

**STATE OF NORTH DAKOTA**  
**PUBLIC SERVICE COMMISSION**

**Public Service Commission  
Demand Response  
Investigation**

**Case No. PU-22-145**

**ORDER ON DEMAND RESPONSE**

**February 7, 2024**

**Preliminary Statement**

On November 15, 2021, the President of the United States signed The Infrastructure Investment and Jobs Act ("IIJA"), H.R. 3684, 117<sup>th</sup> Cong. (2021). Pursuant to the IIJA, Section 111(d) of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. 2621(d)) was amended ("Amendments") by adding the following standard:

Each electric utility shall promote the use of demand-response and demand flexibility practices by commercial, residential, and industrial customers to reduce electricity consumption during periods of unusually high demand.

On March 30, 2022, the Commission issued an Order Requesting Comment on Demand Response Rate Mechanisms requesting each electric public utility file written comments that provide:

- a. A report of existing demand response and demand flexibility practices used by commercial, residential, and industrial customers to reduce electricity consumption during periods of unusually high demand for service to North Dakota, as well as adjoining jurisdictions;
- b. Current rate mechanisms employed for timely recovery of the costs of demand-response and demand flexibility practices;
- c. Previous actions taken by the Public Service Commission or State Legislature to implement the standard or a comparable standard;
- d. Opportunities to further promote the use of demand-response and demand flexibility practices to reduce electricity consumption during periods of unusually high demand; and
- e. Any other information that the Commission should consider.

On June 15, 2022, written comments were filed by Montana-Dakota Utilities (MDU), Northern States Power (NSP), and Otter Tail Power Company (OTP).

On September 7, 2022, the Commission issued a Notice of Public Hearing scheduling a Public Hearing to take place on November 17, 2022, in the Commission

Hearing Room, 12<sup>th</sup> floor, State Capitol, Bismarck, North Dakota, with the issue to be considered of whether the Commission should consider establishing rate mechanisms to allow an electric public utility to timely recover the costs of promoting demand-response and demand flexibility practices.

On November 17, 2022, the Public Hearing was held as scheduled.

On November 23, 2022, NSP filed a response to questions raised during the November 17, 2022, Public Hearing.

On November 29, 2022, MDU filed a response to how many customers are eligible for demand response rates raised during the November 17, 2022, Public Hearing.

### **Discussion**

MDU currently has two mechanisms in place for demand response options for commercial and industrial customers. MDU offers an Interruptible Large Power Demand Response – Rate 38, which is available to customers having a demand of 500 Kw or more and the ability to shed their entire load when called upon. MDU currently offers this rate to eligible customers in North Dakota. Currently, there is a total of 17.6 MW of interruptible load available through the interruptible rate.

MDU also offers a Demand Response Resources (DRR) program to commercial and industrial customers with a curtailable load of 25 KW or greater. MDU has partnered with a company, CPower, to administer this program and it is available to customers served by MDU's integrated electric system. Customers who enroll in this program work with CPower to develop a curtailment plan and nominate into the program for the summer season (June 1 – September 30) and the winter season (October 1 – May 31). Customers receive a quarterly demand payment from CPower based on their enrolled Kw, and an energy payment for any interruptible events that may occur.

As of June 2022, MDU has a total of 33 customers enrolled in the DRR program with a curtailable load of 27.6 MW. MDU's goal is to have a total of 40 MW enrolled in the DRR program. The DRR program is treated as system supply. Costs for this program are recovered in the Fuel and Purchased Power Adjustment – Rate 58, which is filed monthly.

MDU tests the Demand Response annually and has only implemented a curtailment once in 2019 during a polar vortex event.

MDU has evaluated a residential air conditioning cycling program as part of the Integrated Resource Plan (IRP) process. MDU has not implemented this program and plans to continue to evaluate its feasibility for residential customers.

Additionally, MDU issued a request for proposal for an Electric Energy Efficiency Potential Study. The purpose of this study is to quantify the amount of cost-effective electric energy savings achievable through identified energy efficiency measures. In

addition to determining the achievable electric energy savings, MDU is also seeking a plan for electric energy efficiency program design and delivery.

MDU has 78 customers in North Dakota that meet the minimum demand requirement. Rate 38 is an optional rate, which may not be appealing to certain customers because of its interruptible requirement. MDU currently has four customers taking service under Rate 38.

NSP has engaged in demand response efforts since the early 1990's. The Company has recently begun to pilot other types of demand response activities, specifically those allowing demand flexibility.

NSP stated that traditional demand response has been to shed or curtail load and is often utilized for contingency events. NSP stated in recent years they have adjusted these programs to include economic opportunities and geotargeting and are accomplished through their programs such as the Saver's Switch direct load control program and the Peak-Controlled Service Tariffs.

NSP offers several demand response programs: AC Rewards, Electrical Rate Savings, Peak Partner Rewards, Saver's Switch, EV Optimization Pilot, Peak Flex Credit Pilot, Load Shifting, Residential Time of Use Pilot, General Time of Use Pilot, and Critical Peak Pricing Pilot. NSP is allowed to recover the costs of demand response and demand flexibility programs either through rate riders, base rates, or a combination of riders and rates in the states in which they are approved.

The Commission has approved three demand response or demand flexibility programs in North Dakota -- Electric Rate Savings, specifically Peak Controlled Services; Tier 1 Energy Control Rider; and Saver's Switch.

NSP states it continues to expand its demand response portfolio and has focused its efforts on expanding load flexibility as they grow demand response as a resource.

Demand Response programs are core service offerings utilized by approximately one-third of OTP customers. OTP has a variety of both direct load control (DLC) and time of use (TOU) Demand Response offerings for residential and non-residential customers. In a DLC program, customers receive a discounted rate or bill credit in return for the installation of switching equipment that OTP can use to stop operation of energy-intensive equipment during peak events. Two TOU programs provide customers prices for electricity that differ based on the time of usage. This can include rates that are sensitive to peak pricing events, with day-ahead notification of such events, or rates that provide fixed peak, shoulder, or off-peak rate schedules.

OTP uses Demand Response to respond to capacity events called by Midcontinent Independent System Operator (MISO), to manage maintenance events on the OTP system, and for economic control to reduce or avoid the need to purchase energy during higher priced periods. The alternative to Demand Response is to purchase additional

energy from the market during periods when prices are high and to secure additional accredited capacity through either contracts or the construction of new generation.

OTP offers six Direct Control rates (DLC) and seven Time of Use Rates (TOU) that support the Company's Demand Response initiatives and provide flexibility and savings for residential, commercial, and industrial customers. Each of the DLC rates provides a discounted rate or bill credit. The six DLC rates are Off- Peak, Large Dual Fuel, Small Dual Fuel, Thermal Storage, Residential Service Demand Control, and Cool Savings. The meter count for the DLC participation in North Dakota is 17,831.

The seven TOU rates are General Service Time-of-Use, Large General Service – Time of day, Super large General Service, Standby Service, Irrigation Service, and Fixed Time of Delivery Service. The meter count for the TOU participation in North Dakota is 404.

OTP stated sign up for Demand Response has decreased over the last several years and they are working to maintain the current levels of participation in their Demand Response offerings.

OTP stated their current Demand Response system is aging and the beginning of replacement has started with their Advanced Metering Infrastructure project, which has been approved by the Commission. The Advanced Metering Infrastructure will potentially open more Demand Response possibilities for OTP.

MDU, NSP, and OTP all have demand response programs.

The PSC has been involved in demand response and has approved demand response riders prior to the amendment of the IJA act.

MDU, NSP, and OTP continue to evaluate their demand response programs for additional efficiencies and opportunities. They continually review participation in the programs and look for additional cost-based incentives to increase adoption of demand response options by their customers.

## **ORDER**

The Commission orders:

1. The Commission has held the required hearing on how electric utilities promote the use of demand response and demand flexibility practices by commercial, residential, and industrial customers to reduce electricity consumption during periods of unusually high demand. The Commission has determined that based on the comments provided no changes to laws, rules, tariffs, or rates related to demand response or demand flexibility need to be addressed at this time.

PUBLIC SERVICE COMMISSION

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