nFRONT CONSULTING LLC
Power Industry Planners • Analysts • Advisors

DEBBIE MCDONOUGH

OVERVIEW

Ms. McDonough has over 20 years of professional experience in systems and business analysis. Her background includes 15 years in the energy industry with regard to:

- Transmission and market risk assessments;
- Due diligence activities for financings, asset transactions, and NERC compliance;
- Business analysis activities for asset transactions;
- Security Constrained Economic Dispatch (SCED) analyses;
- Transmission expansion and planning procedures;
- Transmission service and delivery studies;
- Transmission interconnection and power purchase contracting;
- Transmission policy and regulatory matters;
- Transmission system and market benchmarking and data modeling;
- Presentation of complicated technical data for audiences of varied backgrounds; and
- Project management.

Ms. McDonough has extensive experience in transmission- and energy markets-related planning and analysis matters. This experience includes assisting power plant developers, independent system operators, utilities, lenders, equity investors, and other energy market participants. Ms. McDonough has extensive knowledge and experience regarding various North American regional market models, their known transmission issues and planned improvements. Ms. McDonough has assessed the transmission systems and markets of the Midcontinent Independent System Operator (MISO), Southwest Power Pool (SPP), PJM, California Independent System Operator (CAISO), Alberta Electric System Operator (AESO), the New York Independent System Operator (NY-ISO), and the Independent Electricity System Operator (IESO) of Ontario Canada and is knowledgeable of policies and regulations of the Federal Energy Regulatory Commission (FERC) and the North American Electric Reliability Corporation (NERC).

PROJECT EXPERIENCE

Ms. McDonough has managed, and been a key content contributor to, the following types of projects:

- Transmission and market risk assessments, including:
    - Review of power purchase agreements and other transmission-related contracts,
    - Identification of current grid issues/concerns and planned improvements,
    - Analysis of historical market performance,
    - Discussion of market rules and how they may impact a project, and
    - Future year congestion analysis using SCED;

- Transmission service and delivery studies using:
  - ABB-Ventyx ProMOD,
  - PowerGem TARA,
  - General Electric's Positive Sequence Load Flow (GE PSLFTM) power flow program,
  - PSS®E and MUST,
  - Contingency analysis,
  - NERC compliance requirements,
  - Proprietary macros and models developed in Visual Basic for Applications (VBA), and
  - Market-specific Open Access Same-time Information System (OASIS) data;
- Generator and transmission siting/integration analyses;
- Transmission system and market benchmarking and data modeling as follows:
  - Comparing standard transmission system models to market planning documents,
  - Identifying gaps and erroneous data in standard transmission system models,
  - Modeling appropriate changes to represent real-world scenarios, and
  - Tracking changes on an annual basis to accurately represent future scenarios;
- Preparing analyses, reports, and data submissions to support:
  - Financings of various power generation or transmission projects, and
  - Client business decisions regarding development or procurement of generation and/or transmission assets; and
- Developing, responding to, and evaluating responses to requests for proposals (RFPs) for transmission planning services.

PROFESSIONAL HISTORY

Ms. McDonough began her career as a systems and business analyst for companies in the defense and software industries growing from an entry level engineer to Project Manager. Prior to joining nFront Consulting LLC, Ms. McDonough spent 13 years with R. W. Beck, Inc. and its successors, SAIC and Leidos Engineering. During that time, she grew her knowledge of the energy industry progressing to the level of Senior Consultant with significant project and client relationship management responsibilities.

EDUCATIONAL AND PERSONAL

Ms. McDonough's educational background includes a B.S. in Electrical Engineering from the University of Florida. She has completed certification courses for Business Analysis Professionals and Project Management Professionals.