Andrew Levitt

SENIOR CONSULTANT

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Mr. Levitt is an expert in wholesale electricity policy, with a focus on evolving system needs.

He has worked with a wide variety of stakeholders – including utilities, regional transmission organizations (RTOs), and regulators – to address wholesale electricity policies in a changing operational and infrastructure environment. With hands-on expertise in power system processes and operations, he has provided training and consulting for several regional and national utilities.

In the RTO sphere, Mr. Levitt's experience includes the development of capacity value accreditation rules for renewable and storage; foundational market access rules for hybrids and storage; a new reactive power compensation approach; an initial design concept for a capacity market overhaul; and principles and policies for integrating DER into wholesale markets and operations.

As a member of the balloting committee for IEEE Standard 1547-2018, Mr. Levitt offers special expertise in policies that recognize the operational challenges and opportunities associated with the widespread deployment of inverters.

A lecturer in Johns Hopkins University's Energy Policy and Climate program, Mr. Levitt is also a frequent speaker and panelist at industry conferences. His research has been published by the Institute of Electrical and Electronics Engineers (IEEE) and *Energy Policy*, and he is the coauthor of a chapter that appeared in *Future of Utilities – Utilities of the Future*.

Prior to joining Brattle, Mr. Levitt was a Senior Lead Market Strategist and Designer at an RTO serving Atlantic and Midwestern states. He previously worked at a national energy provider, where he managed vehicle-to-grid R&D projects, and an electric utility company in New Mexico.

AREAS OF EXPERTISE

- Integration of renewables, storage, DER, and inverters with power systems and markets
- Economic design and analysis of markets for wholesale energy, capacity, ancillary services, and financial transmission rights
- Resource adequacy analysis, capacity value of resources, and effective load carrying capability
- Demand response market design
- Transmission system modelling, analysis, and pricing

EDUCATION

- **University of Delaware**
  MA in Marine Policy, Center for Carbon-Free Power Integration
- **University of Toronto**
  BS in Physics

PROFESSIONAL EXPERIENCE

- **The Brattle Group (2022–Present)**
  Senior Consultant
- **Johns Hopkins University (2020–Present)**
  Adjunct Faculty, Energy Policy and Climate Program
- **PJM Interconnection (2015–2022)**
  Senior Market Strategist/Senior Lead Market Design Specialist
- **NRG Energy (2012–2014)**
  Manager, Vehicle-to-Grid
- **PNM (2006–2008)**
  Project Controls Manager

TESTIMONY

- *Comments of Andrew Levitt, Senior Market Design Specialist, on behalf of PJM Interconnection*, *FERC Technical Conference on Hybrid Resources*, Docket No. AD20-9-000, (July 23, 2020)
- *Comments of Andrew Levitt, Senior Market Design Specialist, on behalf of PJM Interconnection*, FERC Technical Conference on Distributed Energy Resources, Docket No. AD18-10-000 (April 10, 2018)

SELECTED EXPERIENCE

FOCUS AREAS

- Integration of renewables, storage, DER, and inverters with power systems and markets
- Economic design and analysis of markets for wholesale energy, capacity, and ancillary services
- Resource adequacy analysis, capacity value of resources, and effective load-carrying capability
- Demand response market design
- Transmission system modeling, analysis, and pricing

PROJECTS

- ***Capacity value of renewables and storage in PJM ("ELCC")***
  FERC docket ER21-2043
  Headed PJM effort to revamp rules to calculate the capacity value of all renewables and storage using an effective load-carrying capability (ELCC) method, setting the course for a scalable integration of any type of emerging resources into the capacity market.
- ***Market integration of wholesale DER in PJM, including storage DER***
  FERC docket ER19-462
  Authored PJM provisions for DER storage under FERC Order 841 in 2018 and 2019. Previously, led PJM stakeholder process to explore enhancements to remove barriers to participation in wholesale markets for distributed energy resources (DER). Testified at FERC DER Technical Conference. Served as an advisor for PJM's implementation of Order 2222.
- ***Hybrids market integration for PJM***
  FERC docket ER22-1420

Directed development of clarifications and enhancements to PJM rules to incorporate unique mixes of technology types (e.g., solar+storage hybrids) in all wholesale markets. Testified at FERC Hybrids Technical Conference.

- ***Reactive market redesign for PJM***
  Co-author of initial PJM proposal to reform compensation of reactive power capability to incorporate a performance-based incentive, recognize the full capability of inverter-based resources, and compensate inverter-based resources appropriately for potential lost opportunity costs.

ARTICLES & PUBLICATIONS

- "Impact of Distributed Energy Resource's Ride-through and Trip Settings on PJM's Footprint," with Rojan Bhattarai et al., *2020 IEEE Power & Energy Society General Meeting (PESGM)*, Montreal, Canada (August 2, 2020)
- "The Fully Integrated Grid: Wholesale and Retail, Transmission and Distribution," with Susan Covino and Paul Sotkiewicz, in *Future of Utilities - Utilities of the Future (*F. Sioshansi, editor), Chapter 22 (March 2016)
- "Pricing Offshore Wind Power," *Energy Policy* (October 2011)

PRESENTATIONS & SPEAKING ENGAGEMENTS

- "Energy Storage in Wholesale Markets," panel at Energy Storage Association Policy Forum (2017, 2019, and 2022)
- "Keynote: an Update from PJM," Smart Energy Decisions Accelerate Philly (December 9, 2019)
- "Energy Storage Deployment in PJM," U.S. Department of Energy Electricity Advisory Committee (October 16, 2019)
- "Leading the Transition," panel at Interstate Renewable Energy Council Vision Summit (March 6, 2019)

LANGUAGES

- Spanish (basic)
- Portuguese (basic)