CURRENT ENERGY GROUP

Andy Eiden
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Education

Bachelor of Science, *magna cum laude,* Economics and Environmental Studies
Portland State University – Portland, OR (2011)

Master's Certificate in Energy Policy and Management
Portland State University – Portland, OR (expected fall 2025)

Work Experience

Sr. Manager, Current Energy Group, (January 2025 – Present)

- Subject matter expert in Distribution System Planning (DSP), electrification and DER forecasting, DSM potential studies, DER integration, advanced rate design, cost-effectiveness modeling, and locational value frameworks.
- Designing strategies to advance DSP processes and practices, DER adoption, and other decarbonization strategies before state public utility commissions.

Sr. Principal Planning & Strategy Analyst, Portland General Electric (2023-2024)
Principal Planning & Strategy Analyst (2022-2023)
Sr. Planning & Strategy Analyst (2020-2022)
Planning & Strategy Analyst (2019-2020)

- Led company-wide DER forecasting efforts to support DSP, IRP, finance, programs, and transmission planning. Responsible for all aspects of analysis and final reports.
- Represented PGE in regulatory proceedings, including DSP and TE dockets and related technical working groups.
- Designed Python-based DER forecasting tools for circuit-level DER adoption modeling.
- Led team of analysts to deliver sound planning studies to internal clients
- Managed multiple R&D partnerships with government, industry, and academia.
- Led valuation efforts and non-wire alternative evaluations for grid optimization.

Planning Project Manager, Energy Trust of Oregon (2015-2019)

- Managed electric avoided-cost dockets and targeted non-wire alternative pilots.
- Oversaw cost-effectiveness reporting for a $200M energy efficiency portfolio.
- Maintained TRM database and managed solar and multifamily program evaluations.

Research Analyst, The Cadmus Group (2012-2013)

- Conducted process and impact evaluations for utility clients across the U.S.
- Developed survey instruments to evaluate utility efficiency program offerings
- Delivered actionable recommendations through data-driven insights for client projects.

Publications

"Distribution Capacity Expansion: Current Practice, Opportunities, and Decision Support" (2022)

Co-authored a whitepaper looking at the future evolution of Distribution Planning to evolve toward a more holistic approach encompassing scenario planning, DER penetration, and economic optimization. Worked closely with lead authors to validate existing utility planning practices and identify areas for improvement.
Whitepaper

"KPF-AE-LSTM: A Deep Probabilistic Model for Net-Load Forecasting in High Solar Scenarios" (np., March 2022)

Co-authored a paper on net-load forecasting at the distribution level of aggregation that identified statistically-determined upper- and lower-error bounds for PV production while considering typical end use load patterns. Also presented on the paper topic at 2022 IEEE IGST conference in New Orleans regarding utility load forecasting from a system operations perspective.
Article

Industry Technical Advisory Committees

ESIG DER and Electrification Impacts Task Force Member (2023-current)

Invited to serve as Task Force member for Energy Systems Integration Group (ESIG) distribution impacts working group. Primary focus was identifying best practices in utility system planning and necessary regulatory evolution related to EV and DER growth.

NEEA End Use Load Research Steering Committee (2021-2024)

Utility representative for regional end-use metering study to update end use load profiles. Assisted steering committee with guidance around key study objectives and desired outcomes, guided workgroup with feedback about relevant research and analysis, and participated in quarterly meetings.

NREL Technical Advisory Group, Grid-Scale Metrics for GEBs (2022-2023)

Provided technical assistance to the NREL NOVA team related to development of metrics for assessing value of grid-interactive efficient buildings (GEBs) as part of DOE grant work. Participated in TAG meetings to review NREL staff concepts about possible metrics and advised on industry feasibility and usefulness. Reviewed draft study materials about TOU rate designs related to solar and storage, as well as provided data and input for a case study of buildings in the Pacific Northwest.

Industry Presentations

"Planning EV Impacts on the Grid" Presentation at ESIG Spring Technical Workshop (2023)

Presented on utility planning practices to accommodate EV load growth on the grid to conference of international attendees.

EV Load Forecasting and Planning, Western Energy Institute Fall conference (2022)

Gave presentation related to utility practices for forecasting EV load and integration of EV load forecasts with planning studies, with a particular focus on secondary distribution networks and common infrastructure sizing practices.

Expert Testimony

1. In the Matter of Application of Oncor Electric Delivery Company LLC for Authority to Change Rates, Texas PUC Docket No. 58306. On behalf of Environmental Defense Fund.
   Distribution Planning, DER Interconnection, T&D Rate design
   Direct
2. Investigation into Marginal Cost Study Treatment and Costs for Large Customers and Further Modifications to Portland General Electric Company's Rule C and Rule I (Docket No. UM 2377). On Behalf of Climate Solutions, Columbia River Keeper, Community Energy Project, Green Energy Institute, and Oregon Environmental Council.
   Topics covered: Generation Marginal Cost Study; Variable Energy Resources; Large Load forecasting; Flexible Connections.
   Direct
3. Petition of Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid, for approval of the Capital Investment Project (CIP) for the Monson-Palmer-Longmeadow (Northwest) DG Group Interconnection Study (D.P.U. 25-31). On Behalf of the Massachusetts AGO (with Ron Nelson and Tim Cook).
   DG Interconnection and cost allocation
   Direct
4. In the Matter of Electronic Application of Kentucky Utilities Company and Louisville Gas & Electric Company for Certificates of Public Convenience and Necessity and Site Certificates. Case No. 2025-00045. On behalf of Joint Intervenors Kentuckians for the Commonwealth, Kentucky Solar Energy Society, Metropolitan Housing Association, and Mountain Association.
   DSM potential, S+S resource modeling, VPP design
   Direct
5. In the Matter of the Application of Public Service Company of Colorado for Approval of its 2024 Just Transition Solicitation. On Behalf of Western Resource Advocates and Southwest Energy Efficiency Partnership.
   Load and DER forecasting, Large Load forecasting, Interconnection policy
   Direct
6. Petition of NSTAR Electric Company d/b/a Eversource Energy for Approval to Offer Optional Electric Vehicle Time-of-Use Rates (D.P.U. 23-84). Petition of Massachusetts Electric Company and Nantucket Electric Company each d/b/a National Grid for Approval to offer Optional Electric Vehicle Time-of-Use Rates (D.P.U. 23-85). On Behalf of the Massachusetts AGO (with Ron Nelson).
   EV TOU Rate Design, Submetering
   Direct, Surrebuttal

Other Industry Engagement

Smart Grid Graduate Policy Course, Portland State University, adjunct instructor (Spring 2024)

Taught graduate-level Smart Grid course covering policy trends in Smart Grid topics for public administration and policy students, as well as professional development for industry practitioners.

Smart Grid Graduate Course in Electrical Engineering, Oregon State University, adjunct instructor (Spring 2023)

Taught graduate-level Smart Grid course in electrical engineering covering distribution system basics, smart controls, demand-side technologies, transmission and market integration issues.