

**MONTANA-DAKOTA UTILITIES CO.
SOUTH DAKOTA PUBLIC UTILITIES COMMISSION
SET 1 DATA REQUESTS
ISSUED NOVEMBER 3, 2020
RESPONSES DUE NOVEMBER 17, 2020
DOCKET NO. EL20-028**

- 1-5. Provide a list of all inputs and assumptions used in the model to determine the avoided energy costs. Also, provide the source/basis for each input/assumption and indicate any that are required by other jurisdictions. Outline any new sources or major inputs that have been made by MDU in the past year.**

MDU Response:

Customer load forecast	2021-2040 MDU Load Forecast with updates for 2019
Typical hourly load profile	2011 MDU customer load profile
MDU Owned generating resources	Actual information
Committed generating resources	None
Power Purchase Agreements	Minnkota Power Purchase Agreement (30 MWh firm June 2021-May 2022) (75 MWh firm June 2022-May 2026) (75 ZRCs June 2021-May 2023) (30 ZRCs June 2023-May 2026)
Generating unit heat rates	Generator performance data
Generating unit O&M costs	MDU forecast
Generator outage schedules	MDU outage forecast
Generator retirement dates	Lewis & Clark 1 – 3/31/2021 Heskett 1 & 2 - 3/31/2022
Coal fuel pricing	MDU Power Production forecast
Natural Gas fuel pricing	MDU Gas Supply forecast – with 3% escalator
Fuel oil pricing	Current pricing
Hourly wind production	2017 data for each wind project
MISO Market Energy Purchases	Hourly max of: 250 MW – 2020 300 MW – 2021 400 MW – 2022 300 MW – 2023 +
MISO Energy Market price	MDU forecast – 3 year historic avg with 3% escalator