

# Memorandum

To: Commissioners Christmann, Haugen-Hoffart and Fedorchak

From: Chris Hanson, Public Utility Analyst  
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Date: September 22, 2023

Re: Otter Tail Power Company (OTP), Advanced Metering & Distribution Technology (AMDT), Tariff and Rates, Case No. PU-23-275

On July 25, 2023, OTP filed an Application for Approval of Tarriff Changes to Facilitate Implementation of New Advanced Metering and Distribution Technology (AMDT) systems and a Variance to Commission Rules with the North Dakota Public Service Commission (Commission).

OTP was originally granted an Advanced Determination of Prudence (ADP) for this AMDT project in Case no. PU-21-83 and established tariffs and rates (Annual Rider) related to the costs associated with this project in Case no. PU-22-312. The 2024 Annual Rider for this project is filed in Case no. PU-23-283.

There are three primary issues related to this case. These are the proposed variances from the Public Utility Electric Standards of Service (ESS), tariff changes and whether to allow customers to opt out of the AMDT and if so what charges should apply.

The North Dakota Administrative Code (NDAC) sections 69-09-02-10 & 69-09-02-11 denote the frequency of meter readings and how they should be presented on the bill. Currently electricity usage is calculated by subtracting two reads approximately 30 days apart and are presented with the calculated usage on customers' bills. The new system measures usage in 15-minute intervals and only the total usage will appear on the bills, not the meter reading. Staff has no issue with these changes.

The second issue is the changes to the Tariff Sheets related to these changes plus minor alterations to better describe services and provide more consistency in the tariffs between jurisdictions.

Staff notes that in Section 4.01- Meter and Services Installation, OTP states the "Customer must furnish a meter socket that is equipped with lever-style bypass". Northern States Power Company (NSP) is in the process of implementing a similar AMDT system and in Case No. PU-23-307, page 14 notes that NSP plans "to facilitate any necessary minor repairs on the customer's behalf and at the Company's expense" to ensure a timely and efficient roll-out of the Company's new meters. Staff would encourage OTP to adopt a similar approach as part of its AMDT roll-out. Staff has no issues related to the Tariff Sheets other than as noted above.

The last issue is whether OTP customers will be given the opportunity to opt out of the AMDT project and what the corresponding charges should be for opting out and for monthly meter reading.

OTP has proposed that no customers be allowed to opt out of the AMDT system as that requires OTP to maintain duplicate manual process for each of the AMDT functions which is inefficient, requires additional staff and is an indirect cost to the other customers. This also eliminates the two-way communications that is critical to its outage management software and may require the addition of additional infrastructure to account for the unconnected meters.

Regardless of the general opt-out decision, OTP proposes that only customers on the Section 9.01 Residential Rate (M101) be allowed to opt out. Further, these customers must have their meters located outside their home and with no physical barriers. Customers will not be allowed to opt out if they have a history of tampering with meters or have two or missed payments in the last twelve months.

Based upon these criteria, OTP estimates that only about 17,500 of their 46,500 residential customers in North Dakota (ND) would be eligible for the opt-out. Of the 29,000 ineligible customers, approximately 6,500 are not easily accessible, 16,000 have rates other than M101 and just over 10,000 are ineligible due to late payments. This doesn't exactly equal 29,000 as there is overlap between these criteria. OTP estimates that only about 0.5% or 87 of the 17,500 eligible customers would choose to opt out of the AMDT system at the proposed rates if given the choice.

In Case no. PU-22-180, NSP provided an option for ND customers to opt out of their AMDT project and to receive a meter that does not have two-way communications ability. Alex Nesbitt from NSP further stated that their AMDT project is ongoing in ND, but they experienced an overall opt-out of 0.66%, with 0.45% in Minnesota.

If the Commission requires OTP to provide an opt-out of the AMDT system, they are proposing that customers be charged an Up-Front fee of \$226.82 and a monthly fee of \$80.10 for meter reading. As a comparison, NSP requested an opt-out fee of \$40 and a monthly meter reading fee of \$15 in Case no. PU-22-180. The Commission approved \$40 and \$10 respectively.

There are some factors that impact these comparative cost calculations. First, is OTP's low density service area compared to NSP. Secondly, as OTP did not implement the previous generation of automated meter reading, its meters are extremely old by industry standards. Therefore, they have proposed that even customers that opt out will receive the new meters, but OTP will remotely deactivate them after installation. Further, they have noted that deactivated meters cannot be remotely reactivated as is the case with NSP's meters and will need to be physically replaced instead.

Staff considers that OTP's criteria for considering customers that will be eligible to opt out is reasonable. However, based upon the proposed rates, it is likely that the percentage

that opt-out will be below the 0.5%/ 87 estimated. Further, Staff considers the proposed up-front charges are excessive considering that OTP is choosing to install and deactivate the meters regardless of the choice to opt-out. It would seem more reasonable that there be de-activated meters that can be installed without modification for customers choosing to opt-out in advance of the initial installation. Lastly, while Staff realizes that OTP costs to manually read meters will be higher than a denser customer base such as NSP's, the proposed rates seem excessive.

An informal meeting to discuss the case has been scheduled for September 27, 2023.

C. Stuart Tommerdahl, Matthew J. Olson