STAFF MEMORANDUM

TO: COMMISSIONERS AND ADVISORS

FROM: PATRICK STEFFENSEN, JOSEPH REZAC, AND KRISTEN EDWARDS

RE: EL18-048 - In the Matter of the Petition of Otter Tail Power Company for Approval of the Transmission Cost Recovery Rider Rate

DATE: February 12, 2019

BACKGROUND

On October 31, 2018, 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 (OTP 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, 2019 through February 29, 2020, 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. In subsequent years, the Commission approved recovery of additional projects and expenses.

Most recently, in Docket EL17-048, the Commission approved TCR recovery of the 2018 revenue requirement associated with eight previously approved transmission projects, 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 2018 TCR implemented the following rates for each customer class effective March 1, 2018:

Class	¢/kWh	$/kW
Large General Service	0.187	0.549
Controlled Service	0.087	N/A
Lighting	0.334	N/A
All Other Service	0.612	N/A

As the eight previously approved transmission projects are now in-service, OTP has rolled-in recovery of these projects into base rates in rate case docket EL18-021. These previously-approved projects are currently included in interim rates in that docket; however, revenues and expenses associated with MISO and SPP have remained as a part of the TCR. These new TCR rates reflecting these changes went into effect on the date of interim rates on October 18, 2018 and are as follows:

Class	¢/kWh	$/kW
Large General Service	0.182	0.538
Controlled Service	0.069	N/A
Lighting	0.218	N/A
All Other Service	0.421	N/A

In this filing, OTP initially requested to recover a projected March 1, 2019 through February 29, 2020 revenue requirement of $1,605,992 associated with two new transmission projects, Lake Norden Area Project and Big Stone South to Ellendale MVP, SPP Schedule 9 and Schedule 11 expenses, and MISO Schedule 26 and 26A expenses, offset by MISO Schedule 9, Schedule 26 and 26A, and MVP ARR revenues. The request includes the Company's proposal to return to customers an estimated $226,325 in over-collection of the prior period's remaining balance. The Company's initially proposed March 1, 2019 through February 29, 2020 revenue requirement results in the following rates for the respective customer classes, based on a March 1, 2019, effective date:

Class	¢/kWh	$/kW
Large General Service	0.169	0.606
Controlled Service	0.072	N/A
Lighting	0.239	N/A
All Other Service	0.454	N/A

STAFF'S ANALYSIS AND UPDATES

Staff's recommendation is based on its analysis of OTP'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, 2018 through February 28, 2019), 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, 2019 through February 29, 2020 revenue requirement associated with the new transmission projects, MISO Schedule 26 and 26A expenses and revenues, SPP Schedule 9 and Schedule 11 expenses, MISO Schedule 9 and MVP ARR revenues, and filing fee expense. Detailed descriptions of each of these cost/revenue categories are contained in OTP's initial Petition in this docket.

Supplemental Filing

OTP and Staff identified updates to be incorporated into the Company's proposed revenue requirement and OTP submitted a Supplemental Filing on February 1, 2019, to reflect these updates. Staff agrees with OTP's updated 2019 revenue requirement of $1,638,187, including an over-collection of $185,160. This represents an increase of approximately $32,000 from OTP's initial Petition filed on October 31, 2018.

The March 1, 2019 through February 29, 2020 TCR is based on estimated costs of eligible transmission projects subject to later "true-up" to reflect the actual costs and actual recoveries. Table 1 on page 3 of OTP's Supplemental Filing provides a comparison of the Company's originally filed revenue requirement to the revised revenue requirement and pages 1 and 2 provide descriptions of the changes made from the initial filing.

Staff agrees with the changes made, and the following paragraphs provide a brief recap of these changes.

Updated Capital Costs, Revenues, and Expenses

The originally filed TCR was based on actual data through September 2018 and projected activity beginning October 2018. OTP's Supplemental Filing provides an updated report of actual costs and revenues through December 2018. This includes updates to the capital costs, expenses, and revenues for each project as well as MISO expenses and revenues. OTP also updated the MISO forecasts for January 2019 forward. These changes result in an increase to the revenue requirement of approximately $41,000.

Revised Attachment 2 provided with the Company's Supplemental Filing provides a summary of revenue requirements and Revised Attachment 4 summarizes the tracker activity by month. Individual project detail for the two proposed projects, Lake Norden Area and Big Stone South to Ellendale MVP, is found on Attachments 5 and 6, respectively. Revised Attachments 7 through 16 provide details regarding the remaining revenue requirement components.

Capital Structure and Cost of Debt

The initial filing used a capital structure and cost of debt as of December 31, 2017, to calculate the 2019 revenue requirements. OTP updated its 2019 revenue requirement calculation to include a December 31, 2018, capital structure and cost of debt. This update decreases the revenue requirement by approximately $9,000. Furthermore, OTP has agreed to update its TCR to the ROE determined in the rate case, effective October 18, 2018, with a true-up in next year's TCR filing. This ROE will be in effect for all future TCR filings until a new ROE is determined by the Commission.

As stated above, the net result of these changes is an increase of approximately $32,000 to the revenue requirement initially proposed by the Company. Staff next discusses specific revenue requirement topics of interest.

NEW TRANSMISSION PROJECTS

Lake Norden Area Transmission Improvements

The 2018 MISO Transmission Expansion Plan (MTEP18) has recommended substantial transmission upgrades in the Lake Norden, SD area due to an expansion at the Agropur cheese processing plant in Lake Norden. The expansion at the Agropur facilities will ultimately increase peak load from 5.5 MW to 21 MW and create a lack of sufficient capability of the existing 41.6 kV transmission network in the area. OTP has determined this project a necessity to maintain reliability for the growing load in the area.

Even though OTP has indicated this project would not have currently been necessary but for the growing load at Agropur, it believes a transmission plan in this area would have eventually been required given the current system nearing its existing capability. Furthermore, in its 2016 integrated resource plan (IRP), OTP identified an option similar to this Lake Norden Area Transmission Improvements plan in the event OTP was required to retire its fuel-oil fired peaking plant in Lake Preston, SD. And although not a specific driver for this project, the peaking plant in Lake Preston could now retire without jeopardizing reliability to customers within the area.

In addition to the system-wide benefits of this and any transmission project, OTP has agreed to include a future adjustment to reflect the benefit of the additional revenues due to this increased Agropur load (less any cost increases due to changes in jurisdictional allocation factors). The details of this adjustment will be further discussed in Docket EL18-021.

OTP considered two project alternatives to provide long-term, reliable service to Agropur, both utilizing the near-term (Phase 1) radial line from Hetland, SD to Lake Norden as a building block toward the long-term solution. OTP ultimately chose the Phase 2 option that added a 115 kV tie to the planned Astoria 345 kV substation, due to its lower capital cost and better expected reliability performance. This project in total will cost approximately $37.4 million, or $3.4 million as allocated to South Dakota ratepayers.

Big Stone South to Ellendale MVP

OTP has worked with Montana-Dakota Utilities in the completion of a 163-mile, 345 kV transmission project from the Big Stone South substation to a new substation near Ellendale, North Dakota. This project will represent the western most segment in a series of 345 kV MVP lines approved in the 2011 MISO Transmission Expansion Plan (MTEP11) process.

With a total project cost of $115.6 million and an OTP South Dakota cost of approximately $75,000, this project is part of an MVP portfolio that showed a benefit/cost ratio ranging between 1.8 and 5.8 during the initial MTEP11 process, and according to OTP, has continued to show benefits well in excess of costs in subsequent reviews. Once complete, this portfolio of MVPs will allow for the efficient delivery of low-cost generation resources from the western portion of the MISO footprint.

Project Cost Sharing

OTP'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[1].

Staff further notes that SPP Schedule 11 expenses are similar to MISO Schedule 26 and 26A expenses, but an analysis of the applicability of a refined split method does not apply because OTP does not have any transmission investments in the SPP system and therefore OTP is only allocated expenses.

SPP Schedule 7, 8, and 9 Expense and MISO Schedule 9 Revenue

As discussed in prior OTP TCR dockets, in 1958, Central Power Electric Cooperative, Inc. (CPEC) and OTP entered into an Integrated Transmission Agreement to jointly plan, develop, and construct transmission facilities. This 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.

Effective January 1, 2016, CPEC placed some of its facilities, including facilities in the ITS, under the control of SPP. As a result, certain parts of the MISO system and OTP native load is now isolated from direct integration into the MISO system, leaving OTP dependent on SPP transmission service in order to reach other areas of MISO and serve OTP load. This has subjected OTP to Schedule 9 of SPP's tariff to provide Network Integration Transmission Service (NITS). Under NITS, OTP and its customers receive the highest level of curtailment priority on CPEC's facilities. This firm service is comparable to the service CPEC has on these facilities to reliably serve their native customers.

Similar to OTP paying for use of CPEC's system in SPP, CPEC needs to pay for their use of OTP's facilities in MISO. This was also effective January 1, 2016 and flows through to OTP and its customers in MISO's Schedule 9. As provided in the Supplemental Filing, when MISO's Schedule 9 revenue is netted against SPP's Schedule 9 expense, it decreases the revenue requirement by $35,962.

Staff requested OTP provide an update on CPEC's integration into SPP and OTP's efforts to minimize or eliminate its exposure to SPP costs. OTP reported that it has taken several steps over the past year that will reduce SPP expenses and gain more long-term certainty of the existing interconnections with CPEC in the future. OTP stated it has successfully worked with SPP in applying for facility credits and have successfully negotiated a Transmission Interconnection Agreement with CPEC. OTP further stated that it negotiated an Operating Services Agreement with CPEC that will allow OTP to operate certain CPEC facilities that serve the CPEC/OTP integrated load. Otter Tail will continue exploring additional opportunities to reduce SPP expenses in the future and will continue providing updated information and revised rate calculations to South Dakota in future filings.

[1] http://www.puc.sd.gov/commission/dockets/electric/2016/el16-035/memo.pdf

The Supplemental Filing provides the most recent projections of future SPP costs at this time. If OTP is able to lessen the impacts on ratepayers by any means, these changes will be reflected in the true-up mechanism in future TCR dockets.

CLASS ALLOCATION AND RATE DESIGN

The TCR incorporates the class allocation and rate design methodology proposed in the current rate case, Docket EL18-021. The revenue requirement is allocated to four customer classes based on the transmission demand allocation factor, D2, from OTP's current recent rate case, Docket EL18-021. 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.

Going forward, OTP has agreed to track revenue requirements, billings, and the resulting over- or under-recovery by rate class, as opposed to the current tracking at the total revenue requirement and total billings level. This will ensure that next year's TCR true-up will accurately reflect the class allocations as ultimately determined in Docket EL18-021 for the March 1, 2019 through February 29, 2020 plan year and minimize cross-class subsidization in the future.

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 $1,638,187 revenue requirement for the March 1, 2019 through February 29, 2020 plan year. This results in the following rates being effective March 1, 2019:

Class	¢/kWh	$/kW
Large General Service	0.173	0.618
Controlled Service	0.073	N/A
Lighting	0.243	N/A
All Other Service	0.463	N/A