



The End of Texas' Energy-Only Electricity Market
Competition and Market Prices to be Replaced by a Capacity Market

Senate Business and Commerce Committee
November 17, 2022

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The Public Utility Commission of Texas (PUC) last week released the E3 report on the market redesign of the Texas electric grid. Unfortunately, the report follows the lead of the Texas Legislature in failing to address the primary problem behind the reliability problem Texas is facing: the manipulation of market prices by the federal and Texas governments. The manipulation has occurred through two primary market interventions. First, federal, state, and local renewable energy subsidies. Second, the PUC's Operating Reserve Demand Curve and Ancillary Services. The following highlights problems with the PUC market design process and recommends a path to resorting reliability and affordability to the Texas electric grid.

The PUC/E3 Report Doubles Down on the Status Quo

As economists Michael's and Kleit explained in 2013, the beauty of the Texas market's energy-only design was that it provided adequate capacity at a much lower cost than the so-called capacity markets:

ERCOT's "energy-only" market relies on competitive market forces to meet the long-term electricity needs of the 23 million Texans in its service area. Shorter-term needs are also met through the competitive market. ... Competition has worked remarkably well in ERCOT since its introduction about 15 years ago. Consumers can choose over a hundred different plans from dozens of providers. Billions of dollars invested in generation have provided Texas with a reliable supply of affordably priced electricity.

While today's market still bears the name 'energy-only,' regulators have done everything possible to turn it into a capacity market through continuous intervention in the market. Yet the E3 report treats the current market as a fully functional "Energy-Only" market. All of its analyses of the possible proposed use the current market design as a baseline. E3 made no effort to model what a true energy-only market would look like or what a market without subsidies for renewable and traditional generators would look like.

The PUC/E3 Report Offers No Path for Addressing the Growth of Intermittent Generation

The E3 report projects what the installed capacity for each generation source in the electric market would be under each of the seven scenarios it analyzed. One notable aspect of this is that the amount of capacity from renewable energy, wind and solar farms, is the same under the proposed market redesigns as it is under the baseline status quo. What this means is that the proposed market

redesigns will do nothing to reduce the growth of intermittent generation in Texas. This is remarkable because it has been well documented that renewable energy has played a major role in increasing the cost of electricity for Texans and in reducing the reliability.

	New 2018-21	%	Total 2022	%	New 2022-26	%	Total 2026	%
Wind	15,947	58.52%	35,210	30.29%	5,394	16.26%	40,605	29.00%
Solar	7,213	26.47%	11,992	10.32%	27,335	82.42%	39,347	28.10%
Natural Gas	4,075	14.96%	48,479	41.71%	436	1.31%	48,915	34.94%
Nuclear	13	0.05%	4,973	4.28%	0	0.00%	4,973	3.55%
Coal	0	0.00%	13,568	11.67%	-7,396	-22.30%	6,172	4.41%
Battery Storage	0	0.00%	2,014	1.73%	5,397		7,411	5.29%
Total	27,249		116,236		33,165		140,012	
Renewable %		85.00%		40.61%		98.69%		57.10%

In 2007, electricity from wind and solar generation made up 3% of the total electricity generated in ERCOT. Through June, the total this year is 37%--more than natural gas. The reason for this is simple. Renewables totaled 85% of new generation over the last four years as subsidies allowed renewables to practice predatory pricing and keep new natural gas plants from coming online. Even when the intermittency of renewables hasn't led to reliability problems, it has significantly increased the cost of electricity as regulators have forced Texans to pay billions of dollars to get enough generation online to keep the lights on. And the market redesign won't make things better. The E3 report estimates that almost 99% of new generation coming online in Texas through 2026 will be renewables.

The Market Design Recommendations in the PUC/E3 Report Will Transfer Billions of Dollars of Wealth from Texas Consumers to Texas Generators

On p. 5 of its report, E3 suggests that its proposed redesign of the Texas market will result in an incremental increase in costs to Texans of \$460 million per year. However, the costs will be much higher. E3 is able to claim the \$460 million figure by comparing the proposed market redesigns to its status quo scenario. Yet the status quo scenario contains billions of dollars of current and future cost increases already added to Texans' electric, property tax, and income tax bills by federal, state, and local governments.

Annual Est. Energy Costs Imposed on Texans by U.S. & Texas Governments – 2026	
Source	Amount
CREZ Lines	\$573,683,601
RPS/RECs	\$27,219,750
Securitization	\$738,246,192
ORDC/Ancillary	\$3,300,000,000
Congestion (Renewables)	\$766,475,000
Market Redesign	\$460,000,000
Subtotal – Annual Grid Costs	\$5,865,624,543
Chapters 312 & 313	\$167,584,402
U.S. Renewable Subsidies	\$2,437,015,948
Total Annual Cost	\$8,470,224,893

For instance, the E3 report builds in the \$2 billion of increased costs through July 31 from the PUC's Operating Reserve Demand Curve (ORDC) and ancillary services. Of this, \$1 billion was a result of changes the PUC made to the ORDC made in January 2022. One group estimates that the ORDC will add an additional \$1.3 billion to the cost of Texas electricity next year.

Then there is the cost of securitization caused by the PUC's arbitrary and capricious decision during the 2021 winter storm to raise electricity prices to \$9,000 per MWH. The result is that Texas consumers are on the hook for at least \$10.5 billion in costs from the storm. The annual cost on consumers' electric bills will be at least \$738 million per year.

There are also the annual costs associated with CREZ lines (\$573 million), Texas Renewable Portfolio Standard (\$27 million), and congestion costs associated with renewables (\$766 million).

Add all these up, and the recommended alternative in the E3 report will force Texas consumers will have to pay \$5.8 billion a year above market price for the electricity they purchase in ERCOT. Most of that will be used to subsidize thermal and renewable generators in Texas with multi-billion-dollar market caps in Texas' newly designed capacity market.

In addition to these costs on their electric bills, Texans will also have to bear the costs of federal and local renewable subsidies through their income and property taxes. The Energy Alliance estimates that these costs will total about \$2.6 billion in 2026; \$167 million from local property tax abatements for wind and solar farms and \$2.4 billion in federal subsidies through the Production Tax Credit (wind) and Investment Tax Credit (solar). The federal subsidies include increases contained in the recently passed Inflation Reduction Act. The total annual cost in 2026 that Texans will have to pay for their electricity above market-priced energy costs will be about \$8.4 billion.

Recommendations

Scrap the Market Redesign Project at the PUC. Instead, maintain Texas' energy-only market and restore its health through these steps:

- End the PUC's manipulation of market prices by eliminating the ORDC and ERCOT's Ancillary Services.
- Do not adopt a mandatory reliability standard
- Directly address the price distortions caused by renewable resources receiving out-of-market support through requiring either
 - Renewable energy minimum offer price
 - Firmness of dispatch for renewable energy
- Eliminate/do not renew Chapter 312 and 313 property tax abatements for wind and solar generation
- Make Texas' Renewable Energy Credits program voluntary
- End the socialization of grid connection and transmission costs
- Require the PUC to model the costs and reliability of Texas' energy-only market with these recommendations in place