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Docket No. E,G999/CI-19-160

Information Request Docket No. E999/AA-18-373

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Minnesota Department of Commerce Division of Energy Resources Information Request

Docket Numbers:E999/AA-18-373⊠ Nonpublic□ PublicRequested From:All Regulated Electric UtilitiesDate of Request: 5/8/2019Type of Inquiry:GeneralResponse Due: 5/20/2019

Requested by: Adam Heinen/Angela Byrne/Sachin Shah

Email Address(es): adam.heinen@state.mn.us/angela.byrne@state.mn.us/

sachin.shah@state.mn.us

Phone Number(s): 651-539-1825

Request Number: 27

Topic: MISO Penalties

Reference(s):

Request:

Please provide the following:

- a. The amount of MISO penalties by charge type incurred during the recent severe cold weather event:
- b. An estimate of when this information will be available and, when this information is available, please provide this information in Microsoft Excel format;
- c. A detailed explanation of how these penalties will be assigned and passed on to other utilities in the Load Balancing Area (LBA) and ratepayers; and
- d. A detailed explanation of why these penalties were incurred and whether the utility has identified a specific reason or entity that is responsible for the penalty.

If this information has already been provided in initial petition or in response to an earlier Department-DER information request, please identify the specific cite(s) or Department-DER information request number(s).

Company Response:

a) The net amount of the MISO Performance Penalty incurred related to the recent severe cold weather event is \$273,975.36 through the "Miscellaneous" MISO Market Charge Type. This charge consists of two parts; the penalty incurred by Minnesota Power and the redistribution of the penalty to load serving entities in the area of the emergency area based on load ratio share. The original penalty charge was

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Response Date: June 20, 2019
Response by: Laurel Udenberg

Email Address: ludenberg@mnpower.com

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the related redistribution to Minnesota Power was	
resulting in a net charge of \$273,975.36.	[TRADE SECRET DATA EXCISED]

- b) The charge is shown on Minnesota Power's S-105 statement for operating day January 30, 2019 with updated charges shown on the S105 for operating day February 8, 2019. Minnesota Power received the calculation of the penalty from MISO on April 26, 2019 and the calculation is included as Attachment 1 to this response.
- c) Per MISO's Post Operating Processer 5 Minute Calculation Guide MS-OP-031-r29, the revenues from the LMR penalties are allocated, pro rata, on the metered Load Ratio Share, to Market Participants representing the LSEs in the Local Balancing Authority Areas that experienced the Emergency. This charge appeared on Minnesota Power's MISO Market invoice received on May 21, 2019 and payable on May 28, 2019. It is not Minnesota Power's intention to pass the net charge on to the ratepayers through the Fuel Clause Adjustment.
- d) Minnesota Power met and exceeded MISO's request for implementation of Load Modifying Resources (LMR) during MISO's Maximum Generation EEA2b Event on January 30. The LMR penalties assessed by MISO were due to an administrative error by Minnesota Power.

On January 30th at 05:37 CDT MISO issued LMR Scheduling Instructions to Minnesota Power. LMRs are comprised of Demand Resources (DR) and Behind the Meter Generation (BTMG) that provide capacity to MISO. Operators acknowledged the Scheduling Instructions in the MISO MCS tool and began to implement the LMRs as instructed. The LMR implemented by Minnesota Power consisted of both BTMG and Demand Resources. Table 1 shows MISO's Scheduling Instructions and Minnesota Power's LMR implementation for the hours which incurred a MISO LMR penalty.

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Table 1: Comparison of MISO LMR Scheduling Instructions and Minnesota Power Implementation (Times shown in Central Daylight Time)

Hour Ending	MISO LMR Scheduling Instruction Issued 05:37	MISO LMR Scheduling Instruction Revised 09:49	Minnesota Power LMR Implementation
8	126.2 MW		132.58 MW
9	126.2 MW		171.94 MW
10	126.2 MW		175.59 MW
11	286.2 MW	126.2 MW	192.96 MW

Even though Minnesota Power exceeded MISO's LMR Scheduling Instructions, the operator did not accurately complete the Advanced Reporting Screen in the MISO Communication System LMR tool. The Advanced Reporting Screen is used to identify which LMRs are to be utilized and their associated MW levels to meet the total MWs contained in the Scheduling Instructions. The Advanced Report Screen defaults to the maximum amount of the LMR resource that is in the LMR Availability Screen. MISO calculated the LMR penalties using the amounts shown in the Advanced Reporting Screen, not the actual LMR Scheduling Instructions. Thus an administrative error on the Advanced Reporting Screen resulted in Minnesota Power's penalty assessment. The penalty was not the result of Minnesota Power not supplying LMR to MISO when requested.

Minnesota Power did have two BTMG that were not able to meet their availability; and even with these two BTMG not being able to meet their scheduling requirements, Minnesota Power still delivered more than the amount of energy requested by MISO in the LMR Scheduling Instruction.

Minnesota Power communicated the BTMG operational issues to MISO and the units were not disqualified as a capacity resource nor received a Disqualification Penalty.

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It should be noted that only 21% (103 out of 502) of LMRs met their Measurement and Verification (M&V) for Module E compliance from the January 30th event. MISO declared administrative errors such as Minnesota Power's to be out of M&V compliance for Module E.

MISO and Market Participants have created a Demand Response and MCS Alignment Task Team to provide a forum for Stakeholders to provide input into the rewrite of the MISO Communication System (MCS) and alignment of Demand Response tools. Minnesota Power is participating on this task team and has also updated its internal procedures to address deficiencies and reduce the risk of incurring these types of penalties in the future.

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MP LBA AO Resource Name	MECT Reg MW M&V	Acknowledge SI	HE 9 AR HE 10 AF	R HE 11 AR	HE 12 AR I	HE 13 AR	HE 9 Actual	HE 10 Actual	HE 11 Actual	HE 12 Actual	HE 9 Result	HE 10 Result	HE 11 Result	HE 12 Result
MPM MP MPM														
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MPM MP MPM MPM MP MPM														
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HE 9 LMP HE 10 LMP HE 11 LMP HE 12 LMP HE 9 PEN HE 10 PEN HE 11 PEN HE 12 PEN Penalty

Net Penalty \$ 273,975.36

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DOC IR 27 Attach 1 Docket No E999/AA-18-373.