



Dylan Drugan

Senior Consultant

Dylan advises utilities and infrastructure developers advancing transmission and generation projects including wind, solar, storage, and gas. His experience includes integrated resource planning that optimizes generation resource selection and integrates transmission and distribution planning. He advises clients on how resource selections impact grid reliability, congestion, and operational flexibility. Dylan has testified before multiple state regulatory agencies.

SELECTED PROFESSIONAL EXPERIENCE

Regulatory economics

- Led the economic evaluation, regulatory, and public stakeholder efforts that produce Integrated Resource Plans (IRPs) to be filed with utility commissions for AEP's 5 vertically integrated operating companies.
- Directed efforts across cross-functional organizations to produce public IRP reports and defensible inputs and assumptions that withstand public and regulatory scrutiny related to forecasted resource cost and performance characteristics, load forecasts, fundamentals pricing, and myriad other modeling assumptions.
- Directed Indiana Michigan Power's first-ever state specific IRPs, which include over 4 GWs of datacenter load growth opportunities that will double the size of Indiana's load within the next 5 years.
- Evaluated battery storage optimization results to improve economic modeling so that the model maximizes revenues captured via various market products (i.e., Day Ahead, Real Time, and Ancillary Services), especially in times of market volatility.
- Directed, developed, and implemented AEP's first-ever integrated generation, transmission, and distribution planning process. Conducted modeling runs that integrated inputs/outputs between different Generation, Transmission, Distribution, and Fundamentals modeling platforms (i.e., PLEXOS, AURORA, PROMOD, PSSE, & DGP). Performed locational-based generation resource selection that evaluates new planning considerations such as how resource location impacts transmission reliability and congestion and how, when placed on the distribution system, it improves operational flexibility.
- Evaluated generation needs that AEP must procure in the next 3-7 years. Presented to executive leadership on the resource adequacy implications of evolving SPP and PJM energy policies. Developed a probabilistic risk analysis model to understand the proper amount of contingency generation needed to mitigate risk.
- Research, technical analysis, and testimony development across multiple subject areas. Evaluated utility filings, drafted data requests, and assessed customer impacts of infrastructure investment filings:

- Docket 24-052: Developed testimony on behalf of Arkansas Public Service Commission Staff for Southwestern Electric Power Company's application for a Certificate for Public Convenience and Necessity for two gas plants.
- Docket 24-072: Developed testimony on behalf of Arkansas Public Service Commission Staff for Entergy Arkansas's application for a Certificate of Environmental Compatibility and Public Need for a new gas combustion turbine.

Power system planning

- Performed complex generation resource optimization modeling using the PLEXOS modeling platform. Employed the PLEXOS model to conduct economic evaluation of resource plans for IRPs and to support numerous regulatory filings including supporting the economics of procuring renewable assets.
- Led the acquisition/disposition of strategic transmission assets and negotiated contract terms of multimillion dollar transactions with counterparties.
- Led the financial modeling and statistical risk modeling efforts that allowed Transource to win a competitive bid for a transmission project to be built in the Southwest Power Pool (SPP). Transource's winning project, Sooner-Wekiwa, is a 76-mile, 345 kV transmission line that connects two substations in Oklahoma and is projected to provide more than \$465 million in transmission congestion savings over the project's life.
- Directed a multitude of cross-functional teams spanning from Transmission Planning to Engineering to external EPC firms to submit proposals for competitive transmission projects in PJM and ISO-NE, including a winning bid to construct a transmission substation to support New Jersey's offshore wind development.

Procurements and portfolios

- Conducted financial modeling on wind and solar bids from numerous RFPs under multiple financial structures including as owned assets, purchased power agreements, and through a tax equity partner.
- Served as expert witness for Indiana Michigan Power's Renewable Energy Plan filing and wrote testimony in support of acquiring wind projects for Public Service Company of Oklahoma and Southwestern Electric Power Company.
- Served as an expert witness to support \$35M of capital and O&M investment in two of Public Service Company of Oklahoma's gas plants, including producing testimony and filing responses to intervenor discovery requests.
- Produced market intelligence presentations that informed strategic decision making at the Board of Directors and the Executive Leadership Team levels, specifically around decisions related to plant retirements/life extensions and the \$8+ billion generation capital spend plan over the next 5 years.

EMPLOYMENT HISTORY

Daymark Energy Advisors, Inc. <i>Senior Consultant</i>	Worcester, MA 2024–Present
American Electric Power <i>Manager, Resource Planning</i>	Columbus, OH 2023–2024
<i>Manager, Strategic Analysis</i>	2022–2023
<i>Manager, Transource Transmission Business Development</i>	2019–2022
<i>Auditor Associate</i>	2019
<i>Resource Planning Analyst Principal</i>	2016–2019
<i>Energy Efficiency & Consumer Programs Coordinator</i>	2013–2016
DNV <i>Energy Consultant</i>	Gahanna, OH 2012–2013

EDUCATION

Ohio University <i>M.S., Environmental Studies</i>	Athens, OH 2013
Aurora University <i>M.B.A, Leadership</i>	Aurora, IL 2010
University of Notre Dame <i>B.A., English</i>	Notre Dame, IN 2006

TESTIMONY & FILINGS

Expert Testimony

FORUM	ON BEHALF OF	MATTER
Michigan Public Service Commission	Indiana Michigan Power Company	Application for Approval of Renewable Energy Plan. Case No. U-18233.
Oklahoma Corporation Commission	Public Service Company of Oklahoma	Application for Approval of Adjustments to Base Rates including Costs to Acquire a Wind Facility and Delay the Retirement of Two Gas Facilities. Case No. PUD 2023-000086.

Integrated Resource Plan Filings

FORUM	ON BEHALF OF	MATTER
Arkansas Public Service Commission	Southwestern Electric Power Company	Application of Approval of Integrated Resource Plan. Docket 07-011-U-Doc. 32.
Indiana Utility Regulatory Commission	Indiana Michigan Power Company	Integrated Resource Plan Submitted Pursuant to Commission Rule 170 IAC 4-7.
Kentucky Public Service Commission	Kentucky Power Company	Application of Approval of Integrated Resource Plan. Case No. 2016-00413.
Oklahoma Corporation Commission	Public Service Company of Oklahoma	Integrated Resource Plan Submitted Pursuant to Commission Rule OAC 165:35-37.
Virginia State Corporation Commission	Appalachian Power Company	Application of Approval of Integrated Resource Plan. Case No. PUR-2018-00051.