

ERCOT—GENERATORS' REVENUES LESS THAN COSTS FOR 8 OUT OF 10 YEARS

Excerpts from ERCOT's State of the Market Reports 2011—2020

The Public Utility Commission of Texas maintains a list of the ERCOT annual "[State of the Market Reports](#)" by the Independent Market Monitor, IMM, Potomac Economics. In each of these reports, the IMM assesses whether, on average, the revenues received by the generators are adequate to cover costs, including a return of capital. As noted below, this has occurred only twice in the years since 2011. These are direct, cut-and-paste quotes from the reports.

[2011 State of the Market Report](#) (page ii): "Net revenues provided by the market in 2011 were sufficient to support investment in either new simple-cycle natural gas-fired turbines or natural gas-fired combined-cycle generation. This was largely the result of the increase in shortage pricing in 2011."

[2012 State of the Market Report](#) (page xx): "These results [net revenues to generators] indicate that the ERCOT markets would not have provided sufficient revenues to support profitable investment in any of the types of generation technology evaluated."

[2013 State of the Market Report](#) (page xix): "These results indicate that during 2013 the ERCOT markets would not have provided sufficient revenues to support profitable investment in any of the types of generation technology [coal, nuclear, gas turbine, combined cycle gas turbine] evaluated."

[2014 State of the Market Report](#) (page xvii): "These results indicate that during 2014 the ERCOT markets would not have provided revenues greater than the estimated costs of any of the types of generation technology [coal, nuclear, gas turbine, combined cycle gas turbine] evaluated."

[2015 State of the Market Report](#) (page 94): "These results indicate that during 2015 the ERCOT markets would not have provided sufficient revenues to support profitable investment in any of the types of generation technology evaluated, which may seem inconsistent with the fact that new generation continues to be added in the ERCOT market. This can be explained by a number of factors.

First, resource investments are driven primarily by forward price expectations. Historical net revenue analyses do not provide a view of the future pricing expectations that will spur new investment. Suppliers will develop their own view of future expected revenue and given the level to which prices will rise under shortage conditions, small differences in expectations about the frequency of shortage pricing can greatly influence revenue expectations.

Second, this analysis does not account for bilateral contracts. The only revenues considered in the net revenue calculation are those that came directly from the ERCOT real-time energy and ancillary services markets in a specific year. Some developers may have bilateral contracts for unit output that would provide more revenue than the ERCOT market did in 2015. Given the level to which prices will rise under shortage conditions, buyers may enter bilateral contracts to hedge against high shortage pricing.

Third, net revenues in any one year may be higher or lower than an investor would require over the long term. In 2015, shortages were much less frequent than would be expected over the long term. Shortage revenues play a pivotal role in motivating investment in an energy-only market like ERCOT. Hence, in some years the shortage pricing will be frequent and net revenues may substantially exceed the cost of entry, while in most others it will be less frequent and net revenue will be less than the cost of entry.

Finally, the costs of new entry used in this report are generic and reflective of the costs of a new unit on an undeveloped greenfield site. They have been reduced somewhat to reflect the lower costs of construction in Texas. However, companies may have opportunities to build generation at much lower cost than these estimates; either by having access to lower cost equipment, or by adding the new unit to an existing site, or some combination of both. Financing structures and costs can vary greatly between suppliers and may be improved lower than generic financing costs assumed in the net revenue analysis.”

[2016 State of the Market Report](#) (page i): “Net revenues provided by the market during 2016 were less than the estimated amount necessary to support new greenfield generation investment, which is not a surprise given that planning reserves are above the minimum target and shortages were rare in 2016.”

[2017 State of the Market Report](#) (page i): “Net revenues provided by the market during 2017 were less than the estimated amount necessary to support new greenfield generation investment, which is not a surprise given that planning reserves were above the minimum target and shortages were again rare in 2017.”

[2018 State of the Market Report](#) (page i): “Net revenues provided by the market during 2018 were less than the estimated amount necessary to support new greenfield natural gas generation investment, even in a year with historically low installed reserve margins. Based on the tepid reaction to higher ERCOT market prices, it is unclear whether the mix of new generation additions will be sufficient to meet the growing demands in ERCOT.”

[2019 State of the Market Report](#) (page 75): “These results indicate that on a stand-alone basis during 2019, the ERCOT markets did provide sufficient revenues to support profitable investment in combustion turbine and combined cycle technologies. Much of the net revenue increase was the result of shortage pricing. Therefore, investors’ response to these prices will depend on whether they expect them to reoccur in the future.”

[2020 State of the Market Report](#) (page v): “Prices in 2020 did not produce revenues sufficient to support profitable investment in new conventional resources, primarily because shortage pricing was infrequent and modest. Given the current reserve margins, this is expected and raises no substantial concerns.”