



## The Government-Imposed Cost of Electricity in Texas Government Increased the Cost of Texas Electricity by \$20 Billion in 2023

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### Executive Summary

On July 1, Texas Gov. Greg Abbott and Lt. Gov. Dan Patrick [announced that they](#) “will seek to expand the [Texas Energy Fund] to \$10 billion to build more new [generation] plants as soon as possible.” The Texas Legislature, with voter approval, created the Fund last year with initial funding of \$5 billion.

Subsidizing multi-billion dollar generators and electric utilities using Texans’ money is nothing new in Texas. **Figure 1** shows that in 2023 the U.S. government, Texas’ state government, and Texas local governments increased the cost of electricity in the Texas area served by the Electric Reliability Council of Texas (ERCOT) by \$19.9 billion, most of it by providing subsidies and benefits to generators and utilities. This represented 42.7% of the total cost of electricity to Texans in ERCOT. Over the last 10 years, the total government imposed cost (GIC) of electricity in ERCOT was \$84.3 billion. Of that amount, Texas state and local governments are responsible for 85.7% of the total.

Figure 1: Government Imposed Cost of Electricity in Texas (ERCOT)			
Year	Total Cost of Electricity	Government Imposed Costs	%
2014	\$31,348,800,000	\$2,126,490,833	6.78%
2015	\$34,294,899,435	\$2,610,837,043	7.61%
2016	\$32,222,639,500	\$2,621,469,012	8.14%
2017	\$33,493,666,748	\$3,001,875,382	8.96%
2018	\$34,772,595,608	\$4,325,178,194	12.44%
2019	\$37,076,668,260	\$8,868,889,361	23.92%
2020	\$33,960,757,607	\$5,336,558,229	15.71%
2021	\$49,723,524,733	\$20,508,313,259	41.24%
2022	\$45,649,756,871	\$14,935,966,916	32.72%
2023	\$46,709,006,079	\$19,963,822,965	42.74%
<b>Total</b>		<b>\$84,299,401,195</b>	

How did it happen that more than 40% of Texans’ electricity costs are imposed on them by government? The answer is simple: Texas policymakers supported ever increasing

subsidies for renewable energy even as renewables were degrading the reliability of the Texas grid. When the reliability problem caused by renewable subsidies became so apparent to the public that it could no longer be ignored—think Winter Storm Uri, policymakers decided to throw more taxpayer dollars at all generation sources rather than end renewable subsidies. Apparently, it is safer politically to take money from constituents than to challenge the renewable energy lobby.

The only solution to the current insanity of increasing energy subsidies in an attempt to address the harm being done by renewable energy subsidies is to eliminate all of the subsidies.

### The Government-Imposed Cost of Texas Electricity

Only a decade ago, Texas had the most competitive electricity market in the world, a market that produced reliable, affordable electricity. Today, the Texas electric grid has been taken over by Texas

*The Energy Alliance ([www.theenergyalliance.com](http://www.theenergyalliance.com)) is a project of the Texas Business Coalition to raise awareness of issues about the energy market that matter the most to consumers: Reliability, Affordability, and Efficiency.*

Figure 2 Year	Renewable Subsidies	Other Government Imposed Costs	Texas (ERCOT) Total
2014	\$1,275,995,355	\$850,495,478	\$2,126,490,833
2015	\$1,527,364,920	\$1,083,472,123	\$2,610,837,043
2016	\$1,856,789,699	\$764,679,313	\$2,621,469,012
2017	\$2,181,736,097	\$820,139,285	\$3,001,875,382
2018	<b>\$2,544,709,335</b>	<b>\$1,780,468,859</b>	<b>\$4,325,178,194</b>
2019	<b>\$2,533,784,302</b>	<b>\$6,335,105,059</b>	<b>\$8,868,889,361</b>
2020	\$2,615,179,107	\$2,721,379,122	\$5,336,558,229
2021	\$3,563,567,563	\$16,944,745,697	\$20,508,313,259
2022	\$3,506,142,527	\$11,429,824,388	\$14,935,966,916
2023	<b>\$4,035,263,673</b>	<b>\$15,928,559,292</b>	\$19,963,822,965
2014-18	<b>\$9,386,595,406</b>	<b>\$5,299,255,059</b>	<b>\$14,685,850,464</b>
2019-23	<b>\$16,253,937,172</b>	<b>\$53,359,613,558</b>	<b>\$69,613,550,731</b>

government. This has produced predictable results: reliability has plummeted while costs have skyrocketed. The latest data show April electricity residential prices at 14.57 cents per kilowatt hour, up 23% over the last three years.

As bad as they are, retail electricity prices do not immediately reflect all the costs. **Figure 2** shows 2019 as the pivot point in the takeover of the electricity market. That was the year that the government-imposed cost of electricity doubled from \$4.3 billion to \$8.9 billion, primarily

because the Public Utility Commission of Texas (PUC) made adjustments to the Operating Reserve Demand Curve (ORDC) that increased wholesale electricity prices by \$3 billion. Then Uri brought another increase. For the five years prior to 2019, government-imposed costs totaled \$14.7 billion. Over the last five years, they totaled \$69.6 billion, 32.7% of the total cost of electricity. Most of it paid for by Texans.

Wholesale electricity prices confirm that these costs have been passed along to Texas businesses and consumers. In the five years prior to 2019, wholesale prices [averaged \\$31.18](#) per megawatt hour. Since then, prices [averaged \\$76.14](#). The costs translate into higher energy prices, higher general prices, higher taxes, lower wages, and lower profits for Texans. Except for wages and profits in the energy industry.

Prior to 2019, renewable energy subsidies had always been the largest government-imposed cost. That is no longer the case. **Figure 3** shows that renewable subsidies totaled \$4 billion in 2023, but the other government-imposed costs, \$15.9 billion, were almost four times that of renewables.

Most of the non-renewable government-imposed costs were negligible or did not exist until recently. Uplift costs were negligible prior to 2014. Ancillary Services have tripled since 2014. The ORDC and the Reliability Adder came online in 2014 and 2015, respectively. But it was not until 2019 that they had a significant effect on prices.

Until last year, the ORDC had by far the largest effect on electricity prices (\$12.9 billion in added costs). But in 2023, the newly created ERCOT Contingency Reserve Service (ECRS) overwhelmed the system, increasing wholesale electricity prices by an estimated \$12 billion in one year.

Figure 3 – Texas (ERCOT) Government-Imposed Costs of Electricity – 2023	
Subsidy/Benefit	Cost
<b>Renewable Costs</b>	
Federal Production Tax Credits	\$1,183,607,182
Federal Investment Tax Credits	\$822,890,000
Renewable Energy Credits	\$12,401,722
CREZ Transmission Lines	\$630,355,872
Chapter 313 Tax Abatements	\$756,917,802
Chapter 312 Tax Abatements	\$174,091,095
Renewable Congestion	\$455,000,000
<i>Total for Renewable Costs</i>	<b>\$4,035,263,673</b>
<b>Other Government-Imposed Costs</b>	
Operating Reserve Demand Curve	\$550,000,000
Uplift Charges	\$399,000,000
Reliability Adder	\$372,812,476
Ancillary Services	\$1,868,500,624
Winter Storm Uri Securitization	\$738,246,192
ERCOT Contingency Reserve Service	\$12,000,000,000
<i>Total for Other GICs</i>	<b>\$15,928,559,292</b>
<b>Total</b>	<b>\$19,963,822,965</b>

Sources: Potomac Economics, U.S. Congress JCT, PUCT, Texas Comptroller

## Moving Forward

As long as Texas politicians are unwilling to address the harm being caused by renewable energy, the reliability of the Texas grid will continue to decrease over the next five years as costs increase.

Renewable energy subsidies have forced a radical transformation of the Texas grid over the last 10 years. In 2014, natural gas, coal, and nuclear (thermal generation) made up [86% of the generation capacity](#) in ERCOT. Wind was 13% of capacity, solar less than 0.5%. In 2024, thermal generation comprises only [58% of generating capacity](#). Renewables now make up 38%: wind 25% and solar 13%. It is incredibly complex, difficult, and expensive to maintain the reliability of the Texas electric grid when almost 40% of the installed capacity is intermittent, i.e., cannot be counted on to be available when needed. Battery storage, now at 4% of grid capacity, will never be able to compensate for this.

It appears the explosion of renewables will continue unabated despite the well-known fact that the [reliability value of renewable energy declines](#) as its grid penetration increases. From 2025 to 2029, [ERCOT expects](#) only 1,074 megawatts of new non-renewable generation. Wind generation, though, is expected to increase by 3,628 megawatts, solar by 36,868 megawatts, and battery storage by 18,158 megawatts. This forecast means that renewables (including batteries) would total 59% of generating capacity by 2029. While the Texas Energy Fund may increase new generation from natural gas, it will not stop the growth of renewables and the harm they are causing to the reliability of the grid.

This explains why Texas policymakers are desperate to do something to counter the growth of renewables. It does not explain, however, why they continue to take money from Texas taxpayers and consumers and give it to big businesses. The mechanisms being used to deliver the largest amount of the new subsidies are the ERCOT

Contingency Reserve Service and the Texas Energy Fund. Together, we estimate that these two subsidies will cost Texans at least \$4.6 billion annually over the next six years. **Figure 4** shows that the

Figure 4 Years	Renewable Subsidies	Other Government Imposed Costs	Texas (ERCOT) Total
2014-18	\$9,386,595,406	\$5,299,255,059	\$14,685,850,464
2019-23	\$16,253,937,172	\$53,359,613,558	\$69,613,550,731
2024-28	\$29,207,384,904	\$40,682,042,330	\$69,889,427,235

government imposed costs are expected to add at least \$69.9 billion to the cost of electricity in ERCOT from 2024-28, an average of \$14 billion per year. Renewable subsidies and benefits will comprise \$29.2 billion of that and subsidies and benefits for all energy sources make up the other \$40.7 billion.

## Conclusion

The only solution to the current insanity of increasing energy subsidies in an attempt to address the harm being done by renewable energy subsidies is to eliminate all of the subsidies. The Texas Legislature and the PUC could end all state energy subsidies by 2026. These subsidies are the ECRS, the Texas Energy Fund, the ORDC, the Reliability Adder, most Ancillary Services, and Chapters 312 and 313 tax abatements. Additionally, the PUC and the Legislature could require all energy companies to start paying for the costs they create on the grid that are currently socialized (paid by consumers): transmission lines (including CREZ lines), interconnection costs, renewable congestion costs, and the cost of building new generation and storage to address the reliability problems caused by the intermittency of wind and solar generation. This would be difficult, but the end result would be an electric grid with much less complexity and lower costs for Texans. This will only happen, though, if Texas policymakers are willing to put the interests of Texans ahead of the interests of the green energy industry.

## Appendix: Explanation of Subsidies and Sources

**Total Cost of Electricity.** This is the total revenue from sales of electricity to end users in Texas reduced by 10% to reflect the load in ERCOT, then increased by the cost of federal & state tax subsidies (see below). Source: [U.S. EIA](#).

**Production Tax Credit.** This is a federal subsidy for wind generation. It is expected to average \$2.3 billion annually in Texas from 2024-28. Source: [The Joint Committee on Taxation, U.S. Congress](#).

**Investment Tax Credit.** This is a federal subsidy for solar generation. It is expected to average \$1.7 billion annually in Texas from 2024-28. Source: [The Joint Committee on Taxation, U.S. Congress](#).

**Other Federal Wind and Solar Subsidies.** These were federal subsidies provided through various laws from 2006 through 2019. They totaled \$12.4 billion. Sources: the [U.S. Dept of Treasury](#) and the [Texas Public Policy Foundation](#).

**Renewable Energy Credits.** These were subsidies mandated by the Texas Legislature from 2001 through 2023. The total estimated cost of the credits was \$623.4 million. Source: [ERCOT](#).

**Chapters 312 and 313 Property Tax Abatements.** These are for wind and solar generators. Chapter 313 has been abolished, but the costs will continue through 2032. Average annual cost: \$454 million. Source: [Texas Comptroller](#).

**Competitive Renewable Energy Zone Transmission Lines.** CREZ lines were mandated by the Texas Legislature in 2005 to provide transmission for wind generation from West Texas; they would not have been built under normal PUC protocols. Their total cost through 2029 is projected to be \$13.3 billion. Average annual cost: \$620 million. Source: [The Energy Alliance](#).

**Grid Interconnection.** The cost of generators connecting to the Texas grid are subsidized by Texas consumers. From 2007 through 2021, this cost was \$1.1 billion. Source: [Public Utility Commission of Texas](#).

**Renewable Congestion.** Renewable energy creates congestion when the wind increases and electricity from turbines floods transmission lines. Average annual cost: \$498 million. Source: [Potomac Economics](#).

**Operating Reserve Demand Curve (ORDC).** This was created by the PUC in 2013. Allegedly created to address market failure, the problems were actually caused by renewable energy and state regulations. Average annual cost: \$2.3 billion. Source: [Potomac Economics](#).

**Uplift.** This charge to consumers contains a variety of non-market costs, notably an administrative fee that pays for the cost of ERCOT. Average annual cost: \$366 million. Source: [Potomac Economics](#).

**Reliability Adder.** This is supposed to compensate for price-suppressing effects of out-of-market reliability actions taken by ERCOT. Average annual cost: \$2.2 billion. Source: [Potomac Economics](#).

**Ancillary Services.** These are mainly operating reserves that can start up and produce energy in a short period of time. This is a faulty market intervention based on the false assumption that the market would overcharge for the reserves. Average annual Cost: \$1.1 billion. Source: [Potomac Economics](#).

**Uri Securitization.** The PUC's irrational and [illegal](#) increase of electricity prices during Uri costs consumers billions. At least \$11.5 billion of these costs have been securitized to spread out the cost over time. Average annual cost: \$738 million. Sources: [Robert Bryce](#) and other sources.

**ERCOT Contingency Reserve Service.** The ECRS increases wholesale prices by creating artificial shortages. Projected average annual cost: at least \$3 billion. Source: [Potomac Economics](#).

**Texas Energy Fund.** Created by the Texas Legislature in 2023, using \$5 billion of surplus funds. Another \$5 billion is expected to be added in 2025. Projected average annual cost: \$1.6 billion. Source: [Texas House Bill 1 \(Sec. 18.75\)](#).