Energy Markets 101

What every modern energy manager needs to understand — and how to act on it.

Energy Analyst
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WHERE WE ARE TODAY

Energy managers operate in one of the most complex environments in history. The grid has changed. Pricing models have changed. Regulatory expectations have changed. And the volume of data available from smart meters and edge devices to market feeds has exploded. We are seeing four forces reshaping the role of the energy manager:

1. **Rising energy costs**. Extreme weather events, renewable intermittency, and aging infrastructure are creating new pressure points on the grid every year.
2. **Pricing swings are severe.** Wholesale electricity normally ranges from $30–$50/MWh, but spiked to $9,000/MWh during Winter Storm Uri, leaving some businesses with bills larger than their mortgage payments.
3. **Data is everywhere,** but insight is not. Energy managers are drowning in data from meters, BAS systems, and market feeds, but most lack the tools to turn it into decisions.
4. **Compliance and hidden value** hiding in your energy infrastructure. Learn how to monetize flexible loads, batteries, EV charging, and distributed energy resources through programs, market participation, and grid services.

> YOUR ENERGY ASSETS CAN DO MORE THAN REDUCE COSTS.
>
> THEY CAN GENERATE REVENUE.

ENERGY MARKETS 101

To act strategically, energy managers need to understand how U.S. electricity markets work. Here are the six concepts that matter most:

1. **ISOs & RTOs.** Independent grid operators such as PJM, MISO, CAISO, ERCOT, NYISO, and others manage transmission and set market rules for 65 million+ customers across the U.S.
2. **Day-Ahead & Real-Time Markets.** Electricity is traded a day in advance and balanced in 5–15 minute real-time intervals. Knowing both windows lets you lock in savings before they disappear.
3. **Locational Marginal Pricing (LMP).** Prices vary by grid location based on congestion and delivery cost. LMP signals where the grid is stressed — and where your flexibility is most valuable.
4. **Deregulated Markets.** In states like Texas, Illinois, New York, and Pennsylvania, businesses can choose their supplier. Smart procurement can save millions, but poor procurement can cost them.
5. **Capacity Markets.** Generators are paid to be available during peak demand periods. Buildings with curtailable load or storage can earn capacity payments for their flexibility.
6. **Demand Response.** Programs that pay commercial and industrial facilities to reduce load during grid stress events — a key revenue stream for buildings with automation and flexible assets.

Understanding energy markets is the foundation, but insight without action is just data.

Read the Full White Paper here: A Simple Guide to U.S. Energy Markets for the Professional Energy Manager at intellastar.com. Inside, you'll walk away with:

- A clear map of who controls the grid
- How to protect your organization from price volatility
- 8 proven strategies to cut costs and earn revenue

Talk to an **energy expert** and explore the revenue side of energy management: **Intellastar.com/demo**