

RICK SNYDER GOVERNOR BRIAN CALLEY LT, GOVERNOR

August 17, 2016

John Lawhorn Senior Director of Policy and Economic Studies Midcontinent Independent System Operator P.O. Box 4202 Carmel, IN 46082-4202

Dear Mr. Lawhorn,

The Michigan Agency for Energy (MAE) requests that the Midcontinent Independent System Operator (MISO) conduct system analyses to help the State of Michigan better understand the potential production cost savings, reliability, and resource adequacy benefits of transmission including increased import capability, and generation expansion in Michigan. MISO's regional planning and modeling expertise will be invaluable to us as we set Michigan on a path toward adaptable, reliable, affordable and environmentally protective energy. Specifically, we would ask that MISO conduct a near and long term evaluation of transmission expansion better connecting the Upper Peninsula of Michigan to our Canadian neighbors as well as to lower Michigan.

Many fundamental characteristics of the Bulk Electric System (BES) have evolved over the last five years on both sides of the international border, and change to the system is expected to accelerate within Michigan. With so many changes to the overall MISO system, but especially the challenges that Michigan residents and business face, it is critical for Michigan that MISO conduct analyses that consider updated system assumptions and scenarios specific to Michigan's unique peninsulas. For MISO's consideration, an attachment to this letter outlines recent and expected changes to the electricity system that could have an impact in Michigan.

Specifically, MAE requests that MISO conduct a near and long term regional evaluation of potential production cost savings, reliability, and resource adequacy benefits of transmission and generation expansion in MISO's northern footprint, specifically Michigan's eastern Upper Peninsula (part of Zone 2) up to Sault Ste. Marie, Ontario and northern Lower Peninsula (Zone 7) at the Straits of Mackinac down to the northernmost portion of the existing 345 kV transmission line near Gaylord, MI. Alternatively, MAE requests MISO update its 2012 Northern Area Study for these same Michigan areas, but in that event, to work more closely with the Ontario grid operators to ensure possible benefits are fully studied, as we understand the interconnection is to an area that has high production potential compared to the load but constrained transmission. Ontario's next Long-Term Energy Plan process will commence this summer, so this may be an excellent opportunity to work together.

Further, MAE is interested to know the impacts that a new natural gas-fired electric generating station located strategically in northern lower Michigan could have on the BES, especially in conjunction with the transmission upgrades. As you know, Michigan is likely to have to add capacity, likely in the form of a natural gas plant, in the near term. An evaluation as to the ability of strategic location of that plant to be part of an overall cost-lowering strategy is something that would be especially beneficial at this time.

Specifically, MAE would like MISO to model the production cost savings, reliability, resource adequacy, and power flows that would result from a natural gas-fired generating station located in the northcentral Lower Peninsula of Michigan. The optimal site to model new gas-fired generation is near existing underground natural gas storage fields in Otsego and Kalkaska counties, intrastate natural gas pipelines, and 345 kV electric transmission lines in the northern Lower Peninsula.

MAE appreciates your consideration of this request and are happy to address any additional questions you would have. MAE staff would be happy to provide any technical assistance, government-to-government outreach, or any other support that would be requested by MISO to assist it in conducting this study.

Sincerely,

Rick Snyder Governor Valerie Brader Executive Director

Michigan Agency for Energy

Attachment