

44 Montgomery Street, Suite 1500, San Francisco, CA 94104 aaron.burdick@ethree.com

ENERGY AND ENVIRONMENTAL ECONOMICS, INC.

San Francisco, CA

Director

Mr. Burdick joined E3's Integrated Systems Planning group in 2019, where he helps utilities, system operators, and state agencies prepare for a high renewables future. He leads projects forming long term planning and reliability analyses for the electric system. His work includes working on electric planning in California, the Pacific Northwest, Hawaii, and the Midwest with expertise in utility procurement, commercial strategy, and electricity market design. He joined E3 from utility Pacific Gas & Electric, where he led the development of PG&E's 2018 Integrated Resource Plan and provided leadership on decarbonization efforts and renewable energy strategy. Before attending graduate school, Mr. Burdick spent four years at energy consultancy ICF International. He has also conducted energy analysis and provided strategic advice to non-profit environmental organizations. Mr. Burdick holds an M.S. in Civil and Environmental Engineering (Atmosphere/Energy) from Stanford University and a B.S. in Environmental Studies from the University of California, Santa Barbara. Select E3 projects include:

California Public Utilities Commission, Integrated Resource Plan, 2019-current. First as Project Manager and now as Project Lead, oversees E3's comprehensive support for CPUC electricity planning for clean energy and reliability.

Bonneville Power Authority, Lower Snake River Dams Study, 2022. Project Manager for an independent E3 study that analyzed the value of the Lower Snake River dams to the Northwest power system. E3's report examined the resource needs and costs associated with replacing the power services that the dams provide. The E3 report concluded that replacing the energy services from the dams would come at substantial financial cost to the region.

Omaha Public Power District (OPPD) Net Zero Carbon Pathways Study, 2021 - 2023. Project Manager for E3's comprehensive study on various pathways for OPPD to achieve net zero carbon by 2050. The study included multi-sector modeling of scenarios consistent with OPPD decarbonization, reliability and resiliency analysis using E3's RECAP model, and the development of optimal electricity portfolios using E3's RESOLVE model. Also Project Lead for a second project with OPPD including near-term procurement evaluation support.

Hawaiian Electric Company (HECO), Integrated Grid Planning Support, 2022-current. Project Lead and Project Manager for multiple E3 projects for HECO related to integrated planning of HECO power systems. Includes reliability modeling, capacity expansion and optimization, and technology evaluation.

PACIFIC GAS & ELECTRIC COMPANY

Principal, Policy Analysis Expert Analyst, Clean Energy Analysis San Francisco, CA December 2017 – May 2019 January 2016 – November 2017

San Francisco, CA July 2013 – October 2014

- Technical, policy, and strategy leadership on electric decarbonization efforts
- o Led the development of PG&E's 2018 Integrated Resource Plan
- Project management of key renewable energy compliance deliverables and technical consulting studies
- Key contributor to additional topics including cost-effectiveness, valuation, DER planning, transmission planning, vehicle-to-grid integration, and decarbonization pathways modeling

SIERRA CLUB Campaign Analyst

- Developed policy analysis models to inform policy positions and regulatory comments on the EPA's Clean Power Plan
- Provided technical and market expertise on power plant economics and national electric sector trends to directors and executive leadership to inform organizational strategy

CLEAN COALITIONPalo Alto, CAIntelligent Grid Program AssociateJune 2012 – January 2013

 Led the technical development of the Community Microgrid Initiative to integrate high penetrations of distributed solar using storage and smart inverters; developed and ran distribution power flow models

STANFORD UNIVERSITY

Palo Alto, CA January 2013 – June 2013 July 2011 – December 2011

Teaching Assistant Research Assistant

- Teaching Assistant for graduate-level courses "Air Pollution & Global Warming" and "Electric Power: Renewables & Efficiency"
- Research Assistant to Dr. Mark Jacobson on climate impacts of aviation

ICF INTERNATIONALSherman Oaks, CAAnalystJune 2009 – December 2011Research AssistantDecember 2007 – June 2009

 Clean energy, energy efficiency, and climate change consulting projects, including technical assistance for state government clean energy efforts for DOE, IOU energy efficiency program implementation, and GHG reduction planning for the public sector and Fortune 500 firms

Education

Stanford University Stanford, CA M.S., Civil and Environmental Engineering (Atmosphere/Energy) 2013

University of California, Santa Barbara *B.S., Environmental Studies (with Highest Honors)*

Santa Barbara, CA 2007