THE WSU-PNNL ADVANCED GRID INSTITUTE

WASHINGTON STATE'S CLEAN ENERGY CHALLENGE: WHAT IS THE OPPORTUNITY SPACE FOR WSU'S INSTITUTE FOR NORTHWEST ENERGY FUTURES

~ by ~

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Joint Appointment

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ABSTRACT

Washington State is widely viewed as a clean energy leader supported by hydropower dominated electricity system and ambitious climate legislation. Yet the state's energy transition is entering a phase where policy outcomes need to be demonstrated soon that require regulatory coordination and institutional capacity as well as a funding mechanism to support the ambitious energy transition goals. Sharp increases in AI data centers deployments and the electrification of transportation, buildings, and industry are driving significant growth in electricity demand, exposing gaps between climate ambition and grid planning, reliability, and infrastructure development.

This seminar examines Washington State's evolving energy landscape and explores near-term opportunities for WSU Institute for Northwest Energy Futures over the next three to five years. It outlines a forward-looking vision for Washington State's energy system—one that integrates decarbonization, reliability, and resilience through coordinated planning and explicit tradeoffs at local and regional levels —and discusses the roles for institutions of higher learning. Universities could play a critical role not only in advancing technology in the clean energy and agriculture sectors, but in training interdisciplinary practitioners, convening policy-relevant research, and informing public decision-making. The seminar concludes by arguing that Washington's ability to translate climate ambition into durable outcomes will depend in part on how effectively universities align their engineering, applied sciences, and policy agendas with the state's emerging needs for technology and institutional innovation.

BIO

Dr. Michael Kintner-Meyer is Chief Engineer at the Pacific Northwest National Laboratory in Richland, Washington, and a Joint Appointee with the WSU: Institute of Northwest Energy Futures. He was the Laboratory's lead for energy storage grid analysis and electrification of transportation, and development of decarbonization strategies. He completed a 1-year assignment with the US Department of Energy (under Secretary Granholm's leadership) as an advisor for Vehicle-Grid Integration. Dr. Kintner-Meyer received a Ph.D. in Mechanical Engineering from the University of Washington; a MS from the University of Aachen, Germany; and a BS from the University of Braunschweig, Germany. He holds 10 patents related to grid-friendly technologies. In his spare time, he enjoys triathlons and riding his motorcycle through the PNW.