STAFF MEMORANDUM

TO: COMMISSIONERS AND ADVISORS

FROM: PATRICK STEFFENSEN, BRITTANY MEHLHAFF, JOSEPH REZAC, AND AMANDA REISS

RE: EL20-019 - In the Matter of Otter Tail Power Company's Petition for Approval of Phase-In Rider Rate

DATE: July 30, 2020

BACKGROUND

On June 1, 2020, the South Dakota Public Utilities Commission (Commission) received a petition from Otter Tail Power Company (OTP or Company) for approval of its first annual update to its Phase-In Rider (PIR) rate. The proposed PIR rate reflects the PIR revenue requirements for September 1, 2020 through August 31, 2021.

SDCL §§ 49-34A-73 through 78 authorize the Commission to approve a tariff mechanism for the annual adjustment of charges for a phase-in rate plan for rate increases due to plant additions.

Previously, on March 6, 2019, the Commission issued an Order Granting Joint Motion for Approval of Settlement Stipulation; Order Approving Settlement Stipulation in Docket EL18-021. This settlement established OTP's phase-in rider, allowing OTP the opportunity to recover the Merricourt Wind Project (Merricourt) and the Astoria Natural Gas Project (Astoria), along with offsetting revenue credits for new load growth in the Lake Norden area and net savings associated with OTP's retirement of its Hoot Lake Plant. As part of this settlement, OTP agreed to not file a rate case until the test year for such filing reflects twelve months in-service for the Merricourt and Astoria projects, with April 1, 2022 being the earliest OTP can file.

In Docket EL19-025, the Commission approved a $863,665 revenue requirement for the September 1, 2019 through August 31, 2020 plan year and a 3.345 "percent of bill" phase-in rider factor effective September 1, 2019.

In this current filing, OTP requests to recover a projected September 1, 2020 through August 31, 2021 revenue requirement of $1,931,407 associated with the Merricourt and Astoria projects, the revenue credit due to the new load growth in Lake Norden, and the net savings associated with the Hoot Lake Plant (HLP) retirement. The Company's proposed revenue requirement results in a proposed "percent-of-bill" base revenue charge of 7.753 percent.

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 forecasted September 1, 2020 through August 31, 2021 revenue requirement associated with the Merricourt and Astoria projects, Lake Norden load growth credit, and HLP retirement. The September 1, 2020 through August 31, 2021 phase-in rate is based on estimated costs of Astoria and Merricourt, estimated Lake Norden load growth revenue credit, and estimated HLP retirement savings, all subject to later "true-up" to reflect the actual costs, actual revenues, and actual recoveries.

Revenue Requirement Updates and Analysis

Astoria

Astoria is a 245 MW natural gas-fired simple cycle combustion turbine currently being constructed near Astoria, South Dakota. OTP currently projects the Astoria project will be completed on time and under the initial budget. OTP's current cost estimate is $158 million (OTP Total) / $15.8 million (OTP SD), with an estimated in-service date of December 2020.

In the Petition, OTP discussed the Long-Term Service Agreement (LTSA) it entered into with Mitsubishi. Under the LTSA, the manufacturer maintains a parts pool for its fleet of combustion turbines and takes on the risk of the repair and/or replacement of the combustion components. OTP in turn makes prepayments to the manufacturer for major maintenance based on the hours the unit is operated and/or the number of starts until the major maintenance is complete. The annual LTSA fee is $2.0 million (OTP Total) / $0.2 million (OTP SD).

OTP has not entered into any LTSAs in the past. Therefore, Staff inquired as to the analysis completed to determine the prudency of the LTSA. Otter Tail explained that the project team first reviewed data and information from the final two potential turbine suppliers to evaluate consistency between the suppliers. Once the information between suppliers was found to be consistent, the project team made a comparison between the cost over the life of an LTSA versus completing major maintenance as traditionally done with other turbines. Otter Tail found that the net present value for an LTSA was lower cost than the traditional maintenance for the combustion turbines evaluated. In addition to being prudent from a cost perspective, Otter Tail also identified several other benefits to an LTSA. These include, but are not limited to, predictable major maintenance costs, guaranteed outage lengths, unit availability guarantees, warranties, collateral damage coverage, remote monitoring of the unit by the manufacturer, unscheduled outage response time guarantees, and inspections.

Merricourt

OTP is also currently constructing Merricourt, a project consisting of 75 V110-2.0 MW Vestas wind turbine generators with an aggregate nameplate capacity of 150 MW, near Merricourt, North Dakota. At the time of filing, OTP estimated Merricourt to be in-service in November 2020 with a cost estimate of $258 million (OTP Total) / $25 million (OTP SD). OTP expects the project to be completed on time and under budget.

OTP's Petition discussed that its current forecast has Merricourt at reduced output while certain transmission network facilities are being constructed throughout 2021. Merricourt could be subject to MISO's quarterly operating limits until all network facility upgrades are in service. Staff sought additional information regarding the quarterly operating limits, as the output is a key factor in the amount of Production Tax Credits (PTCs) customers receive as a benefit through the rider. OTP explained that a generator seeking to interconnect in MISO has conditional interconnection service until all required upgrades and contingent facilities are completed, and thus is subject to quarterly operating limits.

In March 2019, MISO provided a correction page to the Merricourt Generation Interconnection Agreement (GIA) which included a 345 kV line with an estimated completion date of December 31, 2023 as a contingent facility. While OTP was not concerned about the 345 kV line being a contingent facility since it is relatively remote from Merricourt, it was concerned that the inclusion of this line would keep Merricourt's GIA conditional until the end of 2023 and subject to possible quarterly operating limits. It was not until December 2019 when OTP became aware that other network upgrades were required on transmission facilities near Merricourt, when the GIA for later queued MISO projects was filed. These network upgrades occurring on the MDU and OTP transmission systems between 2020 and 2022 are in the vicinity of Merricourt and are expected to have an impact on the output of Merricourt.

Given these issues were not identified until after construction on Merricourt began, Staff is satisfied with the Company's response. In addition, OTP confirmed it continues to investigate options to minimize Merricourt curtailments due to these upcoming network upgrades. Furthermore, the Company stated that the network upgrades will increase the capacity of the transmission system in the vicinity of Merricourt once they are completed, which all Otter Tail customers will benefit from.

Lake Norden Area Load Growth Credit

OTP used the same methodology for calculating this adjustment to the Rider as was used in Docket EL19-025. However, as described in detail in OTP's petition and discovery, there are three updates to the model that change the credit from what was estimated last year.

1) The OTP customer experienced unexpected equipment efficiencies and lower demand than anticipated, causing a reduction of over 10 million kWh in estimated load growth.

2) Last year's filing included the correct baseline sales for the customer, but it utilized the rates in effect prior to final rate implementation to determine baseline revenues, so a correction to baseline revenues is now used in the calculation.

3) Due to the decrease in estimated load growth, OTP has now included an estimate of revenue in recognition of an electric service agreement with the customer.

As shown in Attachment 3 in this docket, as compared with Revised Attachment 3 in EL19-025, these changes increase the April 2019 through August 2020 credit amount by approximately $293,000.

Hoot Lake Plant Retirement Savings

The settlement in EL18-021 requires OTP include net savings associated with the HLP retirement within the PIR. OTP expects HLP to continue to incur normal operational costs through May 2021, so June through August of the coming PIR plan year and going forward will include these credits.

OTP has indicated that once HLP is fully decommissioned the labor part of the HLP credit will include the difference between the 37 full time equivalent employees in the 2017 test year and the expected four remaining employees that will continue at HLP to service ongoing hydro operations, leachate hauling, and site reclamation.

Supplemental Filing

OTP and Staff identified updates to be incorporated into the Company's proposed revenue requirement, and OTP submitted a Supplemental Filing on July 29, 2020, to reflect these updates. Staff agrees with OTP's updated rider revenue requirement of $1,624,525. This represents a decrease of approximately $307,000 from OTP's initial Petition filed on June 1, 2020.

Section II of OTP's Supplemental Filing provides a description 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 and Collections

The originally filed phase-in was based on actual data through April 2020 and projected activity beginning May 2020. OTP's Supplemental Filing provides an updated report of actual costs and collections through June 2020. Included with this update, OTP has also updated the 2019 property tax rates, 2020 book depreciation rates, and 15-year MACRS half year convention tax depreciation table for the generation projects.

Revised Attachment 1 provided with the Company's Supplemental Filing provides a summary of revenue requirements and Revised Attachment 3 summarizes the tracker activity by month. Individual project detail for the two projects is found on Revised Attachments 4 and 5.

Corrected Capital Structure

During discovery, Staff identified two errors involving the capital structure being used for the Astoria and Merricourt projects.

1) The capital structure when using long- and short-term debt costs used ratios that were calculated using a 13-month average and needed to be corrected to use the ratios based on December 31st of the prior year, consistent with the EL18-021 settlement stipulation.
2) The Merricourt capital structure (when using only long-term debt) used in the calendar year 2020 revenue requirement utilized the debt and equity ratios as of December 31, 2018. This needed to be corrected to utilize the debt and equity ratios as of December 31, 2019.

The corrected capital structures using the corrected ratios can be found on Revised Attachment 4 and Revised Attachment 5.

Corrected Allocators

In the initial filing, OTP utilized the D1 and E2 allocation factors which tied most closely to the corresponding filing date for the calendar year. However, this approach didn't update the allocators at the beginning of the plan years. OTP has corrected this to more appropriately use the D1 and E2 factor that corresponds to the recovery period as calculated in Attachment 6c to the initial filing rather than the calendar year. The corrected allocators can be found on Revised Attachment 4 and Revised Attachment 5.

Updated Electric Service Agreement Revenue

As indicated above, OTP now includes an estimate of electric service agreement revenue within the Lake Norden Area Load Growth Credit due to a decrease in estimated load growth from its customer. OTP wishes to include a recognition of these revenues at this time to help reduce rate volatility, realizing the amount will eventually be trued-up to actual. Upon further review, OTP has included an update to this amount in the supplemental filing, further decreasing the revenue requirement.

Updated Generator Interconnection Costs and Revenues

In the Supplemental Filing, OTP updated the interconnection costs and revenues for Astoria and Merricourt and included greater detail for the transmission interconnection upgrades necessary for these projects. OTP identifies the Net Self-Fund Transmission Payment for Merricourt interconnection which is related to other transmission owners self-funding transmission upgrades needed for facilities to accommodate the generator interconnection of Merricourt. OTP also identifies the Net Self-Fund Transmission Payment for Astoria interconnection, which is a credit due to OTP's self-funded transmission investments related to Astoria that it receives facility payments for from other transmission owners. This change results in a decrease of less than $1,000 to the revenue requirement.

As stated above, the net result of these changes is a decrease of approximately $307,000 to the revenue requirement initially proposed by the Company.

CLASS ALLOCATION AND RATE DESIGN

OTP proposes to continue the "percent-of-bill" rate design method for the phase-in rider. This is calculated by dividing the total phase-in rider revenue requirement by the total base rate revenue for the recovery period. OTP believes this method is simpler to administer while providing a fair and representative rate design for the cost responsibility among and within the classes.

Staff supports this method for the reasons stated above and understands this method will appropriately distribute the revenue requirement uniformly among customers. The revisions to the revenue requirement in the Supplemental filing changes the “percent-of-bill” phase-in rider factor to 6.521 percent, effective September 1, 2020. OTP states the impact of the change in rates for a residential customer using 1,000 kWh per month is an increase of $2.30 per month.

RECOMMENDATION

Staff recommends the Commission approve the $1,624,525 revenue requirement for the September 1, 2020 through August 31, 2021 plan year. This results in a 6.521 “percent of bill” phase-in rider factor effective September 1, 2020.