

# TEXAS PUBLIC POLICY FOUNDATION PolicyBrief

## Debunking the Myth: Texas is not Running Out of Electricity—*The Generators*

Various parties have claimed that the competitive market isn't working or providing generators adequate profits to sustain new investment. Power generators themselves make these claims.

Typical of remarks by most generators are these from NRG, "The energy-only market is inherently incapable of supporting resource adequacy." (NRG Energy 2013) Rather than make the argument that this problem is caused by its lack of profits, NRG and other companies point to the supposed harm the public will suffer to make their case for subsidies, "The frequency and duration of outage events resulting from inadequate reserves are a threat to economic growth and can endanger the public." (NRG Energy 2013)

A discussion of profitability was in the forefront of the June 2013 State of the Market Report by Potomac Economics, the official independent market monitor for the Texas competitive market—which is also referred to as ERCOT (Electric Reliability Council of Texas). Potomac wrote:

One of the primary functions of the wholesale electricity market is to provide economic signals that will encourage the investment needed to maintain a set of resources that are adequate to satisfy the system's demands and reliability needs. These economic signals are evaluated by estimating the "net revenue" new resources would receive from the markets. ...

These results [of Potomac's calculations of net revenue] indicate that the ERCOT markets would not have provided sufficient revenues to support profitable investment in any of the types of generation technology evaluated. Higher energy prices in the West zone during 2012 resulted in higher net revenues in that zone, but they were still not high enough to support new entry there. (Potomac Economics 2013)

However, the Foundation's calculations call these conclusions into question:

Computations that assume an ancillary services option and rational bidding behavior cast new light on the viability of ERCOT's energy-only market. Peaker Net Margin is an administrative creation that does not fully reflect the economic opportunities open to generators. Our calculations show that adding the option of producing non-spin to that of the balancing market can raise a peaking generator's net margin in ERCOT into the range of economic viability....

We conclude that investment in generation in ERCOT is likely to continue and, as it has in the past, provide sufficient reserves to maintain reliability. Shifting to a capacity market is unnecessary, and would in reality be a source of inefficiency and a barrier to competition that would likely increase the cost of electricity for consumers. (Kleit and Michaels 2013)

Some also claim that Texas' competitive market is too "risky" to support new investment. Luminant is one of those, saying that a capacity market will reduce risk for investors, "Although a capacity market design is more complex than an energy-only design, the capacity market design far surpasses the energy-only design in terms of reliability, economic efficiency, cost, regulatory stability, and reduced investor risk." (Luminant 2013)

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### **Key Points**

- "It is highly likely that the market itself will address any predicted future shortfall."
   -TXU Electric, 2001
- NRG told the EPA last year that its new investment in Texas generation met "the requirements for low capital cost and economic viability."
- "We believe that ERCOT's energy-only market may be only marginally riskier than energy-andcapacity markets."
   Brattle Group, 2012



Again, the Foundation's research reaches a different conclusion, "There are few obvious differences between the types of risk faced [in ERCOT] by generation builders and investors [and those] in industry-specific capital elsewhere." (Kleit and Michaels 2013) Even the capacity-market friendly Brattle Group agrees, "We believe that ERCOT's energy-only market may be only marginally riskier than energy-and-capacity markets." (Brattle Group 2012)

Of course, generators have not always taken such a negative view of the competitive market. Luminant's predecessor, TXU Electric, said back in 2001, "It is highly likely that the market itself will address any predicted future shortfall by encouraging generators to build new generation because market prices will likely increase when reserve margins decrease." – (TXU Electric 2001)

Generators' support for competition isn't confined to the past, however. Only a few months ago, NRG filed the following comments with the U.S. Environmental Protection Agency in support of its petition to move gas turbines to Texas to be used for generation:

"NRG Texas considered the efficiencies, capital costs to install, potential revenue sources, operating costs, and the targeted "super peak" hours before arriving at the decision to install the GE 7 turbines [that] represent the only identified generating technology which meet the ... requirements for low capital cost and economic viability." (NRG Texas 2013)

NRG says that its investment in new generation in ERCOT will have "economic viability." At least in this case, NRG expects the market to work well enough for it to make a profit.

#### References

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ERCOT 2012, "New report reinforces future electric resource adequacy concerns," press release (22 May 2012).

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NRG Texas 2013, Supplement to Combustion Turbine BACT Analysis (7 Oct. 2013).

Potomac Economics 2013, 2012 State of the Market Report for the ERCOT Wholesale Electricity Markets.

TXU Electric 2001, Comments on Rulemaking Concerning Planning Reserve Margin Requirements, PUC Project # 24255.

