Organized Wholesale Market Expansion Brings Cost Savings & Increased Reliability

The Clean Energy Buyers Association (CEBA) supports congressional appropriations to bolster state and regional efforts to develop organized wholesale energy markets in the West and the Southeast. These markets provide a transparent and open platform for energy trading at the wholesale level.

The most advanced markets are in regions where regional transmission organizations (RTOs) and independent system operators (ISOs) manage power flows across the grid while providing long-term transmission and resource coordination.

RTOs and ISOs create a competitive environment that can generate cost savings, improve efficiency and reliability, provide increased transparency in operations and financial transactions, and give customers options that can spur innovation. These expanded market structures also are effective in reducing emissions and creating economic development opportunities.

A recent State-Led Market Study sponsored by the Utah Office of Energy Development found a West-wide RTO could bring nearly $2 billion in potential annual savings. A Colorado study found full participation by electric utilities in an RTO could save customers about $230 million annually. An analysis by the Clean Energy Buyers Institute and Resources for the Future, in collaboration with the National Renewable Energy Laboratory, found that organized market expansion into the West and Southeast would save customers $11 billion per year.

RELIABILITY IS ENHANCED IF REGIONS CAN SHARE AND BALANCE RESOURCES ACROSS THE WIDEST POSSIBLE AREA. WITH THEIR LARGER SCALE OF OPERATIONS, ORGANIZED MARKETS CAN:

- attract a more diverse range of resources,
- reduce the overall need for capacity reserves to address the growing concern about unexpected disruptions or meeting peak demand,
- lower transmission charges of neighboring systems, and
- conduct more effective system-wide planning, including new transmission that can help improve grid reliability.
Organized wholesale markets strive to foster a technology-neutral and non-discriminatory environment and provide open access to transmission and price transparency. They also provide large energy customers with transparent prices and purchasing options.

Through innovative contracts known as virtual Power Purchase Agreements (vPPAs), energy customers can secure longer-term contracts that specify the type and source of electric power generation they will buy, providing long-term price stability in what is now a volatile energy market. This additional market flexibility and competition also spurs other forms of innovation.

Electric power generators, grid operators, and wholesale customers are constantly looking for more efficient and less costly ways to operate and procure their electricity. Where organized wholesale markets exist, practices such as demand response and energy efficiency and use of battery storage can be employed on a larger scale to achieve greater efficiencies and cost savings. Since 2019, more than 60% of all large-scale battery storage system capacity has been located in areas covered by two regional grid operators.

Organized wholesale markets also bring economic market forces into play to reduce carbon emissions. Clean energy sources are often the cheapest source of electricity. If allowed to compete, their lower price per kilowatt hour makes them the preferred choice for dispatch.

This increased use of clean energy has often led to carbon emission reductions that exceed state renewable energy standards. In the Southwest Power Pool’s (SPP’s) service area, renewable energy production grew from 6 gigawatt hours (GWh) in 2008 to 90 GWh in 2019, and overall carbon-dioxide emissions have dropped 21% since 2014. An RTO across the West could help reduce carbon emissions an additional 3 million tons annually by 2030.

Energy cost savings through RTOs and ISOs translate directly into economic development opportunities. A study by Energy Innovation found that a Southeastern competitive energy market could generate $384 billion in savings and create at least an additional 285,000 new jobs by 2040. A recent analysis by Energy Strategies and Peterson & Associates found that forming an RTO in the West would:

- create $2.2 billion in annual energy cost savings by 2030,
- spur up to $79 billion in annual economic activity, and
- generate up to 657,000 permanent jobs with average annual salaries of $73,000.

When businesses and consumers can procure more cost-effective, clean energy through competitive markets, it has a ripple effect on regional economies. Companies make decisions about where to locate their facilities based on access to clean energy as well as the ability to invest in the clean energy facilities themselves, and both types of investment bring economic development opportunities to a region.