SMART GRID CENTER
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WEBINAR

Assessment of an AC Interconnection of the North American Eastern and Western Electric Grids

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Except for a brief time around 1970, the North American Eastern and Western grids have operated asynchronously from each other, with power transfers only possible through a few back-to-back HVDC ties. However a recent study has shown that an AC interconnection may be possible. This talk will present the dynamic and steady-state issues that need to be considered in contemplating synchronous operation of such a large-scale grid. The talk will also present new techniques for visualizing the results of the large-scale, long duration dynamic simulations needed for doing this assessment. Finally results will be presented demonstrating the methodology using an 80,000 bus synthetic electric grid and a 110,000 bus actual electric grid model.

February 24, 2021 at 3:00 P.M. CST

Register in advance here.

Thomas J. Overbye is professor and holder of the O'Donnell Foundation Chair III in the Department of Electrical and Computer Engineering at Texas A&M University (TAMU). Prior to joining TAMU in 2017 he was a Fox Family Professor at the University of Illinois at Urbana-Champaign. He received his BS, MS, and Ph.D. degrees in Electrical Engineering from the University of Wisconsin-Madison. Before starting his academic career he was employed with Madison Gas and Electric Company. He is the original developer of PowerWorld Simulator, a co-founder of PowerWorld Corporation, and an author of a widely used Power System Analysis and Design book. He was also the recipient of the Alexander Schwarzkopf Prize for Technological Innovation, a University of Wisconsin-Madison College of Engineering Distinguished Achievement Award, the IEEE Power and Energy Society Outstanding Power Engineering Educator Award, and is a member of the US National Academy of Engineering.