

MONTANA-DAKOTA UTILITIES CO.

Work Session

Electric Vehicle Charging Stations

NORTH DAKOTA PUBLIC SERVICE COMMISSION

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PowerPoint Presentation
Montana-Dakota Utilities Co.



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Introduction

Good Afternoon and joining us on the call today from Montana-Dakota is:

- Travis Jacobson – Director Regulatory Affairs
- Tamie Aberle – Director Regulatory Affairs
- Karl Liepitz – Assistant General Counsel
- Larry Oswald – Director Business Development & Energy Services

Electric Vehicles (EV) Overview

- Electric vehicle use is growing and expected to increase across the country
- Original Equipment Manufacturers are expected to release several additional models in the next 2-5 years
- Current EV ownership in ND is limited. (193 hybrid & 166 electric)
- Montana-Dakota believes EV adoption by our customers is also growing, however expects EV adoption rates will be slower than other areas of the country due to loss of range during winter months

EV Charging Infrastructure

- Montana-Dakota currently supplies electricity to several Level I and Level II chargers under the applicable general service rate schedules
- Montana-Dakota currently supplies electricity to Tesla Level III chargers in Bismarck & Dickinson under the Large General service Rate 30
- Overall Level III Fast charging infrastructure in ND is limited but is expanding with VW settlement funding projects that have been announced. (3 planned in Montana-Dakota service territory)
- In the near-term Montana-Dakota does not have plans to own or operate EV chargers except for our own fleet use

EV Impacts

- Load growth potential for expanded EV charging infrastructure.
 - The Company suggests this load growth should be based on cost-based rates for all providers and not incentive rates
- EV chargers in homes and business could require distribution system and service upgrades depending on existing infrastructure and current loading.
 - EV Charging infrastructure expansion and any electric system upgrades required would be reviewed based on existing electric extension policy.

EV Planning

- Montana-Dakota is researching the possibility of developing an EV charging rate for residential and commercial customers
 - Cost based
 - A Time-of-Day based rate specific to EV charging, if supported, rather than currently offered Time-of-Day rates
 - Separately metered
- Montana-Dakota is evaluating EV applications for our fleet vehicles
 - Economics of EV ownership
 - We expect additional light duty options available in 2022-2023
 - Heavy duty and specialized options are currently limited

ND PSC Role in EV Infrastructure

- ND PSC approval would be required for Investor Owned Utilities to offer EV charging rates or incentives
- Montana-Dakota's rates currently prohibit sale for resale.
 - Most commercial EV chargers charge by time versus by units of energy.
 - Rates charged by commercial EV chargers most likely include more than just the cost of energy.
 - Possible changes to sale for resale provisions could be required for EV chargers if deemed necessary by the Commission.



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