

At A Glance

## Wholesale Power Market Assessment Services

### Overview

The current economic climate along with an abundant supply of natural gas have depressed electricity prices, compressed spark spreads, and flattened operating margins. Whether you are buying, selling, refinancing a generating asset, or operating in the current business environment, understanding the power market—and identifying the key drivers of value, as well as the associated risk—is critical in determining an asset’s value and setting business strategy.

### Our Practice

NERA experts have comprehensive experience in power markets. We have provided leadership in power market design, supported merchant energy financing and M&A, and developed state-of-the-art modeling and valuation techniques. NERA offers expertise in the following areas:

#### Market Structure and Design

Some markets have been successfully transformed to Independent System Operators (ISOs) with well-established market rules for generation products and services. Others are still in the stages of development and are making critical market structure decisions. Recent events have put a spotlight on the pace of deregulation and the evolution of competitive markets—in turn raising several questions as to the direction the markets should take and the level of regulation required. Presuming that a market exists when no institutions are in place to support a market has led to erroneous assumptions about the performance of assets, particularly when utilities have few incentives to buy from merchant energy providers. Asset owners must be keenly

aware of the unique geographic market rules as well as the potential impact of proposed changes to existing rules. NERA is particularly well-qualified to advise on both how to structure markets and the implications of market structure on the ability to monetize asset positions.

We have extensive experience in developing markets, and have worked closely with several ISOs and RTOs on market structure and design projects. NERA’s market knowledge and insight can assist clients with determining appropriate business strategies, as well as identifying the impacts of market structure on asset performance.

#### Market Price Forecasting

One of the primary ways to describe a market is through projections of the prices for electricity and other generation services. Given the current environment, a detailed look at the supply and demand relationship is an important first step in developing price projections. Especially for the near term, key fundamental drivers such as fuel prices,

demand growth, environmental policy, and renewable power development need to be carefully assessed. For truly enhanced insights, market participants must combine market information and technical analyses with fundamental analyses.

*NERA prepares market price forecasts for all North American markets using a hybrid approach of fundamental and market analyses. Our experts have prepared Independent Market Expert Reports in support of over \$40 billion in bank debt and capital market offerings, and supported the acquisition of more than 20,000 MW of generation. We also have been involved in several high-profile restructurings of distressed energy merchant companies.*

### **Operating Margin Projections**

The valuation of a specific generating asset is primarily based on a forecast of the asset's future operations, revenues and costs. Even when an asset has fully contracted revenues, there is uncertainty inherent in the revenue projections since the pressure to economically breach the agreement increases as the contract becomes further out-of-the-money. Market participants should perform due diligence to determine what revenue streams are likely to be available to a particular asset, as well as to characterize their risk. Key areas on which to focus include revenues from contractual arrangements, merchant electricity and capacity sales, transmission congestion, ancillary services, and reliability contracts.

*NERA uses a sophisticated market price forecasting approach, along with asset due diligence, to project operating margins for cash flow modeling and capital adequacy analyses. We have provided analytic valuation and due diligence on assets and contracts in virtually all US regions, as well as in a number of foreign countries.*

### **Risk and Uncertainty Analysis**

Uncertainty of outcomes pervades asset strategy decisions and is a significant determinant of the value attributed to positions in a generating asset. In addition to the well-publicized market risk, the power industry is also faced with credit risk, regulatory risk, fuel price risk, and operational risk. The extent of downside risk is a key factor in decisions now being made both by asset owners and lenders. Equity positions (and increasingly debt positions) in merchant

assets appear to be (out-of-the-money) options in many cases, indicating that the upper tail of the distribution of operating margins is the source of equity value. Market participants need to understand these risks and analyze their business strategies considering the possible outcomes. Risk, or uncertainty, analysis identifies the key uncertain variables and provides a distribution of possible results instead of one expected outcome.

*NERA's risk analysis provides clients with insight into the key drivers and uncertainties of their business and the range of potential outcomes that should be considered in their business and strategy planning.*

## **About NERA**

NERA Economic Consulting ([www.nera.com](http://www.nera.com)) is a global firm of experts dedicated to applying economic, finance, and quantitative principles to complex business and legal challenges. For over half a century, NERA's economists have been creating strategies, studies, reports, expert testimony, and policy recommendations for government authorities and the world's leading law firms and corporations. With its main office in New York City, NERA serves clients from more than 25 offices across North America, Europe, and Asia Pacific.

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