

Spring 2024 PA573
The Smart Grid and Sustainable Communities
Course Instructor



Andy Eiden is a Sr. Principal Planning & Strategy Analyst in Portland General Electric's (PGE) Distributed Resource Planning (DRP) team. Before joining PGE, Mr. Eiden spent five years at Energy Trust of Oregon and nearly two years at The Cadmus Group. Mr. Eiden has over 12 years of experience in the energy industry, focusing on distributed clean resources across the private, non-profit, and utility sectors. At PGE, Mr. Eiden leads company-wide DER forecasting efforts, including coordination with load forecasting, IRP, T&D Planning, and Power Operations. He is a frequent speaker at industry conferences on topics related to

utility planning for DER growth, and participates in a variety of industry committees including the Energy Systems Integration Group (ESIG) working group on Distribution System impacts of EVs, National Renewable Energy Lab's (NREL) Technical Advisory Group for grid-interactive efficient buildings, and the Steering Committee for Northwest Energy Efficiency Alliance's (NEEA) region-wide End Use Load Research Project.

Mr. Eiden has also been active in the R&D space of the industry and worked with academics and students from across the country. He has successfully secured research funding for projects spanning multiple topics at the cutting edge of industry trends. Notable projects related to the Smart Grid course include use of AI/ML forecasting techniques for advanced solar penetration (with PNNL), planning for fleet managed charging of electric vehicles (with the Electric Power Research Institute), cybersecurity techniques for high DER penetration leveraging human-machine interfaces (with PNNL), and enhanced net-load forecasting techniques under extreme heat waves (with LBNL). Currently, Mr. Eiden is one of PGE's lead representatives for EPRI's ClimateREADi initiative, a flagship national effort to evolve utility preparedness for climate-related risk planning.

In addition to professional and academic interests, Mr. Eiden is also heavily involved in local k-12 student support activities, acting for the last several years as the co-chair for business engagement with the East Metro STEAM Partnership, one of the Oregon Department of Education funded STEM hubs around the state serving east Multnomah County. He has previously hosted interns from Saturday Academy at PGE, and plans to continue these partnerships under the auspices of new US Department of Energy funding related to Clean Energy Workforce Development that PGE is leading for the state.

Mr. Eiden graduated *magna cum laude* with dual degrees in Economics and Environmental Studies from Portland State University. He previously taught a Smart Grid graduate course in Electrical Engineering at Oregon State University, and has been a guest lecturer for PSU, University of Oregon, and Stanford University related to various aspects of grid modernization planning.