

Comments of the WATT Coalition in response to the February 1, 2023 presentation on Flow Control Devices in Planning from Steve Leovy, WPPI

February 22, 2022

The WATT Coalition is pleased to see MISO's planning subcommittee considering applications of Advanced Power Flow Control (APFC). Incorporating APFC into MISO's system planning and operations would improve grid capacity and flexibility, lowering congestion costs, reducing renewable energy curtailment, and increasing optionality in extreme conditions. In the longer term, deployments of Grid Enhancing Technologies (GETs) (APFC, dynamic line ratings and topology optimization) are necessary to increase transmission capacity rapidly and affordably in response to changes in the generating resource mix and growing electrification.

WATT is happy to offer MISO further resources for learning about Grid-Enhancing Technologies (GETs). [Unlocking the Queue with Grid Enhancing Technologies](#), produced by the Brattle Group in 2021, modeled the cost and value of GETs across the Kansas and Oklahoma grids. The study found that twice as much renewable energy could interconnect if GETs were deployed widely, and that the cost of that deployment would be offset by production cost savings in less than a year. MISO's territory is similarly wind-rich, and we believe MISO should comprehensively evaluate how GETs could improve the transmission system for all customers.

Ultimately, APFC and other GETs should be included in all transmission planning and operations. We welcome an initial inclusion in the LRTP planning process as proposed by WPPI. We encourage MISO to work towards including these commercialized technologies in all of their transmission-related work, including grid operations and generator dispatch.

About the WATT Coalition

The Working for Advanced Transmission Technologies (WATT) Coalition is a trade association supporting wide deployment of GETs, to accelerate the clean energy transition and lower energy costs. Members include grid technology, renewable energy, and investment companies, and a transmission owner. WATT currently supports three technologies in particular: 1) Dynamic Line Ratings (DLR) which determine the true, real-time capacity of power lines. 2) Advanced Power Flow Control (APFC) which changes line impedance so planners and operators can fully utilize lines with available capacity. 3) Topology Optimization which identifies the best grid reconfigurations to reroute flow around bottlenecks. These three technologies reduce congestion costs and improve economic dispatch, situational awareness and reliability.