

Robert A. Cleveland

MANAGING DIRECTOR, TRANSMISSION PLANNING AND ANALYSIS

Rob Cleveland has more than 22 years of experience analyzing electric power markets. His primary focus has been using nodal market expertise and simulation software to study business problems. As an expert in PROMOD™ IV nodal market production cost software, he has modeled energy markets across North America; Great Britain, Ireland, and the Philippines; and Maui, Hawaii.

Mr. Cleveland has a deep understanding of study methods and technical approaches to assessing transmission upgrade economics, generation asset values, transmission congestion, LMP basis risk, and renewable curtailment risk. He has extensive project management experience and has led major consulting engagements.

Mr. Cleveland's work at Leidos has included more than 120 studies, including congestion and locational marginal pricing (LMP) basis risk and curtailment assessments for new generation projects to support development and financing activities, market benefit and economic impact analysis of new transmission lines, and wind and solar grid siting studies. Mr. Cleveland has provided written and oral testimony in state commission proceedings and submitted studies to support generator siting applications and RFP responses.

EDUCATION

- › M.S. in Public Policy, Georgia Institute of Technology
- › B.S. in Mechanical Engineering, Georgia Institute of Technology

AREAS OF EXPERTISE

- › Transmission congestion
- › LMP basis risk
- › Wind curtailment and integration
- › Market benefit studies
- › Economic transmission analysis
- › Power market price forecasting
- › Generation strategy

PROFESSIONAL RECORD

Managing Director, Transmission Planning and Analysis, Leidos

Mr. Cleveland directs and performs consulting engagements with a focus on congestion dynamics, wind and solar curtailment, economic benefit of transmission, and generator strategy in nodal markets.

- › **Congestion and Curtailment Risk.** Congestion and curtailment risk studies to support wind, solar, and natural gas generation project financing.
- › **Economic Transmission.** Electric market benefit and impact analysis of new transmission lines to support project development.
- › **Generator Strategy.** Nodal market analysis to advise generator operating/retirement strategy given future market changes.

EXPERIENCE PRIOR TO LEIDOS

GL Garrad Hassan

- › **Price Forecasting.** Long-term zonal market price forecasting in Southwest Power Pool,



Midwest Independent Transmission System Operator (MISO), and Western Electricity Coordinating Council.

- › **Market Participation.** Benefit study and testimony to support power company decision to join MISO.

Ventyx

- › **Consulting.** Managed and provided oversight on nodal analysis consulting engagements.
- › **Staff Management.** Led North American consulting and software training staff.
- › **Product Management.** Led PROMOD IV software through period of strong growth, 30 percent increase in clients.
- › **Modeling.** Designed break-through enhancements in PROMOD IV security-constrained unit commitment logic.