STAFF MEMORANDUM

TO: COMMISSIONERS AND ADVISORS

FROM: ERIC PAULSON AND KRISTEN EDWARDS

RE: EL22-031 - In the Matter of the Petition of Otter Tail Power Company for Approval of the Transmission Cost Recovery Rider Rate

DATE: FEBRUARY 6, 2023

BACKGROUND

On November 1, 2022, the South Dakota Public Utilities Commission (Commission) received a Petition for Approval of the Annual Update to its Transmission Cost Recovery Rider Rate (Petition) from Otter Tail Power Company (Otter Tail or Company) requesting approval of its annual update to its Transmission Cost Recovery Rider (TCR) rates. The proposed revised TCR rates reflect the TCR revenue requirements for March 1, 2023 through February 29, 2024, including the tracker balance estimated for the end of the current period.

SDCL §§ 49-34A-25.1 through 25.4 authorize the Commission to approve a tariff mechanism for the automatic annual adjustment of charges for the jurisdictional costs of new or modified transmission facilities with a design capacity of 34.5 kV or more and which are more than five miles in length.

In Docket EL10-015, the Commission approved the establishment of TCR rates to recover the costs associated with three transmission projects and Midcontinent Independent System Operator (MISO) Schedule 26 expenses. The Commission approved a Settlement Stipulation supporting the "hybrid" or "split method" approach for allocating MISO approved cost-shared projects with company investment. This method was refined in Docket EL12-054 and Otter Tail continues to apply the refined split method for MISO Schedule 26 and 26A expenses today.[1]

In subsequent years, the Commission approved recovery of additional projects, which were ultimately rolled into base rates in rate case docket EL18-021.

Most recently, in Docket EL21-032, the Commission approved TCR recovery of the 2022 revenue requirement associated with four previously-approved transmission projects (Lake Norden Area Transmission Improvements, Big Stone South to Ellendale, Erie-Frazee and Grant County-Norcross), a transmission adjustment from rate case EL18-021, Southwest Power Pool (SPP) Schedule 9 and Schedule 11 expenses, and MISO Schedule 26 and 26A expenses, offset by MISO Schedule 9, Schedule 26 and 26A, and Multi-Value Project (MVP) Auction Revenue Rights (ARR) revenues. The Commission also ordered that Otter Tail shall file additional information in its next TCR filing regarding all costs and benefits associated with the new 100 MW load customer in North Dakota and specifically address the costs and

[1] See Docket EL16-035 Staff Memorandum, pages 5 and 6 for a synopsis of the refined split methodology.

benefits to South Dakota as well as include any adjustments necessary for 2022 in the true-up calculation, including any appropriate adjustments to jurisdictional allocation factors. The 2022 TCR implemented the following rates for each customer class effective March 1, 2022:

Class	¢/kWh	$/kW
Large General Service	0.226	0.712
Controlled Service	0.124	N/A
Lighting	0.843	N/A
All Other Service	0.626	N/A

In this filing, Otter Tail requested to recover a projected March 1, 2023 through February 29, 2024 revenue requirement of $2,968,042 associated with updated D2 allocation factor, one new project (Oslo to Lake Ardoch Switching Station and 115 kV line), the four previously approved projects, and regional transmission expenses, and revenues. The Company provided updates to the jurisdictional allocators as ordered. The request includes the Company's proposal to collect from customers an estimated $220,063 in under-collection of the prior period's remaining balance. The Company's proposed March 1, 2023 through February 29, 2024 revenue requirement results in the following rates for the respective customer classes, based on a March 1, 2023, effective date:

Class	¢/kWh	$/kW
Large General Service	0.291	0.906
Controlled Service	0.143	N/A
Lighting	0.850	N/A
All Other Service	0.852	N/A

STAFF'S ANALYSIS AND UPDATES

Staff's recommendation is based on its analysis of Otter Tail's filing, discovery information, relevant statutes, and previous Commission orders. Staff's analysis consisted of review of the revenue requirement calculation, class allocation, and rate design. Each of these items are discussed below.

REVENUE REQUIREMENT

Staff reviewed the tracker report for the previous period (March 1, 2022 through February 28, 2023), including review of the actual costs to ensure the costs were prudent and at the lowest reasonable cost to ratepayers and the calculation of the under/over collection balance to be incorporated in the new TCR rates. Staff also reviewed the forecasted March 1, 2023 through February 29, 2024 revenue requirement associated with the one new project, four previously approved transmission projects, the transmission adjustment from rate case EL18-021, MISO Schedule 26 and 26A expenses and revenues, SPP Schedule 9 and Schedule 11 expenses, MISO Schedule 9 and MVP ARR revenues, updated allocation factors and filing fee expense. Detailed descriptions of each of these cost/revenue categories are contained in Otter Tail's Petition in this docket.

Typically, Otter Tail makes a MISO filing for Attachments O, MM and GG and subsequent availability from MISO of updated rates for annual Schedules 26 and 26A Expenses and Revenues and those rates are generally available in January. If the updated MISO rates (or any other updated cost, expense or revenue items) result in a 5% or greater change in the overall revenue requirement than proposed in the initial filing, Otter Tail will submit a supplemental filing updating the information in the filing.[2] The filing updates did not result in a 5% or greater change and therefore no supplemental filing was made.

The following sections provide Staff's analysis of Otter Tail's Filing, updates regarding the impact to Otter Tail customers of SPP expenses, and the forthcoming new load which will impact MISO expenses.

Initial Filing

The March 1, 2023 through February 29, 2024 TCR is based on estimated costs of eligible transmission projects subject to later "true-up" to reflect the actual costs and actual recoveries. Attachment 2 provided with the Company's Filing provides a summary of revenue requirements and Attachment 4 summarizes the tracker activity by month.

Individual project details for the previously approved projects are found on Attachments 5 through 8. Individual project detail for the new project is found on Attachment 9. Attachments 10 through 20 provide details regarding the remaining revenue requirement components.

Oslo 115 kV Switching Station and Oslo – Lake Ardoch 115 kV Line

Otter Tail asks for approval of TCR recovery of one new project, the Oslo 115 kV Switching Station and Oslo – Lake Ardoch 115 kV Line. The revenue requirements associated with this project are found on Attachment 9.

Otter Tail and Minnkota Power Cooperative (MPC) have been involved in a transmission system planning study to closely monitor the load growth in Northwest Minnesota in order to ensure that the system continues to reliably serve customers, especially during winter peak conditions when the transmission system in this area experiences its highest loads and lowest voltages. Table 2 on page 11 of the Petition summarizes the current plan to address the issues.

After analysis of the studies, it was determined that Otter Tail and MPC need to move forward with building the Lake Ardoch 230/115 kV Substation, Lake Ardoch to Oslo 115 kV line, and the Oslo 115 kV Switching Station in order to maintain reliability. Otter Tail and MPC have agreed that MPC will construct the Lake Ardoch 230/115 kV Substation and Otter Tail will construct the Oslo 115 kV Switching Station and the Lake Ardoch to Oslo 115 kV line.

Transmission planning studies have shown that the new Lake Ardoch 230/115 kV Substation, Oslo 115 kV Switching Station, and the associated 115 kV line between these new substations will maintain the reliability of the transmission system for an outage of the Winger source and offer a more resilient

[2] Settlement in docket EL13-029, page 3, paragraph 4, https://puc.sd.gov/commission/dockets/electric/2013/EL13-029/settlement.pdf

system capable of meeting voltage criteria following an unplanned outage during a prior outage condition.

Project Cost Sharing

Otter Tail's TCR continues to apply the refined split methodology approved in Docket EL12-054 for projects cost-shared in MISO. Previous Staff Memorandums, including the memorandum filed in Docket EL12-054, provide a detailed description of the methodology. Should the Commission desire a review of this methodology, a synopsis can be found on pages 5 and 6 of the Staff Memorandum filed in Docket EL16-035.

SPP Related Expenses

As discussed in prior Otter Tail TCR dockets, in 1958, Central Power Electric Cooperative, Inc. (CPEC) and Otter Tail entered into an agreement which required the two parties to contribute equally to the construction of new facilities in the Integrated Transmission System (ITS) and resulted in facility ownership being non-contiguous. In 2016, CPEC placed some of its facilities, including facilities in the ITS, under the SPP tariff. As a result, Otter Tail is dependent on SPP transmission service in order to serve its load. This has subjected Otter Tail to Schedule 9 of SPP's tariff to obtain Network Integration Transmission Service (NITS). Under NITS, Otter Tail and its customers receive the highest level of curtailment priority on CPEC's facilities. This firm service is comparable to the service CPEC has obtained on these facilities to reliably serve their native customers.

Similar to Otter Tail paying for use of CPEC's system in SPP, CPEC needs to pay for their use of Otter Tail's system in MISO. This was also effective January 1, 2016 and flows through to Otter Tail and its customers as a revenue under MISO's Schedule 9. As provided in the Filing, when MISO's Schedule 9 revenue is netted against SPP Schedule 9 expenses, it results in a net impact to the revenue requirement of $117,670.

Otter Tail provided that its efforts to evaluate new facilities to bypass the SPP system have not been completed and no material change from last year's TCRR filing are available. Although Otter Tail was required to renew part of its existing SPP transmission service in 2021 in order to ensure service is not interrupted, Otter Tail elected to only extend its existing SPP transmission service for five years. Otter Tail stated this extension allows Otter Tail to maintain rollover rights of its existing transmission service but does not commit Otter Tail to taking SPP transmission service beyond the next five years, allowing the continued evaluation of building new facilities to potentially bypass the SPP system.

Otter Tail has stated it will continue exploring opportunities to reduce SPP expenses in the future including evaluating additional SPP facility credits for transmission facilities owned by Otter Tail and will continue providing updated information in future filings.

New Material Load Impacting the Revenue Requirement

Otter Tail began serving the new super large load customer located in North Dakota in early 2022 as its facilities came on-line and reach full load by spring of 2022. The new load was reduced for repairs on

Otter Tails system but was subsequently returned to expected load levels of approximately 100 MWs. The intent of the negotiated Super Large General Service rate is to ensure the very large customer, who doesn't fit the standard large general service characteristics, pays at the very least the marginal costs to serve this customer and that other customers are not harmed by the negotiated rate.

In EL21-031 Staff questioned whether these benefits are only for North Dakota customers and what the overall impacts are for South Dakota customers. These benefits may only be realized by South Dakota customers if jurisdictional allocation factors are adjusted to reflect the new load. The Commission therefore ordered that "Otter Tail shall file additional information in its next TCR filing regarding all costs and benefits associated with the new 100 MW load customer in North Dakota and specifically address how these costs and benefits impact South Dakota customers. Otter Tail shall include any necessary adjustments for 2022 in the true-up calculation, including any appropriate adjustments to jurisdictional allocation factors."[3]

Table 3 on page 14 of the Petition shows a side-by-side summary of the changes in expenses and revenues included in the filing this year compared to last year.

As stated on page 16 of the Petition, "Per that tariff, each customer's ESA shall be based upon and reflect either the marginal unit costs expected during the effective rate period or the marginal unit costs plus an appropriate margin determined on a case-by-case basis. Any margin recovered on the incremental costs will collect a share of the Company's costs from the new Customer, thus reducing the fixed costs allocated to existing Customers." The systems benefit amount is listed on confidential page 16 of the Petition.

As Otter Tail points out, how benefits are received by each jurisdiction may vary. The host state receives additional revenues to cover costs to serve the customer. The non-host jurisdictions would receive the benefit in the form of reduced allocation factors thus reducing the various total company costs allocated to the jurisdiction, all else equal.

In EL21-031 the Commission ordered Otter Tail to update its allocation factors used in the TCRR filing. On page 17 and 18 of the Petition Otter Tail provides further details on the allocation tracker update. The D2 allocation factor is used throughout the TCR tracker and has been updated.

Otter Tail notes that the D2 factor from the rate case is used for all time periods prior to January 2022. From January 2022 through December 2022 a forecasted D2 factor was used. This forecasted factor included all new updated forecast amounts, including load changes in all jurisdictions, including but not limited to the new North Dakota Super Large customer load. The forecasted 2023 D2 factor also included updates to anticipated new loads across all jurisdictions.

Table 6 on page 18 of the Petition shows the effects of the updated D2 factor with one exception. The D2 factor for 2023 Forecasted without Additional ND Load should be 10.61% as corrected in response to

[3] Order Approving 2022 Transmission Cost Recovery Rate Adjustment https://puc.sd.gov/commission/dockets/electric/2021/el21-031/EL21-031TCR.pdf

Staff's informal data request. The D2 Factor for 2023 Forecasted without Additional ND Load was not used in the filing other than for illustrative purposes on page 18 and doesn't affect any of the other calculations. A revised chart of the allocation factors is as follows:

Description	D2 Factor
Rate Case	9.20%
2022 Updated Allocation Factor*	10.66%
2023 Forecasted with Additional ND Load	10.54%
2023 Forecasted without Additional ND Load	10.61%
* Actual results through September and forecast for the rest of year	

The difference between the two forecasted 2023 D2 factors of .07% is directly attributable to the new load in North Dakota. This number appears small at first glance but a significant portion of the new load in North Dakota is controllable and therefore does not have a significant impact on the D2 allocator.

In response to Staff's informal DR1-07, Otter Tail indicated increases in large commercial loads in the Lake Norden area have caused overall load growth in South Dakota to be at a faster rate than in other jurisdictions. Therefore, allocation factors are increasing compared to the rate case allocation factors due to the increased load South Dakota is seeing that other jurisdictions are not but are not increasing as much in 2023's forecast compared to the rate case allocation factors due to the new North Dakota load.

CLASS ALLOCATION AND RATE DESIGN

The TCR incorporates the class allocation and rate design methodology approved in rate case EL18-021. The revenue requirement is allocated to four customer classes based on the transmission demand allocation factor, D2, updated in this filing with current information and forecasts. Rates for each customer class are then designed based on forecasted sales for the time period rates will be in effect. Projected sales for each class are created by econometric models using various inputs such as weather data, economic data, customer counts, and historical usage. The large general service class rate design incorporates both a demand charge and an energy charge while the remaining retail rate classes have an energy rate only.

Compared to the rates currently in effect, the proposed revised rates to be effective March 1, 2023 reflect an increase for all classes.

In Docket EL18-048, Otter Tail agreed to track revenue requirements, billings, and the resulting over- or under-recovery by rate class, as opposed to the prior way of tracking at the total revenue requirement and total billings level. This change began in EL19-039 and ensures that TCR true-ups will accurately reflect the class allocations as determined in rate case EL18-021 and minimize cross-class subsidization in the future. This filing tracks revenue requirements and billings by class to obtain class-specific over- and under-recoveries as shown on Attachment 4A.

REASONABLENESS OF OVERALL EARNINGS FROM REGULATED RATES

As established per settlement stipulations in prior TCR dockets, the Company agrees to continue to file, by June 1 of each year, an annual report with the Commission detailing its South Dakota jurisdictional earnings for the preceding calendar year. Staff believes the report is necessary to monitor the Company's earnings and the potential effect of adding the TCR to its South Dakota tariff.

RECOMMENDATION

Staff recommends the Commission approve the $2,968,042 revenue requirement for the March 1, 2023 through February 29, 2024 plan year, with the following rates to be effective March 1, 2023:

Class	¢/kWh	$/kW
Large General Service	0.291	0.906
Controlled Service	0.143	N/A
Lighting	0.850	N/A
All Other Service	0.852	N/A