

Memorandum

To: Commissioners Fedorchak, Christmann, and Haugen-Hoffart

From: Chris Hanson
CH

Date: November 12, 2024

Re: Otter Tail Power Company (OTP), 2023 Electric, Annual Report
Case No. PU-24-213

In Case No. PU-17-398, the Commission authorized a return on equity (ROE) of 9.77% for OTP's ND electric rate case. Staff reviewed OTP's electric annual report for 2023. OTP reports a ROE of 9.24% for 2023, which represents an earnings deficiency of approximately \$4.958 million.

OTP reported one major outage event for 2023. An ice storm started on 12/25/23 in the southern portion of Otter Tail's North Dakota Service territory damaging more than 200 transmission and distribution poles and breaking more than 500 cross-arms, affecting service to more than 27,000 customers. Service was fully restored to all communities by 12/29/23 with some remaining pockets of localized outages.

Normalized for major event outages, the system average interruption frequency index (SAIFI, or the average number of interruptions per customer) was 1.47 interruptions per customer, the system average interruption duration index (SAIDI, or the average outage duration per customer) was 110.80 minutes per customer, and the customer average interruption duration index (CAIDI, or the average restoration time) was 75.4 minutes.

OTP is implementing an Outage Management System (OMS), which will have the ability to calculate major event days and reliability indices according to the IEEE 1366 standard at a more granular customer level. There are several phases to this implementation. The initial phases beginning with the Outage Map were completed in December 2022, the GIS update was completed in May 2024 and will culminate with the integration to the Automated Metering Infrastructure in late 2024 or early 2025. The delay in the timelines has largely been due to integration requirements of software systems.

Staff recommends the Commission close the case.

Attachment 1 – Return Calculation

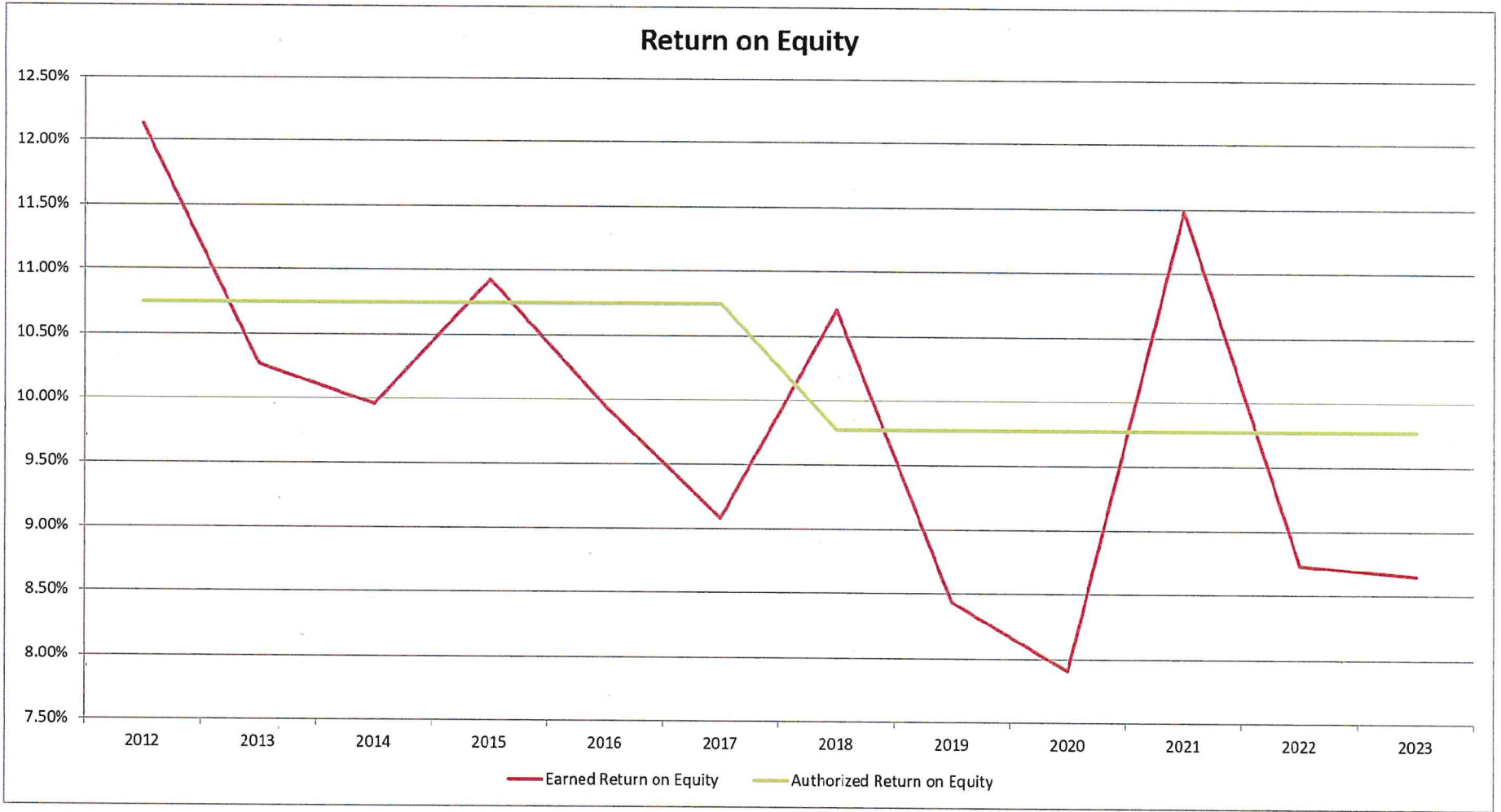
Attachment 2 – Return on Equity Chart

Attachment 3 – Net Operating Income

Attachment 4 – Reliability Indices

Revenue Excess (Deficiency) Calculation:

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Rate Base	\$266,903	\$295,435	\$334,736	\$356,396	\$350,542	\$351,550	\$354,656	\$372,733	\$422,631	\$474,498	\$557,324	\$617,108
Cost of Capital	8.30%	8.15%	8.03%	8.27%	8.22%	8.13%	7.64%	7.63%	7.46%	7.28%	7.25%	7.36%
Return Required	\$22,141	\$24,064	\$26,893	\$29,485	\$28,824	\$28,575	\$27,095	\$28,428	\$31,517	\$34,520	\$40,430	\$45,427
Net Income	24,007	23,317	25,603	29,821	27,340	25,472	28,863	25,790	27,367	35,325	37,323	41,679
Return Excess (Deficiency)	\$1,867	(\$747)	(\$1,290)	\$336	(\$1,484)	(\$3,102)	\$1,768	(\$2,638)	(\$4,150)	\$805	(\$3,107)	(\$3,748)
Income Tax Factor	1.6220	1.6115	1.6115	1.6078	1.6078	1.6078	1.3228	1.3228	1.3228	1.3228	1.3228	1.3228
Revenue Excess (Deficiency)	\$3,028	(\$1,204)	(\$2,078)	\$540	(\$2,386)	(\$4,988)	\$2,339	(\$3,490)	(\$5,490)	\$1,065	(\$4,110)	(\$4,958)
Excess Revenue Sharing												
Customer Refund (Charge)												
Rev. Excess (Def.) after Sharing	\$3,028	(\$1,204)	(\$2,078)	\$540	(\$2,386)	(\$4,988)	\$2,339	(\$3,490)	(\$5,490)	\$1,065	(\$4,110)	(\$4,958)



Otter Tail Power Company
North Dakota Electric Operations
Return Calculation
(\$ in 000s)

Attachment 3

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Operating Revenues	\$138,315	\$148,488	\$160,126	\$156,793	\$154,590	\$155,380	\$160,707	\$158,808	\$148,271	\$165,874	\$209,349	\$205,986
Production	54,798	59,589	66,743	58,885	54,725	57,049	61,605	59,733	48,691	53,029	82,769	74,681
Gross Margins	\$83,517	\$88,900	\$93,384	\$97,908	\$99,865	\$98,331	\$99,102	\$99,075	\$99,579	\$112,845	\$126,580	\$131,305
Change in Margins from Prior Yr	\$12,015	\$5,383	\$4,484	\$4,524	\$1,957	(\$1,534)	\$771	(\$26)	\$504	\$13,266	\$13,735	\$4,724
Transmission	7,117	8,884	10,807	11,668	12,458	12,883	12,259	12,199	11,159	12,119	14,388	13,604
Distribution	7,129	7,545	7,556	7,131	7,668	8,137	8,354	8,367	7,709	7,664	7,839	9,018
Customer Accounting	5,432	5,848	5,820	5,594	5,456	5,641	5,716	5,815	6,657	5,445	6,187	6,460
Cust. Service and Info. Exp.	1,193	1,156	1,107	1,064	1,178	1,017	871	868	936	1,101	1,168	1,190
Sales Expense	140	158	119	18	16	55	47	18	10	31	42	83
Admin. and General	13,142	16,195	17,012	16,331	15,985	16,878	15,427	14,894	15,420	15,416	20,082	19,432
Depreciation Expense	18,601	19,204	18,339	17,734	20,190	20,040	20,549	21,516	23,274	24,842	26,709	28,655
General Taxes	4,544	4,674	5,086	5,148	4,931	5,020	4,863	4,769	5,861	5,943	6,464	6,054
Sub-total (Lines 4-12)	\$57,299	\$63,665	\$65,845	\$64,688	\$67,883	\$69,671	\$68,086	\$68,448	\$71,026	\$72,561	\$82,879	\$84,495
NOI Before Int. & Income Taxes	\$26,217	\$25,235	\$27,539	\$33,220	\$31,981	\$28,659	\$31,015	\$30,627	\$28,553	\$40,284	\$43,702	\$46,810
Income Tax	2,210	1,918	1,936	3,399	4,641	3,187	2,153	4,837	1,186	4,959	6,379	5,131
Net Income	\$24,007	\$23,317	\$25,603	\$29,821	\$27,340	\$25,472	\$28,863	\$25,790	\$27,367	\$35,325	\$37,323	\$41,679

Attachment 4

Reliability Index	2018	2019	2020	2021	2022	2023
System Average Interruption Frequency Index (SAIFI)	1.3143	1.445	1.321	1.181	1.620	1.500
System Average Interruption Duration Index (SAIDI)	85.30	128.20	91.30	79.00	118.60	110.80
Customer Average Interruption Duration Index (CAIDI)	64.90	88.70	69.10	66.89	73.20	75.40