Navigating through Compliance and Implementation of FERC Order No. 1000

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The Federal Energy Regulatory Commission (FERC) issued Order No. 1000 on July 21, 2011 to reform the Commission's electric transmission planning and cost allocation requirements for public utility transmission providers. The rule includes three reforms:

- Transmission Planning
- Cost Allocation
- Nonincumbent Developer

This order creates a number of opportunities and challenges for ISOs, RTOs, investor-owned utilities, Transmission Companies and Transmission Developers in the following areas:

- Identifying regional reliability, economic and public policy needs
- Developing transmission projects that are optimized to meet regional needs
- Technical evaluation of alternative projects
- Energy Market evaluation (Production Cost Modeling) of alternative projects
- Transmission project submittal
- Cost allocation of projects submitted to meet regional needs

Addressing these opportunities and challenges requires a range of technical capabilities including experience evaluating regional needs, developing regional transmission projects, and determining transmission project benefits and costs.

Siemens PTI brings our capabilities in reliability and market analysis together to cohesively develop and analyze transmission projects. Market or production cost analysis is imperative to identifying critical issues on the system such as areas where the system is constrained and how generation can impact the transmission system over time. Siemens PTI utilizes PROMOD®IV, which is used by all ISOs in the U.S., for market simulations and marginal cost calculations. Benefit-to-cost ratios can be determined for transmission projects after achieving reliability, economic or policy requirements. At the outset, the “standard” benefits for a transmission project, which include adjusted production cost savings, transfer capability improvements, loss reduction, and reduced emissions will be identified. These elements will be integrated to deliver benefit-to-cost ratios for the array of potential solutions.