

January 12, 2018

Montana Public Service Commission
1701 Prospect Avenue
Helena, MT 596020

RE: Docket No. N2017.9.73

Dear Commissioners,

Please accept the attached comments from the Energy Office at the Montana Department of Environmental Quality regarding the biennial filing of an electric integrated resource plan for Montana-Dakota Utilities.

Please don't hesitate to contact me at (406) 444-6588 or landersen3@mt.gov if you have any questions. Thank you for considering our comments.

Sincerely,



Laura Rennick Andersen
Chief, Energy Bureau (Montana Energy Office)
Montana Department of Environmental Quality

Service Date: January 12, 2018

**DEPARTMENT OF ENVIRONMENTAL QUALITY
BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MONTANA**

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**IN THE MATTER of Montana-Dakota Utilities)
DIVISION**

UTILITY

**biennial filing of an electric integrated resource plan)
N2017.9.73**

DOCKET NO.

- 1) The Department of Environmental Quality (DEQ) is required to comment on integrated least-cost plans submitted to the Public Service Commission. According to 69-3-1205 (2) (a) MCA, DEQ “shall review a plan and comment on the need for new resources, the alternatives evaluated to meet the need, the environmental implications of the resource choices, and other related issues that it considers important.”
- 2) DEQ supports Montana-Dakota Utilities’ (MDU) move to create a new Residential LED Lighting Program. In recent years, LED technology has rapidly progressed, in terms of price point, lighting quality, and durability. Promoting and incentivizing the increased use of LEDs will assist MDU customers in lowering their overall energy usage and utility bills more quickly.
- 3) As is noted on page 19 of Volume I of MDU’s 2017 Integrated Resource Plan (IRP), MDU’s demand-side management (DSM) analysis is completed on a state-by-state approach. DEQ recommends MDU provide information on whether there are additional operational efficiencies or economies of scale that would be possible if MDU’s DSM programmatic efforts were uniform across its Montana, North Dakota, and South Dakota service territories.

- 4) MDU notes on page 2 of Volume III that part of the reason MDU's achievable energy efficiency potential is lower than the national average is because there are limited contractor networks in MDU's service territory. DEQ recommends MDU further assess how the utility might be able to address this market barrier and develop future programs to cost-effectively promote expanded contractor capabilities and networks within its Montana service territory.
- 5) DEQ understands the financial reasons for MDU suspending its Wi-Fi Thermostat Demand Response program; however, it is unfortunate to see MDU relinquish the opportunity presented in the residential program. This new area of demand response (DR) has the potential to deliver significant benefits to MDU and to its customers, who would have had the potential to reduce their utility bills during four high cost months for residential customers with air conditioning. DEQ recommends MDU continue to look closely at expanding its DR programmatic offerings within the residential and commercial sectors and consider sector diversity as a key benefit when selecting its DR programs.
- 6) DEQ recommends that MDU include within its future integration and risk analysis a scenario for high growth in distributed generation (e.g., distributed generation growing to meet 3-5% of MDU retail sales 10 years into the future). DEQ believes these results may generate distinctly different results from the low-growth scenario forecast because distributed generation typically does not uniformly generate electricity and reduce system load across the day, month, and year.
- 7) Based on promising recent requests for proposal (RFP) results in other western states, DEQ encourages MDU to consider hybrid renewable energy plus energy

storage systems in their future supply-side analyses. As generation and capacity costs for wind and solar energy and energy storage systems continue to drop, the potential to combine renewable energy resources with energy storage has the potential to dramatically change future utility supply plans. Because these technologies are still, in many cases, emerging technologies, they may transition from being uneconomical resource options to market-leading, least cost resources within the span of one or two IRP biennial periods. As such, DEQ recommends MDU continue to closely evaluate not only the submissions they receive within their own supply RFP processes, but also the reported public bids that other western and midwestern utilities receive for combined renewable energy and energy storage projects.

- 8) DEQ recommends MDU evaluate and confer additional value on energy storage technologies where appropriate for their potential value not solely as a source of capacity. Energy storage technologies should be evaluated as a resource that could be located strategically within MDU service territory to assist the utility in mitigating transmission constraints, defer grid infrastructure investments, and as a potential resource that can provide additional ancillary services. These additional benefits would improve the stability of MDU service territory as well as the larger MISO region.
- 9) DEQ commends MDU for continuing to increase the discussion and data made available in the utility's biennial IRP submission to the Montana Public Service Commission. The additional discussion and data provided improves the transparency of MDU's demand and supply side planning efforts, allowing both regulators and the public to better understand the costs and risks that the utility

and its customers will face in the future.

10) This concludes DEQ's comments.

STATE OF MONTANA
Department of Environmental Quality

by: 

Garrett Martin
Energy Resource Professional