (OTP or the Company) filed its 2019 Annual Review of Depreciation Certification in Docket No. E017/D-19-547 (Petition). OTP is requesting approval of changes to the lives and salvage rates of a number of property accounts based on OTP's plant and reserve balances as of December 31, 2018.

On November 7, 2019, the Minnesota Department of Commerce, Division of Energy Resources (Department), filed Comments recommending that the Minnesota Public Utilities Commission (Commission) approve OTP's request with modifications.

On December 2, 2019, OTP filed its Reply Comments opposing the Department's recommended changes to remaining life values.

The Department's Response Comments provide revised recommendations to the Commission.

II. SUMMARY OF ISSUES

The Department's Initial Comments recommended a one-year reduction to the proposed remaining lives (RL) of certain OTP plant listed in Table 2 of our initial comments, to correct OTP's proposed remaining lives of certain facilities with retirement dates that would cause depreciable life to continue beyond their retirement dates. Per the Company's depreciation procedures, as explained in the referenced Docket E017/D-93-869, remaining lives for these plant accounts are to be "based upon their forecast retirement date."¹ The Department also recommended some additional filing and reporting requirements. OTP's Reply Comments opposed the recommended changes to its proposed RL values, but agreed to the additional filing and reporting requirements recommended by the Department.

After review of OTP's Reply Comments, the Department continues to recommend a one-year reduction to correct the remaining lives of certain plant, specifically: the *Hoot Lake Steam Production Units 2 & 3 Plant* accounts (except Account 312.1-102 Landfill) and the *Hydraulic Production Plant* accounts. For the reasons discussed in Section V below, the Department no longer recommends a one-year reduction to the proposed RL values for *Other Production Plant* or the *General Plant*, which were also listed in our Initial Comments Table 2, replicated as Table 1-RC in these comments.

¹ Department Initial Comments, p. 3.

III. CORRECTION OF DEPARTMENT INITIAL COMMENTS TABLES 2 AND 3

In our initial comments, through Table 2, the Department conveyed and concluded that the accounts of all listed plant, using OTP's proposed remaining lives, would extend the occurrence of depreciation well beyond the assets' planned retirement date. OTP's Reply Comments pointed out that the Department's Initial Comments Table 2 did not correctly interpret the final period/timeframe for depreciation accruals of the identified plant.

On further review of Table 2, the Department agrees with OTP that it incorrectly expressed the final year of depreciation that would result using OTP's proposed RL value; corrections to the original table are reflected in Table 1-RC below.² This correction indicates that the difference between the requested remaining lives and retirement dates for the *Other Production Plant* or the *General Plant* are all less than a year. Further, as discussed in Section V below, there will be time in the future to make adjustments to the remaining lives of these facilities.

However, the difference between the requested remaining lives and the stated retirement dates for the *Hoot Lake Production Plant – Units 2 and 3* and its *Hydraulic Production Plant* all continue to be a year, which is a material difference given that the retirement dates are imminent. Thus, the Department disagrees with OTP's statement in the Company's Reply Comments that correction to the Department's Initial Comments Table 2 would then depict that the "ending year for depreciation of these assets will occur on the schedule recommended by the Department."³

As shown in Table 1-RC below, OTP's proposed remaining lives of the *Hoot Lake Production Plant – Units 2 and 3* and its *Hydraulic Production Plant* a year of use beyond their retirement dates. That is, OTP requests that the Commission approve a proposal that assumes that these facilities would remain in production for a year beyond the approved retirement dates.

As further shown in Table 1-RC below, the planned retirement date (June 2021) for its *Hoot Lake Production Plant – Units 2 and 3* and its *Hydraulic Production Plant* is to occur in less than two years' time. Thus, it is important that this issue be corrected as soon as possible.

² In addition, corrections to the Department's Initial Comments Table 3 are also provided herein for record clarification as Table 2-RC, though that content was not at issue.

³ OTP Reply Comments, p. 1.

Table 1-RC

Plant with Retirement Dates that have Remaining Lives which Appear Overstated (Correction to Table 2 presented in Department Initial Comments)						
		Requested Remaining Life (Yrs.) 1/	If effective for 2020, implies Retirement at this point (yr):		Though, the stated Retirement Date is: 2/	RL vs. Retirement Date Timeframe Variance
			That is, depreciation would carry to:			
Steam Production						
	Hoot Lake Plant - Units 2 & 3	2.49	2022.49	Jun-2022	Jun-2021	1 yr.
Hydraulic Production						
	All Plant	2.49	2022.49	Jun-2022	Jun-2021	1 yr.
Other Production						
	Jamestown Units 1 and 2	14.22	2034.22	Mar-2034	Jun-2033	9 mo.
	Lake Preston	14.22	2034.22	Mar-2034	Jun-2033	9 mo.
	Fergus Falls Control Center	11.32	2031.32	Apr-2031	Jun-2030	8 mo.
	Solway	19.01	2039.01	Jan-2039	Jun-2038	6 mo.
	Langdon	13.27	2033.27	Apr-2033	Jun-2032	8 mo.
	Ashtabula	14.23	2034.23	Mar-2034	Jun-2033	9 mo.
	Luverne	15.19	2035.19	Mar-2035	Jun-2034	9 mo.
General Plant						
	Fleet Service Center Buildings	16.14	2036.14	Feb-2036	2035	n/a, ≥2mo.
1/	Source: Petition, Attachment 2 and Attachment 1 - Statement F - column K					
2/	Source: Petition, Attachment 4 and Attachment 1 - Statement F - column H					

Table 2-RC

Plant with Retirement Dates that have Reasonable Remaining Lives (Correction to Table 3 presented in Department Initial Comments)							
			Requested Remaining Life (Yrs.) 1/	If effective for 2020, implies Retirement at this point (in yr): That is, depreciation would carry into:		And, the stated Retirement Date is (yr): 2/	RL vs. Retirement Date Timeframe Variance
Steam Production							
	Big Stone		26.53	2046.53	Jul-2046	Jun-2046	-1 mo.
	Coyote		21.81	2041.81	Oct-2041	Jun-2041	
Other Production							
	Merricourt		25	2045	2045	Jun-2045	n/a
General Plant							
	General Office Building		20.89	2040.89	Oct-2040	2040	n/a
	Central Stores Building		25.55	2045.55	Jul-2045	2045	n/a
1/ Source: Petition, Attachment 2 and Attachment 1 - Statement F - column K							
2/ Source: Petition, Attachment 4 and Attachment 1 - Statement F - column H							

IV. RECOMMENDED REMAINING LIFE VALUE ADJUSTMENTS

The Department maintains its position that the proposed 2020 RL parameter values for the *Hoot Lake Steam Production Plant Units 2 and 3* as well as the *Hydraulic Production Plant* accounts are overstated by one year, and are to be retired in the near future, thus must be adjusted. The Department believes that the perpetuation of overstated RL values and the cumulative effect of minor issues with OTP’s prior depreciation filings have contributed to the current overstated RL values.

A. HOOT LAKE STEAM PRODUCTION PLANT UNITS 2 AND 3

Table 3-RC below summarizes for the *Hoot Lake Steam Production Plant Units 2 and 3*, OTP’s depreciation filing RL values compared to the assumed retirement date provided in its depreciation filings from 2008 to date. Column J of this table reports the calculated time variance between the retirement date implied by the RL value and the stated planned retirement date for this plant.

Table 3-RC

Hoot Lake Plant Units 2 & 3									
Docket E017/D-	Depr. Study Conducted during:	Using Data As of:	For Use in (yr):	RL Yrs	Retirement Date Implied by (col. e) RL Yrs	Stated Retirement year assumption	RL vs. Retirement Date Timeframe Variance		
a	b	c	d	Att. 2 e	f = d+e	mo./yr g	Stmt F, Att 1 h	Att. 4 i	j = g-i
08-1042	2008	12/31/2007	2009	11.32	2020.32	Apr-2020	2019		4 mo.
09-1019	2009	12/31/2008	2010	10.35	2020.35	May-2020	2019	12/31/2019	5 mo.
10-953	2010	12/31/2009	2011	10.35	2021.35	May-2021	2020	5/30/2020	1 yr.
11-886	2011	12/31/2010	2012	10.35	2022.35	May-2022	2021	5/30/2021	1 yr.
12-933	2012	12/31/2011	2013	10.35	2023.35	May-2023	2022	6/30/2022	11 mo.
13-795	2013	12/31/2012	2014	7.42	2021.42	May-2021	2020	6/30/2020	11 mo.
14-732	2014	12/31/2013	2015	6.44	2021.44	Jun-2021	2020	6/30/2020	1 yr.
15-804	2015	12/31/2014	2016	6.44	2022.44	Jun-2022	2021	6/30/2021	1 yr.
16-729	2016	12/31/2015	2017	5.46	2022.46	Jun-2022	2021	6/30/2021	1 yr.
17-652	2017	12/31/2016	2018	4.47	2022.47	Jun-2022	2021	6/30/2021	1 yr.
18-568	2018	12/31/2017	2019	3.48	2022.48	Jun-2022	2021	6/30/2021	1 yr.
19-547	2019	12/31/2018	2020	2.49	2022.49	Jun-2022	2021	6/30/2021	1 yr.

As Column J in Table 3-RC shows, the variance between the RL-value inferred retirement date and the stated (planned) plant retirement date increased from a 5-month RL value overstatement to a one-year RL value overstatement between the Company’s 2009 and the 2010 depreciation study filings. In the following several years, this divergence was not resolved as the planned plant retirement year, marking the near end of the plant’s planned useful period, has closed in.

The Department’s Initial Comments noted that in 1993 OTP changed to a prospective effective date application of its depreciation parameters (Docket E017/D-93-869); the “prospective effective date” approach delays the effective date of a current year’s study results to the following calendar year.⁴ In that 1993 filing in which the new application process was introduced and explained, the Company noted that use of “a prospective effective date does change the RL as presented in the study”, and that “accounts where remaining life is based upon a forecast retirement date should be reduced by one

⁴ This “delay” has been referred to by the Company as “regulatory lag” in OTP Initial Petition, Attachment 4, comments to Base Load plant Hoot Lake Plant Units 2 & 3. Prior depreciation filing years’ “Attachment 4” are included in DOC Attachment C.

year to reflect the passage of one year.”⁵ All the plant identified in Table 1-RC uses *forecast retirement date* as the determinant for the plant’s remaining life, thus the RL value from the study should be reduced by one year to reflect the postponed application of the depreciation study’s results. The RL overstated retirement date variance shown in Column J of Table 3-RC above suggests the possibility that such an adjustment did not occur.

However, without question, in OTP’s more recent depreciation filing Docket E017/D-15-804 (15-804 docket), that upon granting the Company’s life extension request, OTP conveyed to the Commission that the *Hoot Lake Steam Production Plant Units 2 and 3* would then become fully depreciated on June 30, 2021. In the 15-804 docket, the Company acknowledged that the then-set retirement year for the Hoot Lake Plant Units 2 and 3 was June 2020, but requested the Commission’s permission to extend the life of the Hoot Lake Units 2 and 3 plant by one year, changing retirement to June 2021 to align with the Midcontinent Independent System Operator, Inc.’s (MISO) planning year; this was in order for OTP to obtain full year accreditation from MISO. The Company clearly stated to the Commission in the 15-804 docket that the Hoot Lake Plant would be fully depreciated on June 30, 2021:

Now, with the realization that Otter Tail is expected to operate Hoot Lake Plant until the end of its 2020 MISO resource planning year ending May 31st, 2021 we concluded that utilizing the [Average Year of Final Retirement] AYFR of 2021 rather than 2020 will cause the plant to be fully depreciated on June 30th, 2021, a much closer match to its expected end of life of May 31, 2021. That is, the accounting requirement to match expenses to the revenue streams they help generate is better achieved with an AYFR of 2021 for Hoot Lake Plant.⁶

In this instant depreciation filing, the planned plant retirement date remains unchanged from that proposed and approved in the 15-804 docket. However, the Company’s current proposed RL value will not cause full depreciation to be achieved by June 2021, as OTP committed (above) it would accomplish. Therefore, the Department recommends a one-year reduction to OTP’s proposed RL value, changing it from 2.49 years to 1.49 for use in 2020, as this change will result in the plant’s full depreciation to be achieved on June 30, 2021, commensurate with the end of plant’s useful life.

OTP’s Reply Comments expressed concern and argued that reducing the RL value by one year for its Hoot Lake Plant would dramatically increase its annual depreciation expense and that the Company would not have an opportunity to recover that increased expense. The Department does not dispute that, compared to the accrual results using OTP’s proposed RL values, the corrected RL values would result in the Hoot Lake plant’s annual depreciation to increase approximately 65 percent; however, of OTP’s estimated \$2.5 million depreciation increase for the Hoot Lake Plant, the jurisdictional share to

⁵ Department Initial Comments, p. 3, included more complete quote from OTP Docket E017/D-93-869.

⁶ Docket No. E017/D-15-804, [OTP Initial Petition, pp. 3-5](#).

Minnesota would be about 55 percent, or approximately a \$1.38 million increase.⁷ The magnitude of the change in annual depreciation when correcting the RL values increases as the retirement date approaches because the impact from correction is spread over fewer remaining periods. As shown in Table 3-RC, OTP has had several years to institute corrective measures. Furthermore, it is the Department's understanding that OTP is contemplating filing a general rate case in 2020; the utility could choose 2020 for its test-year for its general rate case filing, even if OTP waited until 2021 to file its next rate case.⁸

B. HYDRAULIC PRODUCTION PLANT

OTP's proposed RL value of 2.49 years for *Hydraulic Production Plant* to become effective January 1, 2020, also is overstated because using it would not resolve to the assumed June 2021 retirement for this plant. In a deep-dive review of prior depreciation filings, the Department found that it was in OTP's 1994 depreciation Docket E017/D-94-858 that the Company stated that the retirement date for *Hydraulic Production Plant* accounts was 2021, tied to the expiration of its license, and this date continues to be the assumed retirement date today.

The Department's review of prior depreciation filings also indicated that the passage of time reduction to the RL value did not occur appropriately in prior years, which has contributed to OTP's current proposed RL value overstatement. Specifically, page 5 of the Department's Initial Comments stated that the mismatch "stemmed from an adjustment that was omitted years ago that OTP chose not to correct."

Footnote 8 to the Department's Initial Comments stated that it did not appear that OTP used the approved remaining life values in 1998 for its *Hydraulic Production Plant* (1998 RL values were approved in Docket E017/D-97-1347 or "97-1347 Docket"). More specifically, the Department's review found that in the subsequent depreciation filing (Docket E017/D-98-1658, *Statement A*), OTP reported 1998 RL parameters that differed from the values approved in the prior year 97-1347 docket. Further, the Company's later filed five-year depreciation study, Docket E017/D-03-1555, which provides summary reports for each year since its last five-year study, encompassed reports of 1998 activity; and within this filing, in the 1998 depreciation accrual *Statement I*, OTP again reported remaining life parameters for the Hydraulic Production Plant accounts that differed from the values approved for use in 1998. Thus, it appears that the cause for the inaccuracies in the Company's remaining life for the Hydraulic Production Plant currently at issue were due to OTP not using the correct remaining lives that were approved in the 97-1347 Docket. Table 4-RC below summarizes the 1998 approved and later reported RL values for OTP's Hydraulic Production Plant.

⁷ OTP's Reply Comments did not include calculations for its estimated \$2.5 million increase; therefore, this number has not been vetted. Using plant and reserve data as of 12/31/2018, assuming no changes to plant balances and using the 2019 depreciation accruals for the Hoot Lake Plant total \$5 million (excluding the landfill), the Department estimates that the reduced RL value would result in an estimated \$2.2 million increase for Total Company, which is a \$1.2 million increase over OTP's proposal to the Minnesota jurisdiction. See DOC Attachment B for the Department's workpaper.

⁸ Like other utilities, OTP can choose to use a historical test-year, and in fact has used a historical test-year prior to its most recent rate case in Docket No. E017/GR-15-1033.

Table 4-RC

Hydraulic Production Remaining Lives for use in 1998			
Account	1998 RL (Years)		
	Docket E017/D-97-1347 Approved	Docket E017/D-98-1648 Statement A	Docket E017/D-03-1555 Statement I
331	22.52	23.52	23.52
332	22.53	23.53	23.53
333	22.57	23.57	23.57
334	22.58	23.58	23.58
335	22.61	23.61	23.61

Despite the disparity between the 1998 RL values approved and later reported, OTP’s Reply comments in the current depreciation docket stated that the Company had reduced the remaining lives by one year from 1997 to 1998 for its Hydraulic Production Plant; and OTP’s Reply demonstrated mathematically that Account 333 depreciation accrual amount for 1998 was derived using the approved 1998 RL value of 22.57 years. However, the Company did not offer an explanation for its inconsistent reporting of the 1998 RL parameter values in the various the Company-provided statements filed in those subsequent dockets (03-1555 and 98-1648).

Aside from this confusion, the Department continues to conclude that the proposed 2020 RL parameter values for the *Hydraulic Production Plant* accounts are overstated by one year; and that the amassing of two types of issues with OTP’s prior depreciation filings, which were not offset or balanced out in other years, collectively have contributed to the current overstated values.

First, Table 5-RC below shows the reported RL values for the hydraulic plant Account 331 during 1995 – 1999; note that from 1998 to 1999 the RL value change to mark the passage of one year’s of time was actually *increased* slightly despite no change in the stated plant retirement date of June 2021.

Table 5-RC

Hydraulic Production Plant Account 331 Remaining Life Values during 1995-1999		
Docket	RL Value	Effective for Year
E017/D-94-858	25.53	1995
E017/D-95-939	24.52	1996
E017/D-96-1014	23.53	1997
E017/D-97-1347	22.52	1998
E017/D-98-1658	22.75	1999

Second, since 1999, the Department noted that during these past twenty years, 1999 – 2019, OTP’s RL value year-to-year reduction was always less than a full year (See DOC Attachment A for detailed data). OTP’s practice contravened what OTP’s 2007 depreciation study otherwise stated:

Passage of one year time: Generally relates to accounts in which a “forecast average year of retirement” basis is used with remaining life technique. The proposed average remaining life would naturally decrease by one year as each year passes and that forecast retirement date draws nearer. (Docket No. E017/D-07-1138, Attachment 5).

Given the increase in the remaining life year-value that occurred between 1998 and 1999, coupled with the cumulative effect of the following twenty years’ practice of always adjusting the proposed RL proposed value by less than a full year, OTP now has an overstated proposed 2020 RL value (amounting to one-year’s time) for this plant assumed to be retired in June 2021.⁹

C. DEPARTMENT CONCLUSION

The Department revises and refines its conclusion that, given the planned retirement dates, OTP’s depreciation request has not satisfactorily met its burden of proof to show that their proposed RL values for the *Hoot Lake Steam Production Plant Units 2 and 3* and the *Hydraulic Production Plant* accounts are appropriate. The Department concludes that, though given ample opportunity, OTP did not appropriately adjust the RL values for the passage of time over the course of several years. As the planned retirement date of these plant facilities nears, prompt corrective action is needed to address the divergence between the proposed RL values’ implied plant useful life and the long-held planned retirement date.

The Department concludes that having annual depreciation filings, the Company has had frequent opportunity to adjust depreciation parameters to respond to changing facts, rebalance, and/or make correction for errors. It is important to attribute costs to the period when the customers are receiving benefits from the utility’s facilities and where possible, avoid inter-generational inequities. Therefore, the Department recommends an adjustment downward by one year to the currently proposed RL values for the *Hoot Lake Steam Production Plant Units 2 and 3* and the *Hydraulic Production Plant* accounts, changing the RL values from 2.49 to 1.49 years. This adjustment will resolve the implied RL-driven retirement date to match the long-held planned retirement date for these facilities. The Department’s recommendation upholds regulatory ratemaking principles, to match the balance of plant costs appropriately to their expected remaining period of use, thus aligning the depreciation accruals, inclusive on salvage/removal costs to the planned “used and useful period” of the plant.

⁹ The remaining life used for Account 331 increased by 0.23 years from 1998 to 1999 ($22.75 - 22.52 = 0.23$), and the cumulative effect of persistent adjustment of the RL less than one-year’s time (in lieu of reducing the life by a full year) during the twenty-year period 1999 – 2020, sums to 0.74 years excess life (See DOC Attachment A); together these actions have contributed to OTP’s current state of having an overstated RL of one year ($0.23 + 0.74 = 0.97$ years) for the plant assumed to be retired in 18 months’ time from January 1, 2020 (i.e., in June 2021).

Applying this adjustment will properly allocate costs during the remainder of this plant's useful life and to the customers currently served by the plant.

In addition, the depreciation rates used for ratemaking reflect both the cost of the plant investment and the estimated future salvage/removal costs incurred once the plant is retired. This ratemaking principle and practice exists to accomplish cost assignment to and recovery from those customers who benefit from the asset's operation during its useful life. The fact that the timing of expenditures for plant decommissioning/removal activity and/or receipt of salvage revenues, typically occurs following an asset's retirement date does not justify any continuation of depreciation accrual post-plant-retirement-date for regulatory ratemaking. Rather, utility-ratemaking's inclusion of salvage rates in the development of approved depreciation factors effectively has the built-in design to charge customers on a current basis for these expected future costs during the useful life of the facility.

V. REVISED RECOMMENDATION REGARDING THE REMAINING LIVES FOR OTHER PRODUCTION PLANT

As noted above, the Department withdraws at this time its initial comments recommendation to reduce the RL value by one year for the *Other Production Plant* and *General Plant* accounts identified in Table 1-RC for two reasons. First, because all of OTP's *Other Production Plant* and *General Plant* identified in Table 1-RC have planned retirement dates more than ten years out, and Table 1-RC, with corrected dates, shows that the current variance between their planned retirement dates and the proposed RL-values' implied retirement date is less than one-year's time, the Company has many years to gradually adjust the year-to-year RL proposed values to better align the remaining depreciation periods with the planned retirement dates. Second, not reducing the proposed RL values of the *Other Production Plant* and *General Plant* having less imminent retirement dates at this time will avoid compounding the effect on the depreciation expense increase that will occur with the adoption of the recommended and more important RL adjustments for the Hoot Lake Units and the Hydraulic Production plant with near-term retirement dates.

Despite the withdrawal the Department's Initial Comments recommendation for the *Other Production Plant* and *General Plant*, OTP should be vigilant in the forthcoming years to balance RL adjustments fairly to narrow any differences in the RL implied retirement date and the Company's planned retirement date.

VI. RESPONSE TO OTP'S OTHER ARGUMENTS

OTP's Reply Comments argued that prior depreciation filings were used as the basis to set general rate case base rates and if any methodology changes were to be made, it should be done in a rate case proceeding. The Department notes the following three facts. First, a purpose of depreciation filings is to recognize accurately the cost of service of facilities over the expected life of the facility; once a facility stops being used or useful in providing service, it no longer makes sense to recognize depreciation of the facility. Second, the manner in which depreciation expense was determined when setting base rates and the expense amount included in OTP's prior general rate cases is static; the amounts do not change from year to year. What was underlying in setting base rates does not preclude future change or corrective action in subsequent depreciation filings. In fact, another Minnesota utility, Xcel Energy, recently made some changes to its depreciation methodology in Docket E,G002/D-17-581, which resulted in a large \$6.8 million decrease to its natural gas operations annual depreciation expense, but such change will not be reflected in its base rates until the utility's next general rate case is filed. Third, OTP has at its disposal when to file its next general rate case and the Company may choose the test year upon which its bases its proposed rate changes, including use of 2020 as an historical test year.

VII. RECOMMENDED FILING DEADLINE OF ADDITIONAL INFORMATION

The Department's initial comments recommended some additional annual compliance filing requirements to report calculated depreciation factors using approved parameters by January 31 of the subject year. The Company's Reply Comments were amenable to these recommendations and further suggested modification of the reporting deadline language in consideration of the regulatory approval timing. The Department appreciates the Company's suggestion and has modified the language of its recommendation in the following Section VIII summary accordingly.

VIII. SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

Based on our review of OTP's 2019 Depreciation Petition and OTP's Reply Comments, the Department recommends that the Commission:

- Require the remaining life values to be reduced by one year, from 2.49 to 1.49, for all plant accounts relevant to the Hoot Lake Steam Production Plant Units 2 and 3, with the exception of Account 312.1-102 (i.e., the Hoot Lake Units 2 & 3 Landfill);
- Require the remaining life values to be reduced by one year, from 2.49 to 1.49, for all plant accounts relevant to the Hydraulic Production Plant;
- Approve OTP's proposed remaining-life parameters for the plant not otherwise identified and modified elsewhere by the Commission;
- Approve all of OTP's proposed salvage rates for its plant;
- Require OTP to file in this Petition the Company's calculated depreciation rates that it will actually apply in 2020 by the latter of January 31, 2020, or within 30 days after receiving the Commission Order approving the 2020 depreciation parameters;
- Require OTP to file annually in future depreciation dockets the Company's calculated depreciation rates that it will apply in the subject calendar period, by the latter of January 31 of the subject year, or within 30 days after receiving the Commission Order approving depreciation parameters;
- Approve OTP's prospectively requested remaining life and net salvage parameters for the Merricourt Wind Energy Center;
- Require OTP to include in future depreciation filings a table comparing asset lives used for the purpose of the Company's resource planning with the remaining lives proposed in the depreciation filings, explaining any differences;
- Approve OTP's proposed effective date of January 1, 2020;and
- Require OTP to file its next annual depreciation study by September 1, 2020.

/ar

Hydraulic Production with Retirement Date of June 2021

Docket Number E017/D-	Establishing Values for Use in	Hydraulic Production Account 331 Proposed RL years	Change in RL from Prior Year	Cumulative Excess Life 1999 - 2019
19-547	2020	2.49	-0.99	
18-568	2019	3.48	-0.99	
17-652	2018	4.47	-0.99	
16-729	2017	5.46	-0.98	
15-804	2016	6.44	-0.98	
14-732	2015	7.42	-0.99	
13-795	2014	8.41	-0.96	
12-933	2013	9.37	-0.97	
11-886	2012	10.34	-0.97	
10-953	2011	11.31	-0.97	
09-1019	2010	12.28	-0.96	0.74
08-1042	2009	13.24	-0.98	
07-1138	2008	14.22	-0.96	
06-1238	2007	15.18	-0.96	
05-1410	2006	16.14	-0.95	
04-1419	2005	17.09	-0.95	
03-1555	2004	18.04	-0.95	
02-1442	2003	18.99	-0.95	
01-1340	2002	19.94	-0.93	
00-1170	2001	20.87	-0.94	
99-1260	2000	21.81	-0.94	
98-1658	1999	22.75	0.23	
97-1347	1998	22.52	-1.01	
96-1014	1997	23.53	-0.99	
95-939	1996	24.52	-1.01	
94-858	1995	25.53		

0.23 + 0.74 = 0.97

Otter Tail Power Company
Docket E017/M-19-547
Estimated Impact to Depreciation Accrual in 2020

Input Data:

	Plant investment as of 12/31/2018:	Reserve as of 12/31/2018:	Salvage %	Salvage \$	Outstanding Accrual Amount as of 12/31/18	MN Alloc Factor
	a	b	c	d	e	f
	Stmt B, Att 1, p. 14	Stmt C, Att. 1, p. 20	Stmt E, Att 1, p. 30	d = a * c	e = a - b - d	Stmt B, Att 1, p. 14
Hoot Lake Units 2 and 3						
Accounts:						
311.00	6,093,767	6,377,603	-15.6%	\$ (950,628)	\$ 666,792	0.54606695
312.00	37,830,819	33,775,195	-15.6%	\$ (5,901,608)	\$ 9,957,232	0.54606695
314.00	11,543,445	11,536,138	-15.6%	\$ (1,800,777)	\$ 1,808,084	0.54606695
315.00	2,766,673	2,808,599	-15.6%	\$ (431,601)	\$ 389,675	0.54606695
316.00	1,190,054	1,037,746	-15.6%	\$ (185,648)	\$ 337,956	0.54606695
Total	59,424,758	55,535,281		\$ (9,270,262)	\$ 13,159,739	
Hydraulic Production						
Accounts:	Stmt B, Att 1, p. 12	Stmt C, Att 1, p. 18	Stmt D, Att. 1, p. 24			
331	351,712	287,707	0%	\$ -	\$ 64,005	0.54606695
332	4,277,055	3,030,991	0%	\$ -	\$ 1,246,064	0.54606695
333	1,373,867	1,146,637	0%	\$ -	\$ 227,230	0.54606695
334	597,103	495,373	0%	\$ -	\$ 101,730	0.54606695
335	435,295	289,032	0%	\$ -	\$ 146,263	0.54606695
Total	7,035,032	5,249,740		\$ -	\$ 1,785,292	

Analysis:

Estimated 2020 Depreciation Accrual				
Hoot Lake Units 2 and 3				
Assuming 2019 Reserve Increase/Accrual:				5,000,000
			Total Co.	MN Alloc
Using RL yrs:	2.49	\$	3,277,004	\$ 1,789,463
Using RL yrs:	1.49	\$	5,476,335	\$ 2,990,446
Increase in depr:		\$	2,199,331	\$ 1,200,982
Hydraulic Production Plant				
Assuming 2019 Reserve Increase/Accrual:				515,285
			Total Co.	MN Alloc
Using RL yrs:	2.49	\$	510,043	\$ 278,518
Using RL yrs:	1.49	\$	852,354	\$ 465,442
Increase in depr:		\$	342,311	\$ 186,925
Total Combined Impact of DOC Recommendation:		\$	2,541,642	\$ 1,387,907

**OTTER TAIL POWER COMPANY
2013 ANNUAL REVIEW OF DEPRECIATION CERTIFICATION
Comparison of Resource Plan to Five-Year Depreciation Study**

Generating Unit	Retirement Dates			Comments
	Resource Plan 2014 - 2028, (prior to capacity expansion analysis)	2013 Depreciation Study (Attachment No. 1)	Difference	
BASE LOAD				
➤ Hoot Lake Plant Units 2 & 3	Dec-2020	Jun-2020	None, other than program assumption differences	The IRP adopts December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement.
➤ Big Stone Plant	Dec-2046	Jun-2046	None, other than program assumption differences	The IRP adopts December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement. The prior resource plan selected a conversion alternative (addition of Air Quality Control System ("AQCS")) of this resource in 2016 which created a new retirement date of 2046 for this resource. This AQCS project affects the retirement of this plant as reflected in the IRP and Five-year Depreciation filings.
➤ Coyote Station	Dec-2041	Jun-2041	None, other than program assumption differences	The IRP adopts December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement. Coyote Station recently entered into a new 25 year coal contract resulting in a new plant remaining life calculation as reflected in the IRP and Five-year Depreciation Filings.
WIND				
➤ Langdon Wind Energy Center	Dec-2032	Jun-2032	None, other than program assumption differences	The IRP adopts December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement.
➤ Ashtabula Wind Energy Center	Dec-2033	Jun-2033	None, other than program assumption differences	The IRP adopts December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement.
➤ Luverne Wind Energy Center	Dec-2034	Jun-2034	None, other than program assumption differences	The IRP adopts December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement.
HYDRO				
➤ 6 units in 5 dams on the Otter Tail River, FERC licensed	No retirement date discussed - IRP assumes operating perpetually	Jun-2021	Program assumption differences	IRP assumes permanent hydro dam structures operate perpetually until a final retirement date is established. Depreciation Studies tie retirement date to end of the current active FERC hydro operating license. This is the latest date these facilities can operate as generation resources unless a license renewal is granted pursuant to the satisfaction of its stated conditions.
➤ 2 units on outlet of Lake Bemidji – not subject to FERC jurisdiction	No retirement date discussed - IRP assumes operating perpetually	Jun-2021	Program assumption differences	IRP assumes permanent hydro dam structures operate perpetually until a final retirement date is established. Depreciation Studies tie retirement date to end of current hydro license for other hydro structures which are of a similar vintage.
PEAKING				
➤ Jamestown Combustion Turbines - 2 units	Dec-2029	Jun-2023	6 years	The resource plan assumes operation of this low cost resources through the entire IRP time line. The Depreciation filing extends the plant life an additional year per policy to maintain a 10 year minimum operating window until unit is no longer prudent to operate.
➤ Lake Preston Combustion Turbine	Dec-2029	Jun-2023	6 years	The resource plan assumes operation of this low cost resources through the entire IRP time line. The Depreciation filing extends the plant life an additional year per policy to maintain a 10 year minimum operating window until unit is no longer prudent to operate.
➤ Solway Combustion Turbine	Dec-2038	Jun-2038	None, other than program assumption differences	The IRP adopts December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement.
➤ Fergus Control Center Diesel	No retirement date discussed - beyond study period	Jun-2030	Program assumption differences	IRP assumes new EPA Rice rule environmental upgrades are completed with retirement outside of study period. Depreciation study accounts for assets functionality as control center black start and back up strategic functionality.

Note:

The Company's current working version of the Resource Plan (RP) is scheduled to be filed on December 1, 2013 rather than the normal July 1st sequence which is customarily reconciled to for Depreciation Study purposes. This RP is for a 15-year analysis covering the 2014-2028 time frame coinciding with this Five-year depreciation study. The near-term is intended to be very specific with regard to resource changes, additions, retirements, etc. The long-term is much more uncertain and identifies resources that a utility is likely to use. The depreciation study is intended to be an exact forecast to be used for appropriate depreciation expense allocation over the remaining plant life. The RP is far less exact in the long-term, so, there is a natural potential difference between the purpose of the two filings.

OTTER TAIL POWER COMPANY
2014 ANNUAL REVIEW OF DEPRECIATION CERTIFICATION
Comparison of Resource Plan to Annual Depreciation Filing

Generating Unit	Retirement Dates		Difference	Comments
	Resource Plan 2014 - 2028, (prior to capacity expansion analysis)	2014 Depreciation Study (Attachment No. 1)		
BASE LOAD				
➤ Hoot Lake Plant Units 2 & 3	Dec-2020	Jun-2020	None, other than program assumption differences	The IRP adopts December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement.
➤ Big Stone Plant	Dec-2046	Jun-2046	None, other than program assumption differences	The IRP adopts December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement. The prior resource plan selected a conversion alternative (addition of Air Quality Control System ("AQCS")) of this resource in 2016 which created a new retirement date of 2046 for this resource. This AQCS project affects the retirement of this plant as reflected in the IRP and the 2014 Annual Technical Update filings.
➤ Coyote Station	Dec-2041	Jun-2041	None, other than program assumption differences	The IRP adopts December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement.
WIND				
➤ Langdon Wind Energy Center	Dec-2032	Jun-2032	None, other than program assumption differences	The IRP adopts December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement.
➤ Ashtabula Wind Energy Center	Dec-2033	Jun-2033	None, other than program assumption differences	The IRP adopts December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement.
➤ Luverne Wind Energy Center	Dec-2034	Jun-2034	None, other than program assumption differences	The IRP adopts December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement.
HYDRO				
➤ 6 units in 5 dams on the Otter Tail River, FERC licensed	No retirement date discussed - IRP assumes operating perpetually	Jun-2021	Program assumption differences	IRP assumes permanent hydro dam structures operate perpetually until a final retirement date is established. Depreciation Studies tie retirement date to end of the current active FERC hydro operating license. This is the latest date these facilities can operate as generation resources unless a license renewal is granted pursuant to the satisfaction of its stated conditions.
➤ 2 units on outlet of Lake Bemidji – not subject to FERC jurisdiction	No retirement date discussed - IRP assumes operating perpetually	Jun-2021	Program assumption differences	IRP assumes permanent hydro dam structures operate perpetually until a final retirement date is established. Depreciation Studies tie retirement date to end of current hydro license for other hydro structures which are of a similar vintage.
PEAKING				
➤ Jamestown Combustion Turbines - 2 units	Dec-2029	Jun-2023	6 years	The IRP assumes operation of this low cost resources through the entire resource plan time frame. The Depreciation filing makes annual assessments on the condition of the facility and if it passes the assessment, it extends the plant life an additional year per policy to maintain a 10 year minimum operating window until unit is no longer prudent to operate. The 2014 assessment revealed a one year extension this year was not warranted.
➤ Lake Preston Combustion Turbine	Dec-2029	Jun-2023	6 years	The IRP assumes operation of this low cost resources through the entire resource plan time frame. The Depreciation filing makes annual assessments on the condition of the facility and if it passes the assessment, it extends the plant life an additional year per policy to maintain a 10 year minimum operating window until unit is no longer prudent to operate. The 2014 assessment revealed a one year extension this year was not warranted.
➤ Solway Combustion Turbine	Dec-2038	Jun-2038	None, other than program assumption differences	The IRP adopts December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement.
➤ Fergus Control Center Diesel	No retirement date discussed - beyond study period	Jun-2030	Program assumption differences	IRP assumes retirement is outside of resource plan study period. Depreciation study accounts for assets functionality as control center black start and back up strategic functionality. Unit classified as an Emergency Generator as defined by EPA Rice rules.

Note:

The Company's current working version of the Resource Plan (RP) was filed on December 1, 2013 rather than the normal July 1st sequence which is customarily reconciled to for Depreciation Study purposes. This RP is for a 15-year analysis covering the 2014-2028 time frame coinciding with this Five-year depreciation study. The near-term is intended to be very specific with regard to resource changes, additions, retirements, etc. The long-term is much more uncertain and identifies resources that a utility is likely to use. The depreciation study is intended to be an exact forecast to be used for appropriate depreciation expense allocation over the plants remaining life. The RP is far less exact in the long-term, so, there is a natural potential difference between the purpose of the two filings.

OTTER TAIL POWER COMPANY
2015 ANNUAL REVIEW OF DEPRECIATION CERTIFICATION
Comparison of Resource Plan to Annual Depreciation Filing

Generating Unit	Retirement Dates			Comments
	Resource Plan 2014 - 2028, (prior to capacity expansion analysis)	2015 Depreciation Study (Attachment No. 1)	Difference	
BASE LOAD				
➤ Hoot Lake Plant Units 2 & 3	Dec-2020	Jun-2021	None, other than program assumption differences	The IRP adopts December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement. In the 2015 depreciation study the AYFR added one year to better match the 2020 MISO Resource Adequacy year which ends May 31, 2021.
➤ Big Stone Plant	Dec-2046	Jun-2046	None, other than program assumption differences	The IRP adopts December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement.
➤ Coyote Station	Dec-2041	Jun-2041	None, other than program assumption differences	The IRP adopts December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement.
WIND				
➤ Langdon Wind Energy Center	Dec-2032	Jun-2032	None, other than program assumption differences	The IRP adopts December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement.
➤ Ashtabula Wind Energy Center	Dec-2033	Jun-2033	None, other than program assumption differences	The IRP adopts December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement.
➤ Luverne Wind Energy Center	Dec-2034	Jun-2034	None, other than program assumption differences	The IRP adopts December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement.
HYDRO				
➤ 6 units in 5 dams on the Otter Tail River, FERC licensed	No retirement date discussed - IRP assumes operating perpetually	Jun-2021	Program assumption differences	IRP assumes permanent hydro dam structures operate perpetually until a final retirement date is established. Depreciation Studies tie retirement date to end of the current active FERC hydro operating license. This is the latest date these facilities can operate as generation resources unless a license renewal is granted pursuant to the satisfaction of its stated conditions.
➤ 2 units on outlet of Lake Bemidji – not subject to FERC jurisdiction	No retirement date discussed - IRP assumes operating perpetually	Jun-2021	Program assumption differences	IRP assumes permanent hydro dam structures operate perpetually until a final retirement date is established. Depreciation Studies tie retirement date to end of current hydro license for other hydro structures which are of a similar vintage.
PEAKING				
➤ Jamestown Combustion Turbines - 2 units	Dec-2029	Jun-2023	6 years	The IRP assumes operation of this low cost resources through the entire resource plan time frame. The Depreciation filing makes annual assessments on the condition of the facility and if it passes the assessment, it extends the plant life an additional year per policy to maintain a 10 year minimum operating window until unit is no longer prudent to operate. The 2015 assessment revealed a one year extension this year was not warranted.
➤ Lake Preston Combustion Turbine	Dec-2029	Jun-2023	6 years	The IRP assumes operation of this low cost resources through the entire resource plan time frame. The Depreciation filing makes annual assessments on the condition of the facility and if it passes the assessment, it extends the plant life an additional year per policy to maintain a 10 year minimum operating window until unit is no longer prudent to operate. The 2015 assessment revealed a one year extension this year was not warranted.
➤ Solway Combustion Turbine	Dec-2038	Jun-2038	None, other than program assumption differences	The IRP adopts December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement.
➤ Fergus Control Center Diesel	No retirement date discussed - beyond study period	Jun-2030	Program assumption differences	IRP assumes retirement is outside of resource plan study period. Depreciation study accounts for assets functionality as control center black start and back up strategic functionality. Unit classified as an Emergency Generator as defined by EPA Rice rules.

Note:

The Company's current working version of the Resource Plan (RP) was filed on December 1, 2013 rather than the normal July 1st sequence which is customarily reconciled to for Depreciation Study purposes. This RP is for a 15-year analysis covering the 2014-2028 time frame coinciding with our last Five-year depreciation study. In the RP, the near-term is intended to be very specific with regard to resource changes, additions, retirements, etc. The long-term is much more uncertain and identifies resources that a utility is likely to use. The depreciation study is intended to be an exact forecast used for appropriate depreciation expense allocation our current investment over the plants remaining life. The RP is far less exact in the long-term, so there is a natural potential difference between the purpose of the two filings.

**OTTER TAIL POWER COMPANY
2016 ANNUAL REVIEW OF DEPRECIATION CERTIFICATION
Comparison of Resource Plan to Annual Depreciation Filing**

Generating Unit	Retirement Dates			Comments
	Resource Plan 2014 - 2028, (prior to capacity expansion analysis)	2016 Depreciation Study (Attachment No. 1)	Difference	
BASE LOAD				
> Hoot Lake Plant Units 2 & 3	Dec-2020	Jun-2021	None, other than program assumption differences	The last approved IRP adopted December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement. In the current IRP filing before the Commission, June, 2021 is adopted as the retirement month which matches the Depreciation filing.
> Big Stone Plant	Dec-2046	Jun-2046	None, other than program assumption differences	The last approved IRP adopted December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement. In the current IRP filing before the Commission, June, 2046 is adopted as the retirement month which matches the Depreciation filing.
> Coyote Station	Dec-2041	Jun-2041	None, other than program assumption differences	The last approved IRP adopted December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement. In the current IRP filing before the Commission, June, 2041 is adopted as the retirement month which matches the Depreciation filing.
WIND				
> Langdon Wind Energy Center	Dec-2032	Jun-2032	None, other than program assumption differences	The last approved IRP adopted December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement. In the current IRP filing before the Commission, December, 2032 is maintained as the retirement month.
> Ashtabula Wind Energy Center	Dec-2033	Jun-2033	None, other than program assumption differences	The last approved IRP adopted December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement. In the current IRP filing before the Commission, December, 2033 is maintained as the retirement month.
> Luverne Wind Energy Center	Dec-2034	Jun-2034	None, other than program assumption differences	The last approved IRP adopted December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement. In the current IRP filing before the Commission, December, 2034 is maintained as the retirement month.
HYDRO				
> 6 units in 5 dams on the Otter Tail River, FERC licensed	No retirement date discussed - IRP assumes operating perpetually	Jun-2021	Program assumption differences	The latest approved and the currently proposed IRP's assume these permanent hydro dam structures operate perpetually until a final retirement date is established. Depreciation Studies tie the retirement date to end of the current active FERC hydro operating license. This is the latest date these facilities can operate as generation resources until a new license renewal is granted pursuant to the satisfaction of its stated conditions. OTP is currently evaluating renewing its FERC Hydro license.
> 2 units on outlet of Lake Bemidji – not subject to FERC jurisdiction	No retirement date discussed - IRP assumes operating perpetually	Jun-2021	Program assumption differences	The latest approved and the currently proposed IRP assumes permanent hydro dam structures operate perpetually until a final retirement date is established. Depreciation Studies tie retirement date to end of current hydro license for other hydro structures which are of a similar vintage.
PEAKING				
> Jamestown Combustion Turbines - 2 units	Dec-2029	Jun-2023	6 years	The last approve IRP assumes operation of this low cost resources through the entire resource plan time frame. The IRP before the Commission now incorporates a retirement month of Jun, 2033, the same as the depreciation filing. The Depreciation filing makes annual assessments on the condition of the facility and if it passes the assessment, it extends the plant life an additional year per policy to maintain a 10 year minimum operating window until the unit is no longer prudent to operate. The 2016 assessment determined a one year extension this year was not warranted.
> Lake Preston Combustion Turbine	Dec-2029	Jun-2023	6 years	The last approve IRP assumes operation of this low cost resources through the entire resource plan time frame. The IRP before the Commission now incorporates a retirement month of Jun, 2033, the same as the depreciation filing. The Depreciation filing makes annual assessments on the condition of the facility and if it passes the assessment, it extends the plant life an additional year per policy to maintain a 10 year minimum operating window until the unit is no longer prudent to operate. The 2016 assessment determined a one year extension this year was not warranted.
> Solway Combustion Turbine	Dec-2038	Jun-2038	None, other than program assumption differences	The latest approve IRP adopted December of the year of retirement as its retirement month. The Depreciation Study adopts a mid-year convention where all assets are assumed to be acquired and retired on June 30th of their respective activity years, whether that activity is a plant addition or plant retirement. The current IRP before the Commission adopts Jun, 2038 as its retirement date, the same as this depreciation filing.
> Fergus Control Center Diesel	No retirement date discussed - beyond study period	Jun-2030	Program assumption differences	IRP assumes retirement is outside of resource plan study period. Depreciation study accounts for assets functionality as control center black start and back up strategic functionality. Unit classified as an Emergency Generator as defined by EPA Rice rules.

Note:

The Company's latest approved Resource Plan (RP) was filed on December 1, 2013 rather than the normal July 1st sequence which is customarily reconciled to our Depreciation Study purposes. This RP is for a 15-year analysis covering the 2014-2028 time frame coinciding with our last Five-year depreciation study. Otter Tail currently has a new proposed IRP before the Commission in Docket No. E07-RP-16-386. In the RP's, the near-term is intended to be very specific with regard to resource changes, additions, retirements, etc. The long-term is much more uncertain and identifies resources that a utility is likely to use. The depreciation study is intended to be an exact forecast used for appropriate depreciation expense allocation of our current investment over the plants remaining life. The RP is far less exact in the long-term, so there is a natural potential difference between the purpose of the two filings.

OTTER TAIL POWER COMPANY
2017 ANNUAL REVIEW OF DEPRECIATION CERTIFICATION
Comparison of Resource Plan to Annual Depreciation Filing

Generating Unit	Retirement Dates			Comments
	Resource Plan 2017 - 2031	2017 Depreciation Study (Attachment No. 1)	Difference	
BASE LOAD				
➤ Hoot Lake Plant Units 2 & 3	Jun-2021	Jun-2021	None	Hoot Lake Plant units 2 & 3 have an Average Year of Final Retirement (AYFR) of 2021. The Depreciation Study adopts a mid-year convention where all asset activity is assumed to take place on June 30th of its respective activity years, whether that activity is a plant addition or plant retirement. Therefore the depreciation study has June, 2021 as its retirement date. The IRP in Appendix F also adopts June, 2021 as the retirement month matching the Depreciation filing.
➤ Big Stone Plant	Jun-2046	Jun-2046	None	Big Stone Plant has an Average Year of Final Retirement (AYFR) of 2046. The Depreciation Study adopts a mid-year convention where all asset activity is assumed to take place on June 30th of its respective activity years, whether that activity is a plant addition or plant retirement. Therefore the depreciation study has June, 2046 as its retirement date. The IRP in Appendix F also adopts June, 2046 as the retirement month matching the Depreciation filing.
➤ Coyote Station	Jun-2041	Jun-2041	None	Coyote Station has an Average Year of Final Retirement (AYFR) of 2041. The Depreciation Study adopts a mid-year convention where all asset activity is assumed to take place on June 30th of its respective activity years, whether that activity is a plant addition or plant retirement. Therefore the depreciation study has June, 2041 as its retirement date. The IRP in Appendix F also adopts June, 2041 as the retirement month matching the Depreciation filing.
WIND				
➤ Langdon Wind Energy Center	Dec-2032	Jun-2032	6 months (outside of IRP study period)	The Langdon Wind Energy Center has an Average Year of Final Retirement (AYFR) of 2032. The Depreciation Study adopts a mid-year convention where all asset activity is assumed to take place on June 30th of its respective activity years, whether that activity is a plant addition or plant retirement. Therefore the depreciation study has June, 2032 as its retirement date. The IRP models the Wind Farms as Purchase Power Agreements which expire at the end of their termination year, therefore the IRP uses December, 2032 as its retirement month.
➤ Ashtabula Wind Energy Center	Dec-2033	Jun-2033	6 months (outside of IRP study period)	The Ashtabula Wind Energy Center has an Average Year of Final Retirement (AYFR) of 2033. The Depreciation Study adopts a mid-year convention where all asset activity is assumed to take place on June 30th of its respective activity years, whether that activity is a plant addition or plant retirement. Therefore the depreciation study has June, 2033 as its retirement date. The IRP models the Wind Farms as Purchase Power Agreements which expire at the end of their termination year, therefore the IRP uses December, 2033 as its retirement month.
➤ Luverne Wind Energy Center	Dec-2034	Jun-2034	6 months (outside of IRP study period)	The Luverne Wind Energy Center has an Average Year of Final Retirement (AYFR) of 2034. The Depreciation Study adopts a mid-year convention where all asset activity is assumed to take place on June 30th of its respective activity years, whether that activity is a plant addition or plant retirement. Therefore the depreciation study has June, 2034 as its retirement date. The IRP models the Wind Farms as Purchase Power Agreements which expire at the end of their termination year, therefore the IRP uses December, 2034 as its retirement month.
HYDRO				
➤ 6 units in 5 dams on the Otter Tail River, FERC licensed	No retirement date discussed - IRP assumes operating perpetually	Jun-2021	Program assumption differences	The latest approved IRP assume these permanent hydro dam structures operate perpetually until a final retirement date is established. Depreciation Studies tie the retirement date to end of the current active FERC hydro operating license. This is the latest date these facilities can operate as generation resources until a new license renewal is granted pursuant to the satisfaction of its stated conditions. OTP is currently pursuing renewing its FERC Hydro license.
➤ 2 units on outlet of Lake Bemidji – not subject to FERC jurisdiction	No retirement date discussed - IRP assumes operating perpetually	Jun-2021	Program assumption differences	The latest approved IRP assumes permanent hydro dam structures operate perpetually until a final retirement date is established. Depreciation Studies tie retirement date to end of current hydro license for other hydro structures which are of a similar vintage.
PEAKING				
➤ Jamestown Combustion Turbines - 2 units	Jun-2033	Jun-2033	None	The two Jamestown Combustion Turbines have an Average Year of Final Retirement (AYFR) of 2033. The Depreciation Study adopts a mid-year convention where all asset activity is assumed to take place on June 30th of its respective activity years, whether that activity is a plant addition or plant retirement. Therefore the depreciation study has June, 2033 as its retirement date. The IRP in Appendix F also adopts June, 2033 as the retirement month matching the Depreciation filing.
➤ Lake Preston Combustion Turbine	Jun-2033	Jun-2033	None	The Lake Preston Combustion Turbine has an Average Year of Final Retirement (AYFR) of 2033. The Depreciation Study adopts a mid-year convention where all asset activity is assumed to take place on June 30th of its respective activity years, whether that activity is a plant addition or plant retirement. Therefore the depreciation study has June, 2033 as its retirement date. The IRP in Appendix F also adopts June, 2033 as the retirement month matching the Depreciation filing.
➤ Solway Combustion Turbine	Jun-2038	Jun-2038	None	The Solway Combustion Turbine has an Average Year of Final Retirement (AYFR) of 2038. The Depreciation Study adopts a mid-year convention where all asset activity is assumed to take place on June 30th of its respective activity years, whether that activity is a plant addition or plant retirement. Therefore the depreciation study has June, 2038 as its retirement date. The IRP in Appendix F also adopts June, 2038 as the retirement month matching the Depreciation filing.
➤ Fergus Control Center Diesel	No retirement date discussed - beyond study period	Jun-2030	Program assumption differences	IRP assumes retirement is outside of resource plan study period. Depreciation study accounts for assets functionality as control center black start and back up strategic functionality. Unit classified as an Emergency Generator as defined by EPA Rice rules.

Note:

Otter Tail 's most recently approve IRP was filed under Docket No. E07-RP-16-386. In the RP's, the near-term is intended to be very specific with regard to resource changes, additions, retirements, etc. The long-term is much more uncertain and identifies resources that a utility is likely to use. The depreciation study is intended to be an exact forecast used for appropriate depreciation expense allocation of our current investment over the current plants remaining life. The RP is far less exact in the long-term, so there can be potential difference because of the intended purposes and assumptions the two filings.

OTTER TAIL POWER COMPANY
2018 FIVE-YEAR REVIEW OF DEPRECIATION CERTIFICATION
Comparison of Resource Plan and Depreciation Filing Retirement Dates

Generating Unit	Retirement Dates			Comments
	Resource Plan 2017 - 2031	2018 Depreciation Study (Attachment No. 1)	Difference	
BASE LOAD				
➤ Hoot Lake Plant Units 2 & 3	Jun-2021	Jun-2021	None	Hoot Lake Plant units 2 & 3 have an Average Year of Final Retirement (AYFR) of 2021. The Depreciation Study adopts a mid-year convention where all asset activity is assumed to take place on June 30th of its respective activity years, whether that activity is a plant addition or plant retirement. Therefore the depreciation study has June, 2021 as its retirement date. The IRP in Appendix F also adopts June, 2021 as the retirement month matching the Depreciation filing.
➤ Big Stone Plant	Jun-2046	Jun-2046	None	Big Stone Plant has an Average Year of Final Retirement (AYFR) of 2046. The Depreciation Study adopts a mid-year convention where all asset activity is assumed to take place on June 30th of its respective activity years, whether that activity is a plant addition or plant retirement. Therefore the depreciation study has June, 2046 as its retirement date. The IRP in Appendix F also adopts June, 2046 as the retirement month matching the Depreciation filing.
➤ Coyote Station	Jun-2041	Jun-2041	None	Coyote Station has an Average Year of Final Retirement (AYFR) of 2041. The Depreciation Study adopts a mid-year convention where all asset activity is assumed to take place on June 30th of its respective activity years, whether that activity is a plant addition or plant retirement. Therefore the depreciation study has June, 2041 as its retirement date. The IRP in Appendix F also adopts June, 2041 as the retirement month matching the Depreciation filing.
WIND				
➤ Langdon Wind Energy Center	Dec-2032	Jun-2032	6 months (outside of IRP study period)	The Langdon Wind Energy Center has an Average Year of Final Retirement (AYFR) of 2032. The Depreciation Study adopts a mid-year convention where all asset activity is assumed to take place on June 30th of its respective activity years, whether that activity is a plant addition or plant retirement. Therefore the depreciation study has June, 2032 as its retirement date. The IRP models the Wind Farms as Purchase Power Agreements which expire at the end of their terminaltion year, therefore the IRP uses December, 2032 as its retirement month.
➤ Ashtabula Wind Energy Center	Dec-2033	Jun-2033	6 months (outside of IRP study period)	The Ashtabula Wind Energy Center has an Average Year of Final Retirement (AYFR) of 2033. The Depreciation Study adopts a mid-year convention where all asset activity is assumed to take place on June 30th of its respective activity years, whether that activity is a plant addition or plant retirement. Therefore the depreciation study has June, 2033 as its retirement date. The IRP models the Wind Farms as Purchase Power Agreements which expire at the end of their terminaltion year, therefore the IRP uses December, 2033 as its retirement month.
➤ Luverne Wind Energy Center	Dec-2034	Jun-2034	6 months (outside of IRP study period)	The Luverne Wind Energy Center has an Average Year of Final Retirement (AYFR) of 2034. The Depreciation Study adopts a mid-year convention where all asset activity is assumed to take place on June 30th of its respective activity years, whether that activity is a plant addition or plant retirement. Therefore the depreciation study has June, 2034 as its retirement date. The IRP models the Wind Farms as Purchase Power Agreements which expire at the end of their terminaltion year, therefore the IRP uses December, 2034 as its retirement month.
HYDRO				
➤ 6 units in 5 dams on the Otter Tail River, FERC licensed	No retirement date discussed - IRP assumes operating perpetually	Jun-2021	Program assumption differences	The latest approved IRP assume these permanent hydro dam structures operate perpetually until a final retirement date is established. Depreciation Studies tie the retirement date to end of the current active FERC hydro operating license. This is the latest date these facilities can operate as generation resources until a new license renewal is granted pursuant to the satisfaction of its stated conditions. OTP is currently pursuing renewing its FERC Hydro license.
➤ 2 units on outlet of Lake Bemidji – not subject to FERC jurisdiction	No retirement date discussed - IRP assumes operating perpetually	Jun-2021	Program assumption differences	The latest approved IRP assumes permanent hydro dam structures operate perpetually until a final retirement date is established. Depreciation Studies tie retirement date to end of current hydro license for other hydro structures which are of a similar vintage.
PEAKING				
➤ Jamestown Combustion Turbines - 2 units	Jun-2033	Jun-2033	None	The two Jamestown Combustion Turbines have an Average Year of Final Retirement (AYFR) of 2033. The Depreciation Study adopts a mid-year convention where all asset activity is assumed to take place on June 30th of its respective activity years, whether that activity is a plant addition or plant retirement. Therefore the depreciation study has June, 2033 as its retirement date. The IRP in Appendix F also adopts June, 2033 as the retirement month matching the Depreciation filing.
➤ Lake Preston Combustion Turbine	Jun-2033	Jun-2033	None	The Lake Preston Combustion Turbine has an Average Year of Final Retirement (AYFR) of 2033. The Depreciation Study adopts a mid-year convention where all asset activity is assumed to take place on June 30th of its respective activity years, whether that activity is a plant addition or plant retirement. Therefore the depreciation study has June, 2033 as its retirement date. The IRP in Appendix F also adopts June, 2033 as the retirement month matching the Depreciation filing.
➤ Solway Combustion Turbine	Jun-2038	Jun-2038	None	The Solway Combustion Turbine has an Average Year of Final Retirement (AYFR) of 2038. The Depreciation Study adopts a mid-year convention where all asset activity is assumed to take place on June 30th of its respective activity years, whether that activity is a plant addition or plant retirement. Therefore the depreciation study has June, 2038 as its retirement date. The IRP in Appendix F also adopts June, 2038 as the retirement month matching the Depreciation filing.
➤ Fergus Control Center Diesel	No retirement date discussed - beyond study period	Jun-2030	Program assumption differences	IRP assumes retirement is outside of resource plan study period. Depreciation study accounts for assets functionality as control center black start and back up strategic functionality. Unit classified as an Emergency Generator as defined by EPA Rice rules.

Note:
 Otter Tail 's most recently approve IRP was filed under Docket No. E07-RP-16-386. In the RP's, the near-term is intended to be very specific with regard to resource changes, additions, retirements, etc. The long-term is much more uncertain and identifies resources that a utility is likely to use. The depreciation study is intended to be an exact forecast used for appropriate depreciation expense allocation of our current investment over the current plants remaining life. The RP is far less exact in the long-term, so there can be potential difference because of the intended purposes and assumptions the two filings.

CERTIFICATE OF SERVICE

I Marcella Emeott, hereby certify that I have this day, served copies of the following document on the attached list of persons by electronic filing, certified mail, e-mail, or by depositing a true and correct copy thereof properly enveloped with postage paid in the United States Mail at St. Paul, Minnesota.

**Minnesota Department of Commerce
Comments**

Docket No. E017/D-19-547

Dated this 26th day of **December 2019**

/s/Marcella Emeott

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Christopher	Anderson	canderson@allete.com	Minnesota Power	30 W Superior St Duluth, MN 558022191	Electronic Service	No	OFF_SL_19-547_D-19-547
Ray	Choquette	rchoquette@agp.com	Ag Processing Inc.	12700 West Dodge Road PO Box 2047 Omaha, NE 68103-2047	Electronic Service	No	OFF_SL_19-547_D-19-547
Generic Notice	Commerce Attorneys	commerce.attorneys@ag.state.mn.us	Office of the Attorney General-DOC	445 Minnesota Street Suite 1800 St. Paul, MN 55101	Electronic Service	Yes	OFF_SL_19-547_D-19-547
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Generic Notice	Residential Utilities Division	residential.utilities@ag.state.mn.us	Office of the Attorney General-RUD	1400 BRM Tower 445 Minnesota St St. Paul, MN 551012131	Electronic Service	Yes	OFF_SL_19-547_D-19-547
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Daniel P	Wolf	dan.wolf@state.mn.us	Public Utilities Commission	121 7th Place East Suite 350 St. Paul, MN 551012147	Electronic Service	Yes	OFF_SL_19-547_D-19-547