

A Cooperative of the Region One Education Service Center

Overview of Services & Update

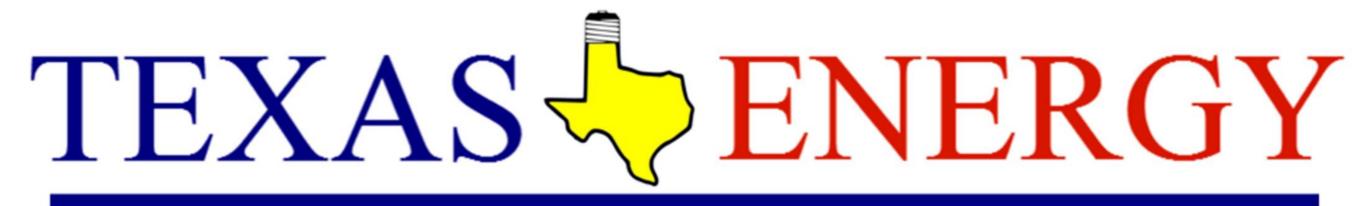
Lori Atwood Ramos, Purchasing Coordinator



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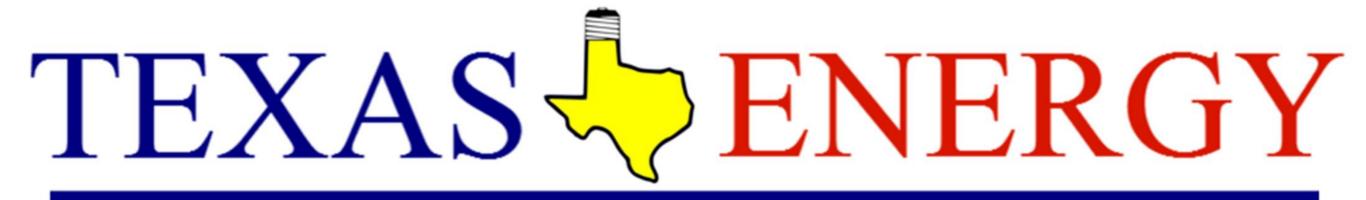
Founded in 2002

- Following the deregulation of electricity
- The Region One Electricity Aggregation Pool (ROEAP) was created



A Cooperative of the Region One Education Service Center

Purpose: to assist school districts in operating more efficiently and economically through the competitive procurement of energy related goods and services



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Through a competitive procurement process Region One ESC establishes a partnership for Energy Aggregation & Consultant Services

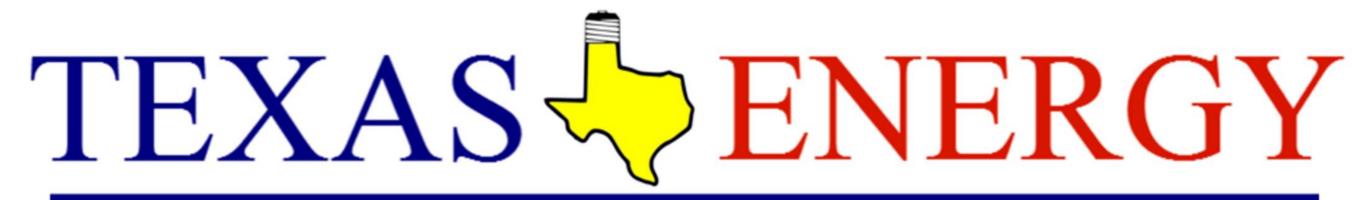




A Cooperative of the Region One Education Service Center

Energy Aggregation & Consultant Services RFP 21-AGENCY-000088





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A Cooperative of the Region One Education Service Center

Why Tradition Energy?

- Experience
- Wholesale Market Knowledge & Expertise
- Strategic Analysis and Recommendations
- Independent, Unbiased and Transparent
- Full-Service Energy Management Solutions

Who We Are

- The nation's largest and most experienced independent energy risk management and procurement advisor
- Advising clients in energy commodities markets since 1986
- Industry-acclaimed energy market research expert and primary source for market intelligence
- Part of the Tradition Group, a top 3 institutional broker of financial products and commodities with over
 2,300 employees in 29 countries
- Providing local clients with the full resources of a global energy advisor
- Better market timing and increased competition through unsurpassed experience in the wholesale energy markets
- 97% of clients say that our "strategic recommendations are making a positive contribution to their enterprise"*



Strategic Solutions

PROCUREMENT SOLUTIONS

Strategic Risk Management

Market Research & Intelligence

Energy Procurement

Client Services

Educational Webinars & Seminars

TEAMView Energy Information & Data Management

Renewables: Solar, Wind

VALUE-ADDED SOLUTIONS

Bill Processing & Payment

Tariff Rate and Tax Analysis

Demand Response (DR)

Demand-Side Management: Energy Efficiency

Projects & Lighting Retrofits







Experience with Cooperative Purchasing Programs

- ChoicePartners (HCDE)
- HGACBuy & H-GAC Purchasing Corp
- Allied States Cooperative (ESC19)
- OMNIA Partners, Public Sector (also TCPN)
- Texas Community College Cooperative Purchasing Network
- MedAssets (healthcare GPO)

Tradition Energy

No other firm matches Tradition's depth and breadth of experience, with more than 250 Education clients managed totaling 9.3 billion kWh

35

years in the energy markets 1300

525

1100

83

15:1

C&I and government clients

million kilowatt-hours priced weekly

accounts priced weekly suppliers competing for our clients' business

ratio of clients to Tradition professionals





Educational Events

Webinar Series: 9 Common Energy Procurement Mistakes and How To Prevent Them

Have you ever executed an energy agreement just to find out you could have waited a week and gotten a much lower price? Purchased the wrong energy product? Or, overlooked a contract clause that benefitted your supplier, but not you? If so, you're not alone. Join us to learn about 9 Common Energy Procurement Mistakes and How To Prevent Them.

Event Details

March 25, 2021

12:30 PM EDT

REGISTER NOW!

Webinar Series: Learn How To Benefit From Solar

Join Tradition Energy as we discuss how using solar energy can help organizations reduce energy costs, consumption and emissions as part of adopting more sustainable business practices

Event Details

April 21, 2021

12:30 PM ET

Webinar Series: Bill Auditing & Tariff Analysis

Join Tradition Energy for our Bill Auditing & Tariff Analysis webinar. This 30-minute presentation will educate attendees on the methods utilized to analyze tariffs and utility invoices to identify billing errors, resulting in recovered costs from past invoices and prevented costs from ongoing expenditures due to the implementation of more appropriate delivery tariffs.

Event Details

May 19, 2021

12:30 PM ET

Webinar Series: How Understanding Utility Delivery Charges Can Reduce Energy Costs

Rate Class, Improper Charges, Demand, Power Factor, Usage Hours and Improper Charges can all affect utilities' delivery charges. This short presentation will highlight the ways one can address and minimize energy costs by better understanding and managing the utility delivery charges.

Event Details

June 16, 2021

12:30 PM ET

https://traditionenergy.com/news/event-calendar



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Tradition Energy Administrative Fee:

Electricity Procurement \$/per MWh	12-48+ 12-48+ Months			
	\$1.00	\$0.90		
Demand Response, Onsite Generation, Renewable Energy Credits, and Power Factor Correction	NAC			
Natural Gas Procurement	12 - 24+ M \$.15 per I			



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52,036 MWh of Electricity

- Edcouch-Elsa ISD
- Hidalgo ISD
- La Villa ISD
- Lyford CISD
- Monte Alto ISD

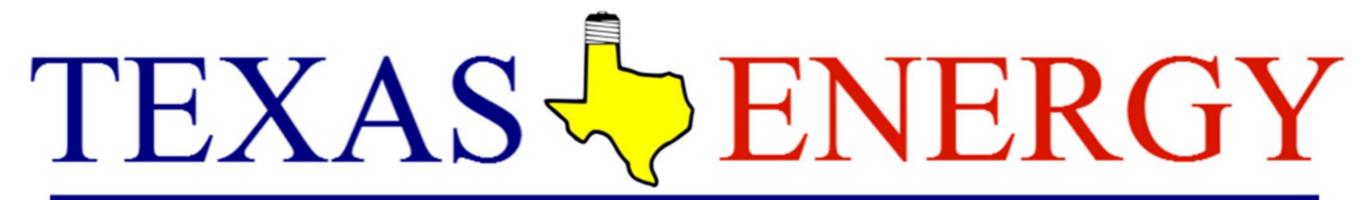
- Point Isabel ISD
- Raymondville ISD
- Region One ESC
- South Texas Ed Technologies



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Hudson Energy Contract

- September 14, 2016, signed contract
 - Rate: \$0.03950 KWH / \$39.50 MWH*
 - Term: 48-months
- October 13, 2016, signed contract
 - > Rate: \$0.03990 KWH / \$39.90 MWH*
 - Term: 48-months
- Expires May 1, 2021



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Upcoming REP Contract Considerations

- Price
- Contract term/length
- Bandwidth
- Add delete allowance
- Inclusion of nodal
- Inclusion of renewable energy sources
- Consensus among the TEC members

Long-Term Energy Procurement Opportunities

Background

- After a thorough RFP process Region 1 selected the nation's largest energy procurement advisor,
 Tradition Energy, to partner with its members to drive down energy costs.
- Tradition Energy has assisted numerous Districts, including McAllen ISD, with long-term electricity procurement opportunities.

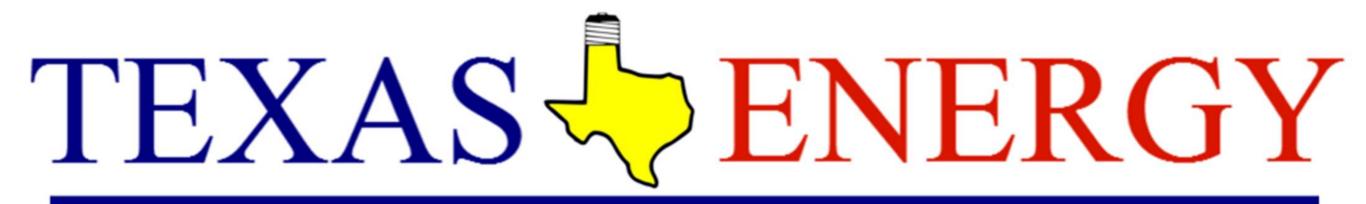
Why Go Long-Term?

- Current electricity pricing in Texas is "backwardated," meaning that longer terms now yield more favorable pricing than shorter terms.
- Rising natural gas exports, increased reliance on renewables, and lack of grid capacity here in Texas
 (i.e. winter storm in February) all point to electricity pricing continuing to move higher over the
 coming years.
- Longer term agreements provide budget certainty and stability that is crucial to ISDs.

What is the Downside?

- Electricity is a volatile commodity that used to cost over \$0.12/kWh over ten years ago compared to the rates in the \$0.03/kWh - \$0.04/kWh range we see today.
- There is limited downside potential. Electricity pricing is near all time lows and market factors show it's more likely than not that prices move higher in the coming years.





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Next Steps

- 1. Signed LOA from TEC members
- 2. TEC member meeting with Tradition Energy
- 3. ROESC updates TEC Interlocal Agreement (ILA)
 - Letter of engagement
 - Signed ILA from all participating members
- 4. Awarded Tradition Energy to obtain REP pricing for member review and approval
 - Electricity pricing is only valid on that day, requires quick turnaround for acceptance
- 5. On-going client educational opportunities and services



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Contact Information

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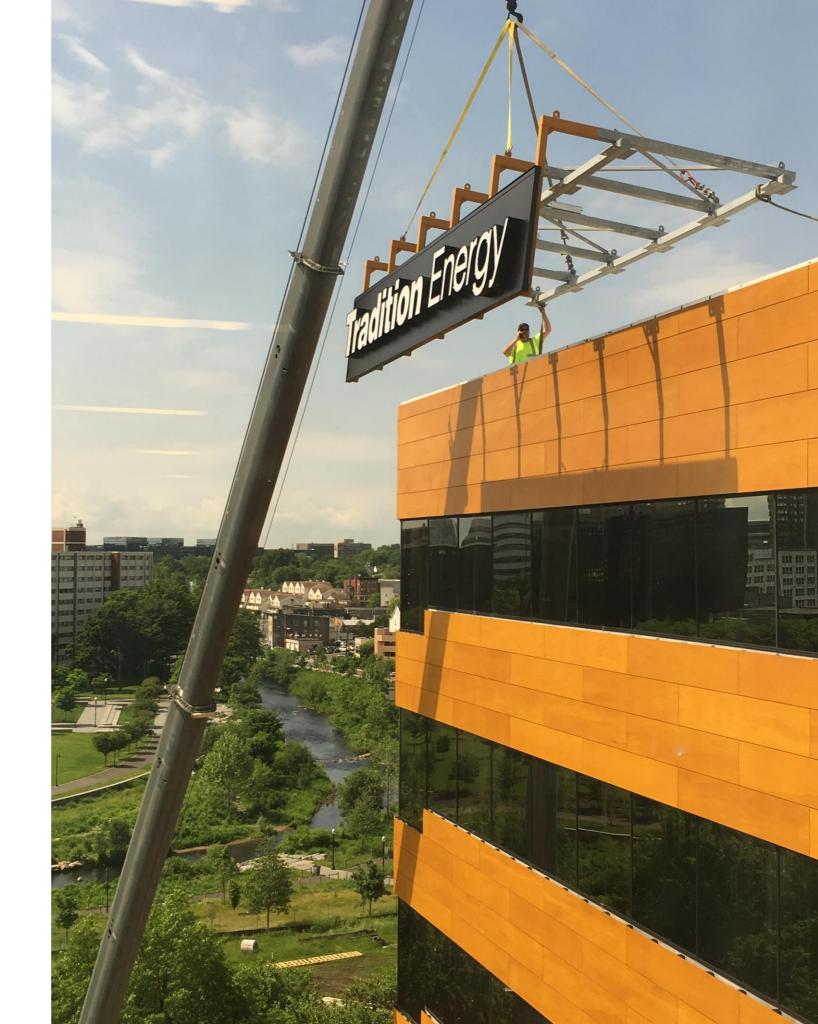
Email: <u>laramos@esc1.net</u>



March 31, 2021

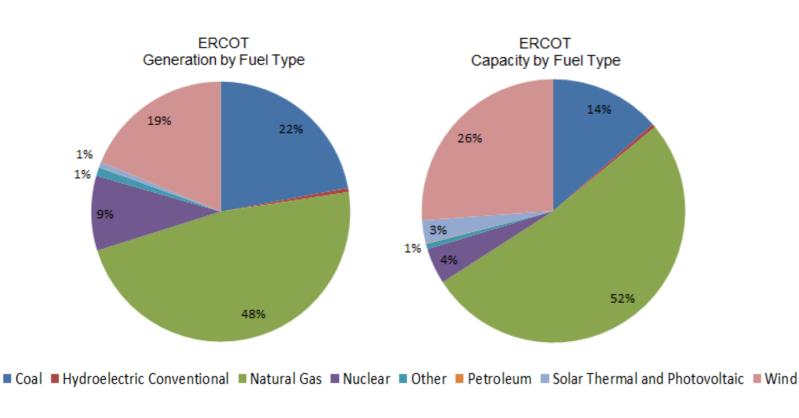
Regional Market Outlook – ERCOT South





ERCOT Energy Market Drivers

- The supply outlook in ERCOT will be tight in the coming years due to increasing system demand and the retirement of both natural gas and coal-fired generators.
 - ERCOT's system could be especially challenged in hot weather as intermittent wind grows as a share of capacity.
 - In 2020, real time average daily prices exceeded \$100/MWh 17 times with the West Zone showing the most volatility.
 - In 2019, real time hourly prices in ERCOT peaked at \$1,700/MWh on one occasion and broke \$1,000/MWh several times.
 - Although volatile, 2020 prices did not experience the same extremes seen in 2019 as wind forecasts were more accurate and demand response reduced overall peak load.
- ERCOT set a new record for system demand in August 2019 at 74,531 MW and despite a 2% decline in projected load from the previous reported value, peak demand reached 74,328 MW in August 2020.
- The reserve margin is expected to tighten in future years as fossil fuel generation is replaced by renewable generation, which requires more capacity than fossil fuel generation to achieve the same reserve margin.

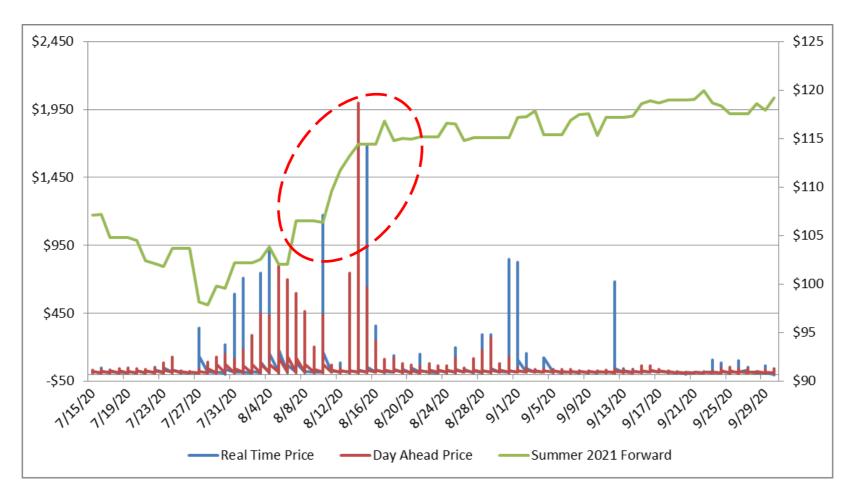






ERCOT Price Spike Risks

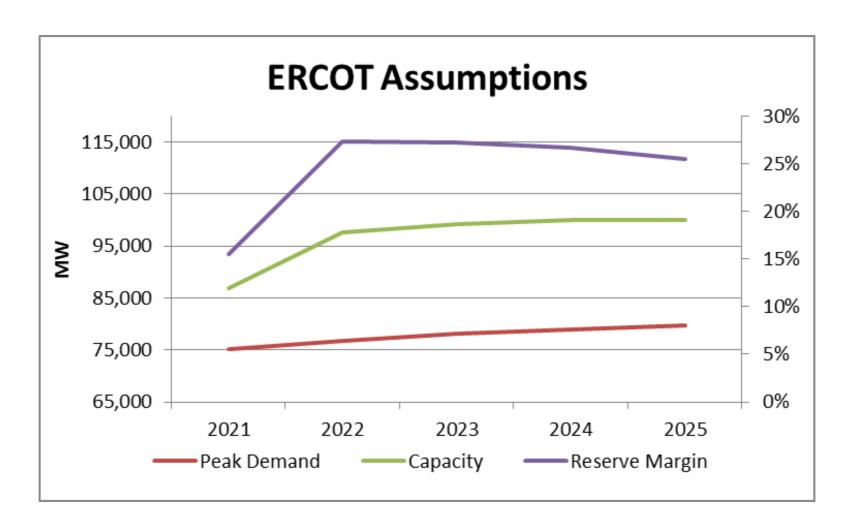
- The closure of ~6,000 MW of coal-fired power generation in 2018 and 2019 has significantly increased the risk of price spikes during peak summer demand periods.
- As heat saturated the state of Texas in August 2020, hourly prices were extremely volatile as the lack of baseload, or traditional thermal generation, became problematic.
- These price spikes increased risk premiums by as much as ~20% for Summer 2021 power contracts, highlighting the market's sensitivity to current supply and demand conditions.



Takeaway: Coal retirements, variable wind output, and thermal plant outages create significant price risks in the hourly markets, which the futures markets reflect.

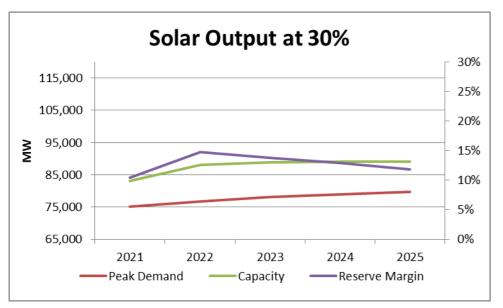
ERCOT Load & Generation Changes

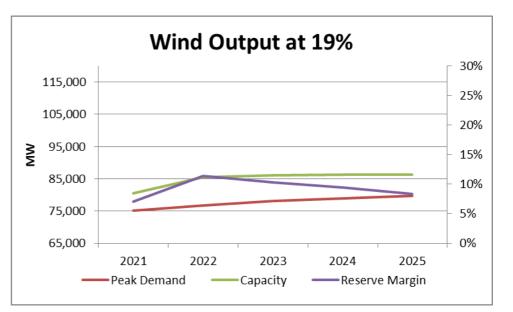
- In June 2021 a significant portion of Lubbock Power and Light will become interconnected with ERCOT increasing peak summer demand significantly.
- Despite the additional demand, the continued buildout of wind and solar resources in Texas should provide ample reserve margins.
- Additional gas-fired generation coming online in 2021 is limited to power plants in Harris and Galveston, benefitting Houston and potentially parts of South Zone.



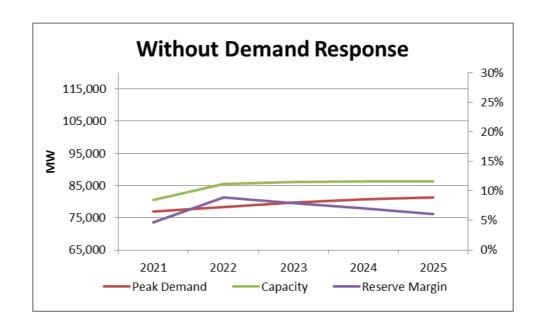
ERCOT Reserve Margin

• Some of the assumptions about renewable output in the ERCOT model may be too optimistic. If we adjust for more conservative scenarios during peak demand we get a very different picture.



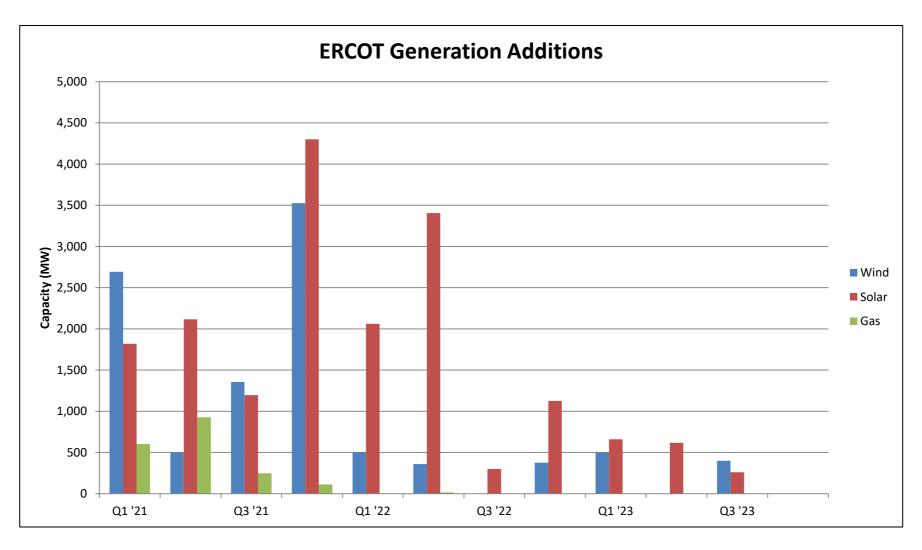


 Further, should participation in Demand Response programs not be as robust as assumed, the picture is even worse.



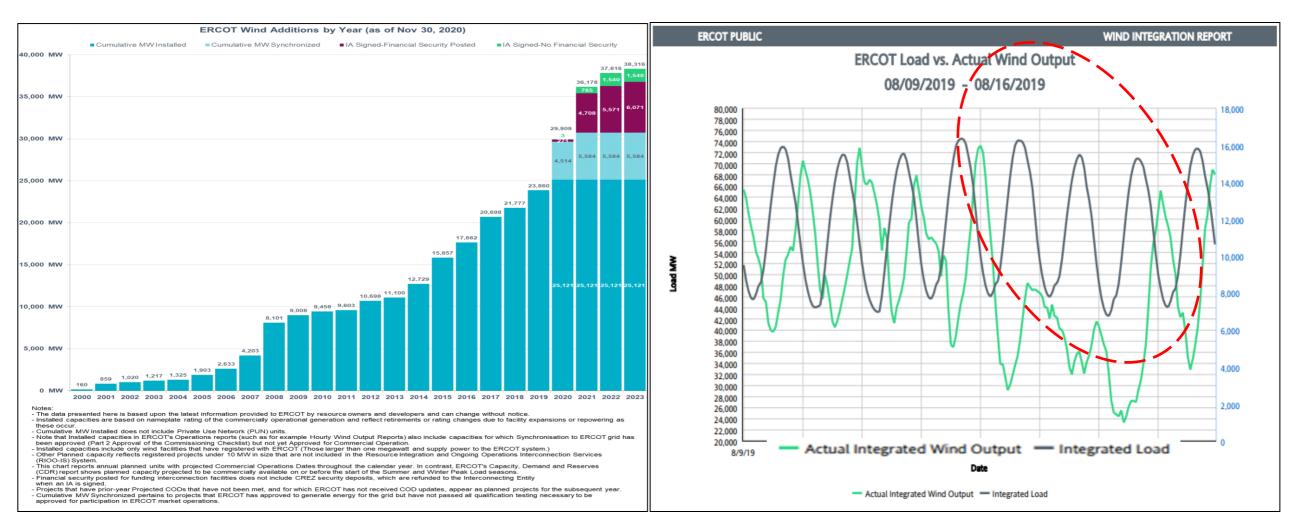
ERCOT Demand & New Build Generation

- There are many generation projects in the pipeline at different stages of development, however potential gas generation builds are small and infrequent in the coming years, with the largest natural gas-fired power plant (510 MW Topaz Power Plant) expected to begin operation in June 2021.
- The build out of renewables will certainly help to meet some of the growing demand, but the intermittency of generation from these resources will make the already volatile electricity market even more unpredictable.



ERCOT Wind Supply

- By 2022 year end, ERCOT wind generation could increase by more than ~9 GW or ~28% from 2020 levels.
- The variance between forecasted and actual wind generation, particularly during peak demand periods, caused severe price spikes (\$9,000/MWh) in summer 2019, and could continue to do so as more wind generation comes online and thermal generation capacity remains fairly stagnant in the coming years.

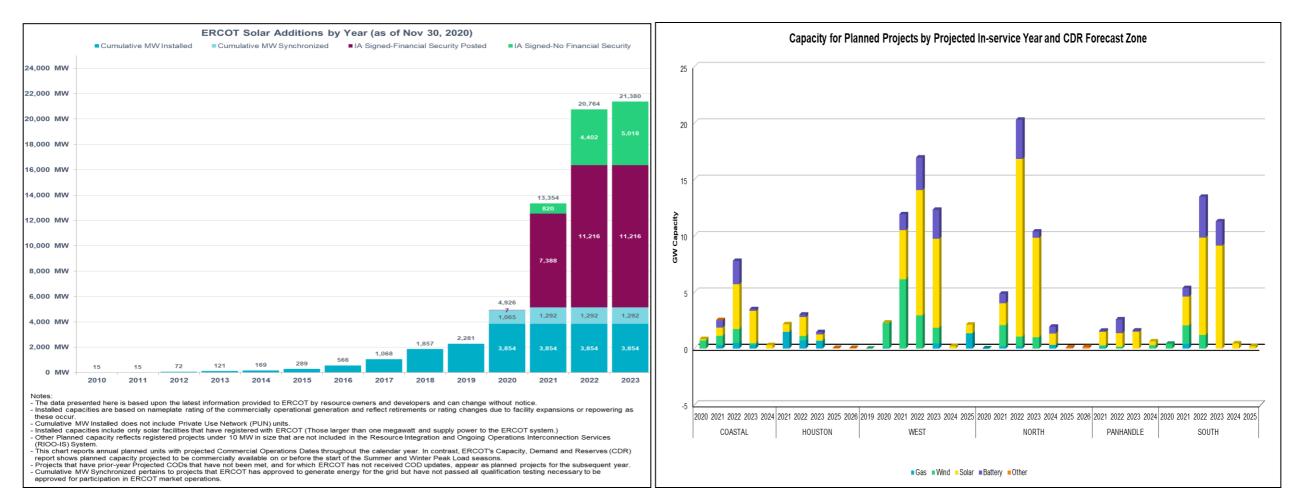


Takeaway: Most new generation getting built is renewable, which adds both supply and volatility due to the difficulties in forecasting their intermittent production in the day ahead market.



ERCOT Solar Supply

- ERCOT could also add more than ~9 GW (Advanced Development), nearly tripling current solar generation capacity in 2021 with another 6.9 GW planned for the following year.
- Many new solar projects are in early development and as they move forward could increase solar generation capacity significantly.
- Increased solar generation could help meet peak demand during the day and mitigate risk for price spikes due to variance in wind generation.

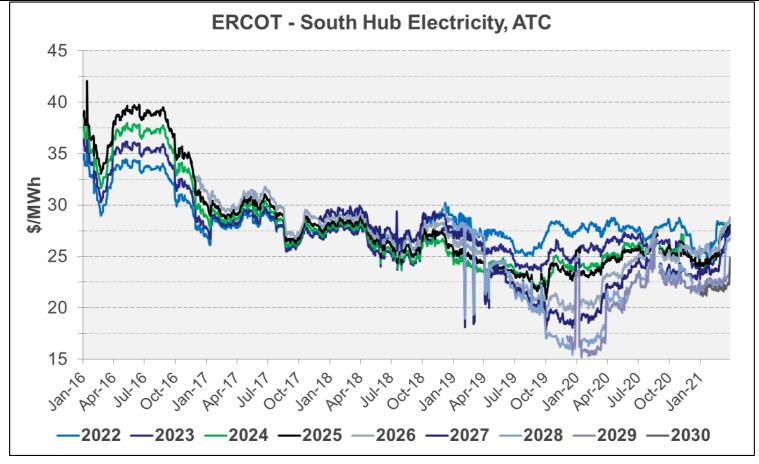


Takeaway: Although solar capacity will increase in the coming years, it will still be less than 6% of ERCOT's total capacity by 2024.

ERCOT South Hub Forward Prices

- As more renewable sources are added to the generation mix, their increasing share of generation capacity presents a risk to prices in future years as their generation output is less predictable.
- Texas prices are driven by summer risk, as is evidenced in forward prices strong reaction to daily price volatility in summer 2019, and to a lesser extent in summer 2020.
- Longer term prices have seen increases following the extreme winter weather in February 2021, as the newly evidenced winter seasonal risk is now compounded with summer risk.

			ERCOT - South Hub Electricity, ATC							
		CAL 2022	CAL 2023	CAL 2024	CAL 2025	CAL 2026	CAL 2027	CAL 2028	CAL 2029	CAL 2030
ſ	Current Price	\$28.10	\$27.58	\$27.76	\$28.03	\$28.80	\$27.85	\$26.84	\$24.71	\$24.92



12 – 60 Month Pricing

Terms	12 Months	24 Months	36 Months	48 Months	60 Months	
Start Date	May-21	May-21	May-21	May-21	May-21	
End Date	May-22	May-23	May-24	May-25	May-26	
KWH Usage	31,842,994	63,685,988	95,528,982	127,371,976	159214970	
TXU	0.04695	0.04363	0.04239	0.04176	0.04139	
Savings %		-10.5%	-7.3%	-5.7%	-4.8%	
CREDIT:	Pending	SWING %:	100%	PAY TERM: 30		
Reliant	0.04693	0.04422	0.04286	0.04211	0.04175	
Savings %	-18.8%	-11.9%	-8.5%	-6.6%	-5.7%	
CREDIT:	Pending	SWING %: 100%		PAY TERM: 30		
Hudson	0.05300	0.05020	0.04900	0.0489	0.0488	
Savings %	-34.2%	-27.1%	-24.1%	-23.8%	-23.5%	
CREDIT:	Pending	SWING %: 100%		PAY TERM: 30		
Gexa	0.04869	0.04607	0.04504	0.04465	0.04483	
Savings %	-23.3%	-16.6%	-14.0%	-13.0%	-13.5%	
CREDIT:	Pending	SWING %: 100%		PAY TERM: 30		
EDF	0.04597	0.04365	0.04236	0.04179	0.04143	
Savings %	-16.4%	-10.5%	-7.2%	-5.8%	-4.9%	
CREDIT:	Pending	SWING %: 100%		PAY TERM: 20		
Constellation	0.05001	0.04867	0.04769			
Savings %	-26.6%	-23.2%	-20.7%			
CREDIT:	Pending	SWING %:	Unbanded	PAY TERM: 20		



72 – 156 Month Pricing

72 Months

Terms

Start Date	May-21	May-21	May-21	May-21	May-21	
End Date	May-27	May-31	May-32	May-33	May-34	
KWH Usage	191,057,964	318,429,940	350,272,934	382,115,928	413,958,922	
MP2	0.04122	0.04016	0.04018	0.04048		
Savings %	-4.4%	-1.7%	-1.7%	-2.5%		
CREDIT:	Pending	SWING %:	Unbanded	PAY TERM: 30		
TXU	0.04216	0.04137	0.04140	0.04123		
Savings %	-6.7%	-4.7%	-4.8%	-4.4%		
CREDIT:	Pending	SWING %:	100%	PAY TERM: 30		
Reliant	0.04160	0.04080	0.04069	0.04054	0.04011	
Savings %	-5.3%	-3.3%	-3.0%	-2.6%	-1.5%	
CREDIT: Pending		SWING %:	3 %: 100% PAY TERM: 30			
EDF	0.04095	0.03996	0.04000	0.04031		
Savings %	-3.7%	-1.2%	-1.3%	-2.1%		
CREDIT:	Pending	SWING %: 100%		PAY TERM: 20		

132 Months

144 Months

120 Months



156 Months

Next Steps

- LOA, LOE, and current ESI list sent back to Tradition by tomorrow, 4/1
- Interlocal agreement finalized with the TEC
- Tradition conducts initial pricing with suppliers the week of 4/5
- Agreement to be finalized no later than 4/16 to allow two weeks minimum for supplier enrollment

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