



# Texas Solar Market Update

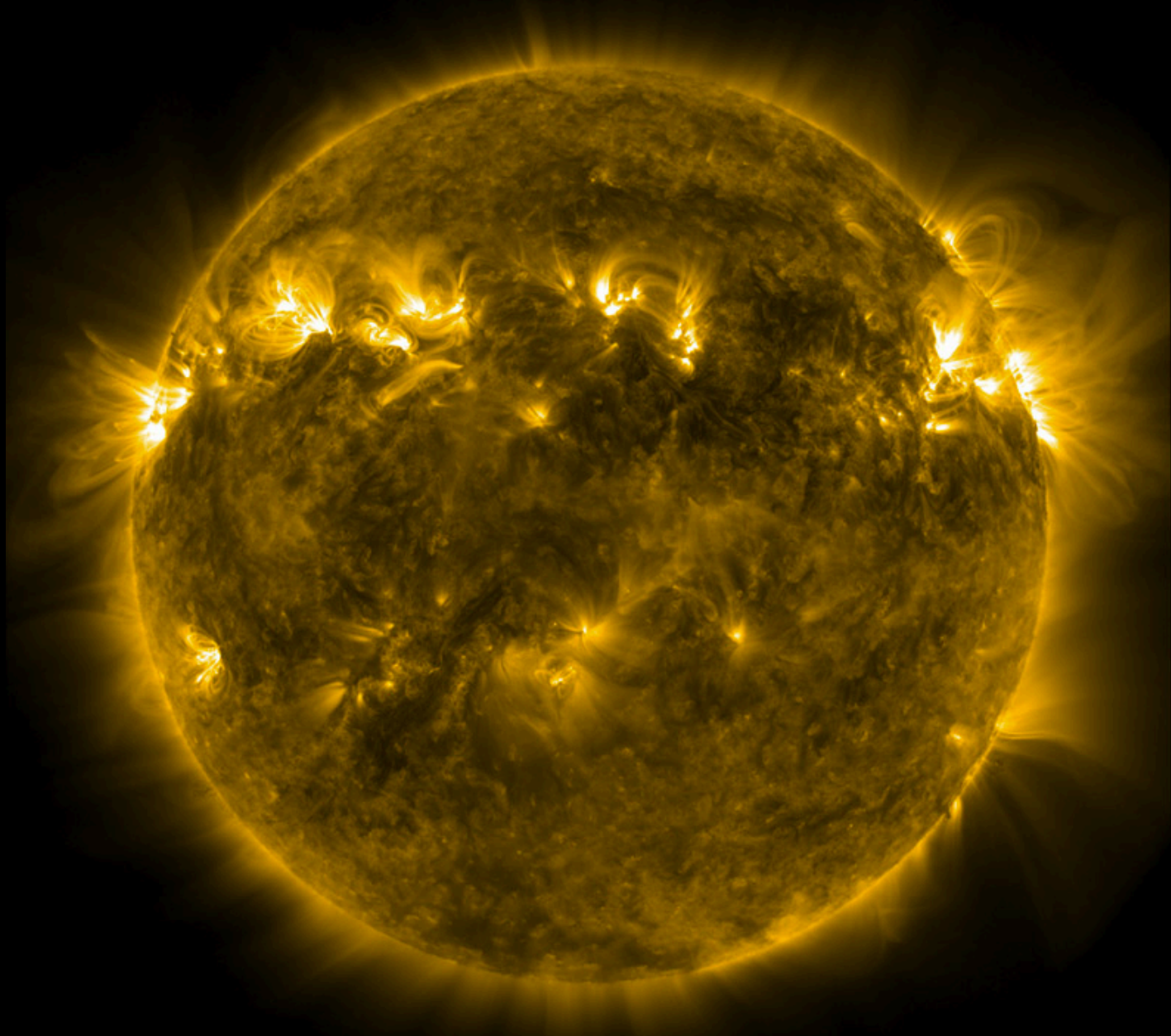
*Texas Solar Energy Society – 2020 Annual Meeting*

*2/1/20*



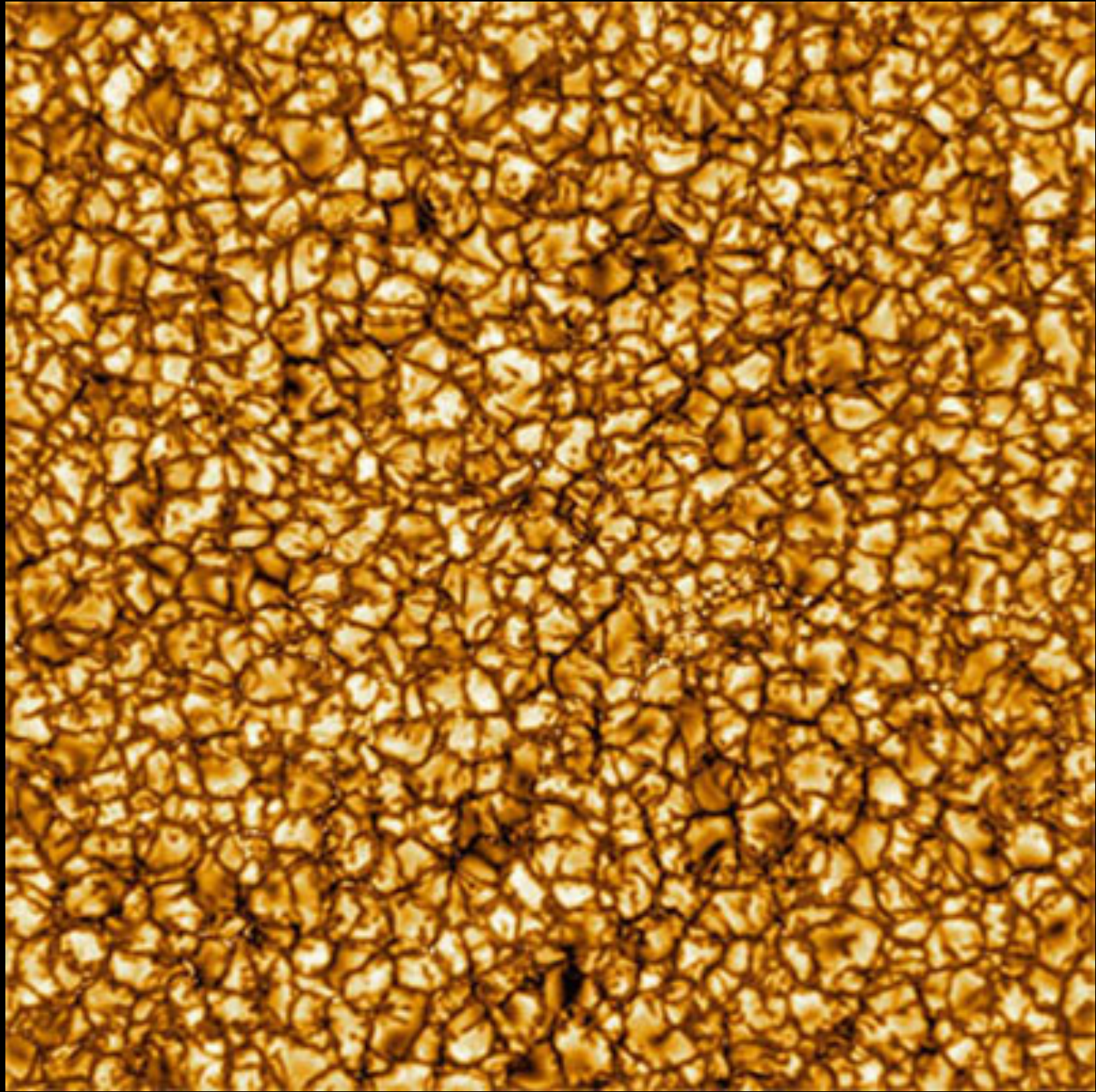
TEXAS SOLAR POWER  
ASSOCIATION



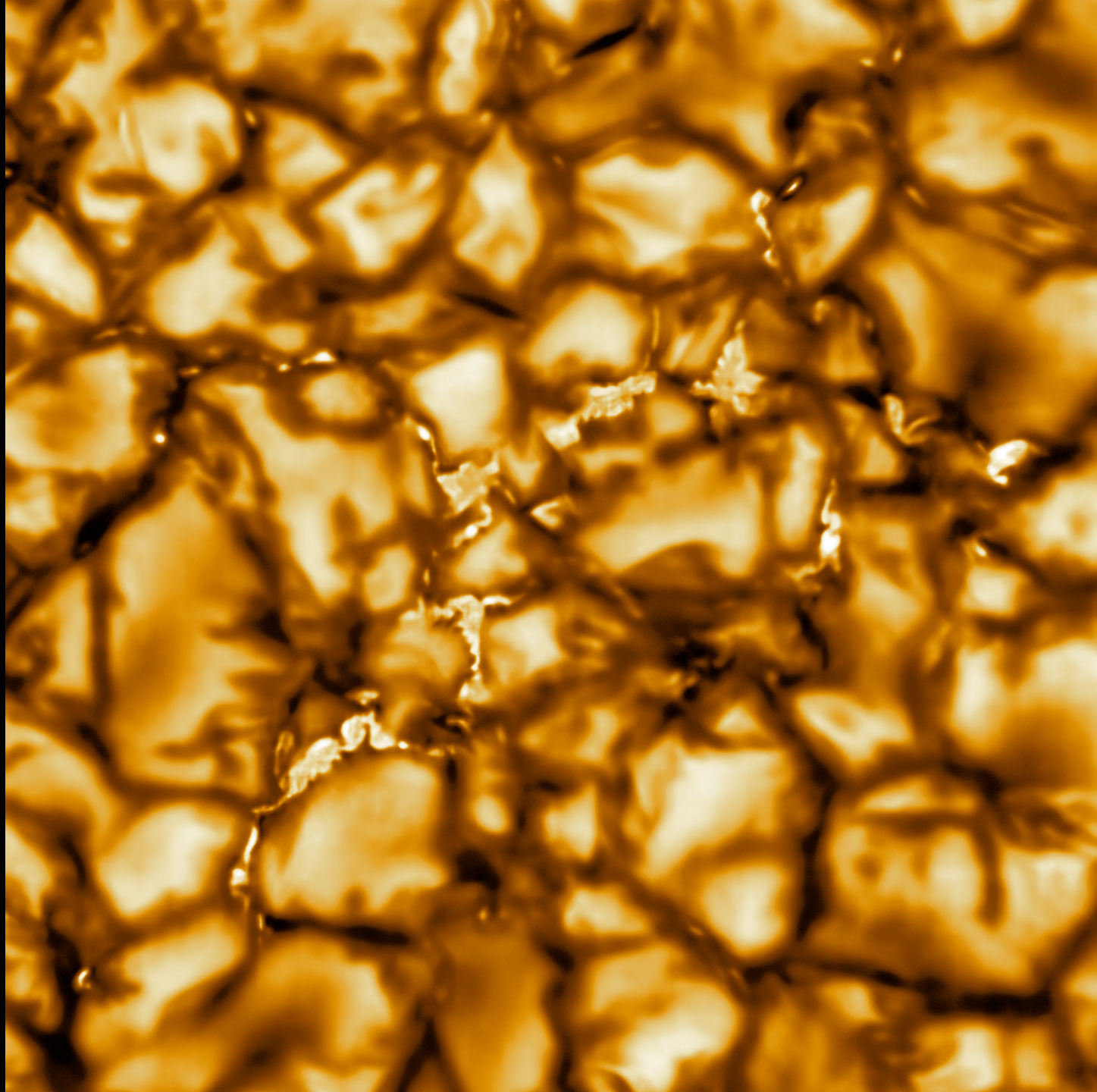


SDO/AIA 171 2011-04-08 07:44:01 UT





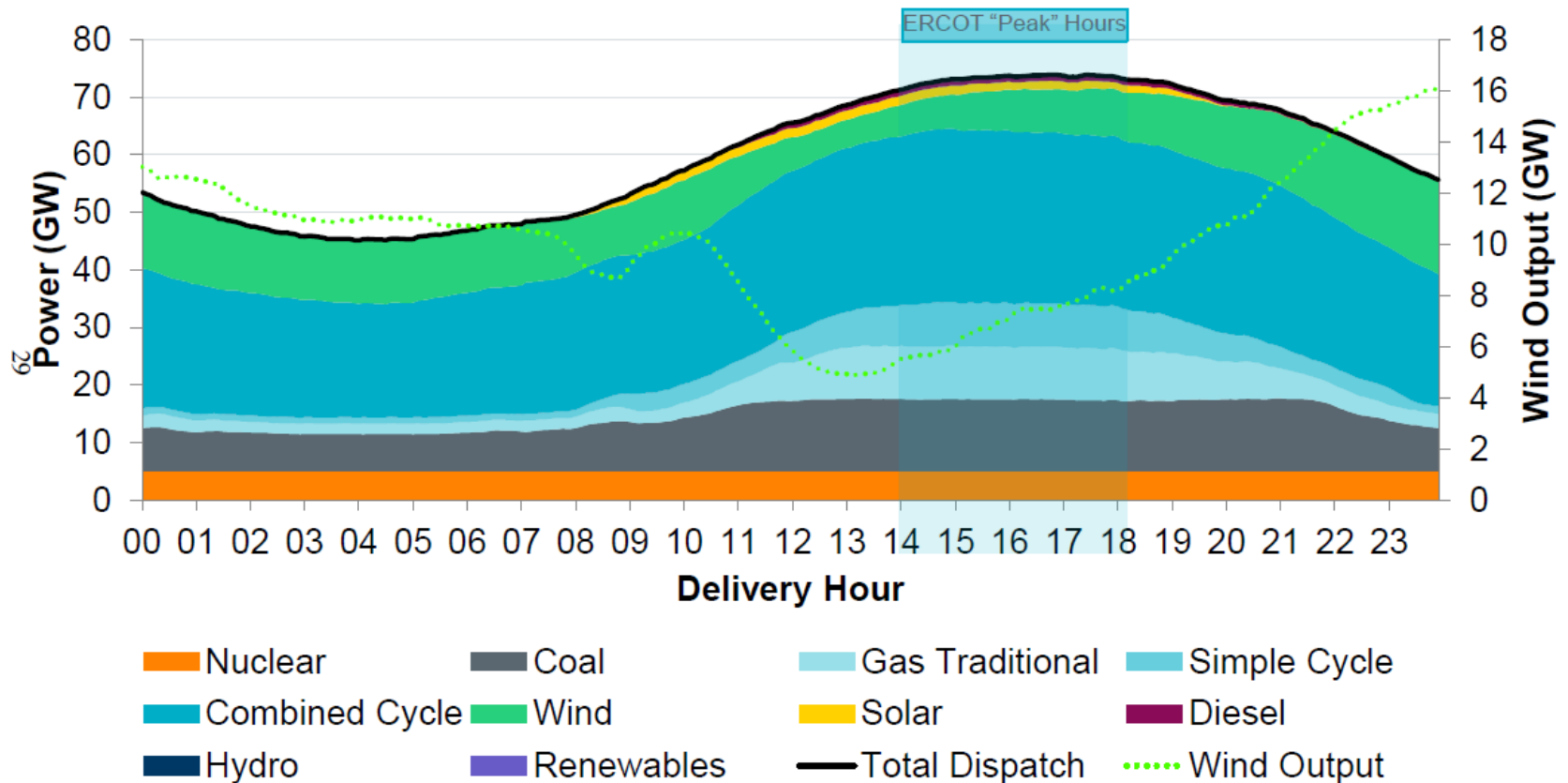






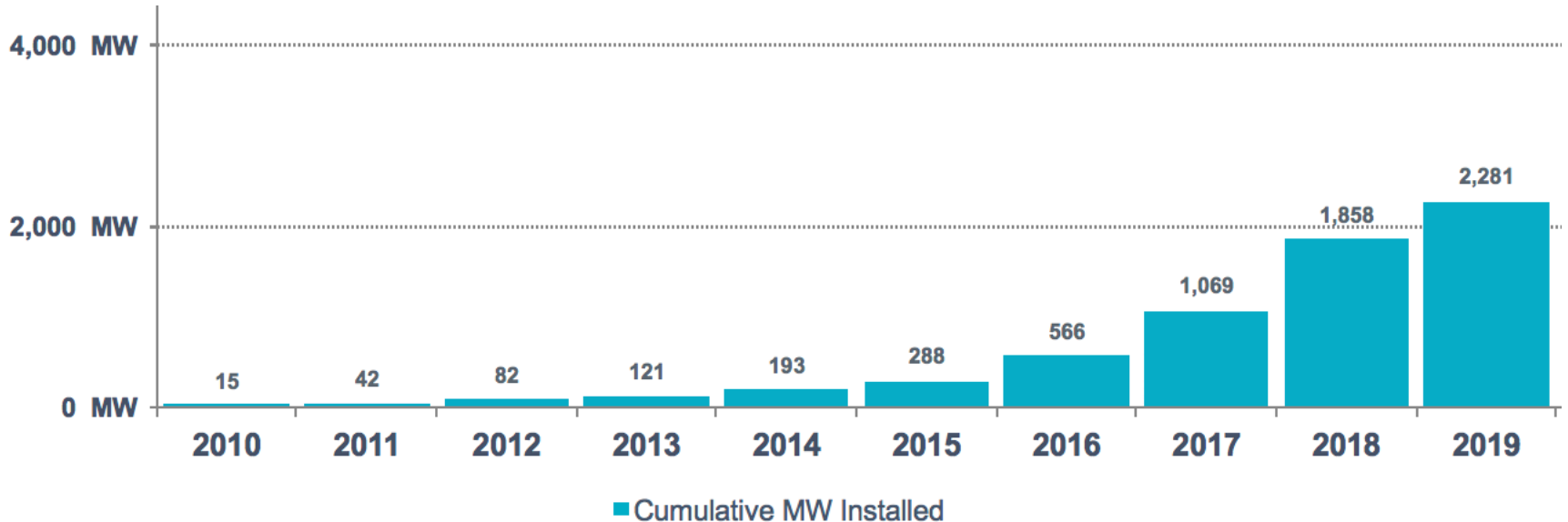
# Looking back on Summer 2019: Solar produced on peak as expected

Generation on Peak Demand Day of August 12





# Wholesale Market Activity



## Initial utility-scale solar plants sited in central TX (2010-2015):

- Blue Wing (14.9 MW)
- Centennial Solar (19.8 MW)
- Webberville (26.7 MW)
- Alamo Solar 1 + 4 (39.2 + 38 MW)

## New build out of larger west TX plants (2016-present):

- Upton Solar 2: Vistra (180 MW)
- Roserock: Recurrent / Southern (157 MW)
- East Pecos: First Solar / Southern (121 MW)
- Alamo Solar 6: OCI / Berkshire (108 MW)
- CED Upton: ConEdison (158 MW)



# Corporate demand takes off

- Recent utility-scale solar deals in Texas announced with Anheuser-Busch, Honda, Apple, Google, Microsoft, Target, and others
- Facebook investing directly in 379 MW solar project north of Odessa
- Starbucks announces contract with 50 MW of solar generation across multiple sites to power 360 Texas stores, plus investment in additional sites







## Innovative deals bring solar to new customers

- **Competitive retail market:** NRG signs solar power purchase agreements totaling 1,300 MW to serve their retail customers
- **Municipal utilities:** New Braunfels Utilities organizes combo 500 MW solar RFP with Bryan, Denton, Garland, and Kerrville
- **Co-op utilities:** Brazos Electric Power Co-op contracts for 94 MW on behalf of CoServ and seven of their other distribution co-op members
- **Public entities:** Through the State Energy Conservation Office, Texas Energy Aggregation is organizing a group procurement to provide long-term low-cost solar to state agencies, cities, universities, and hospital districts

Aggregated procurements enable smaller utilities and retail customers to access low-cost solar from large-scale solar facilities



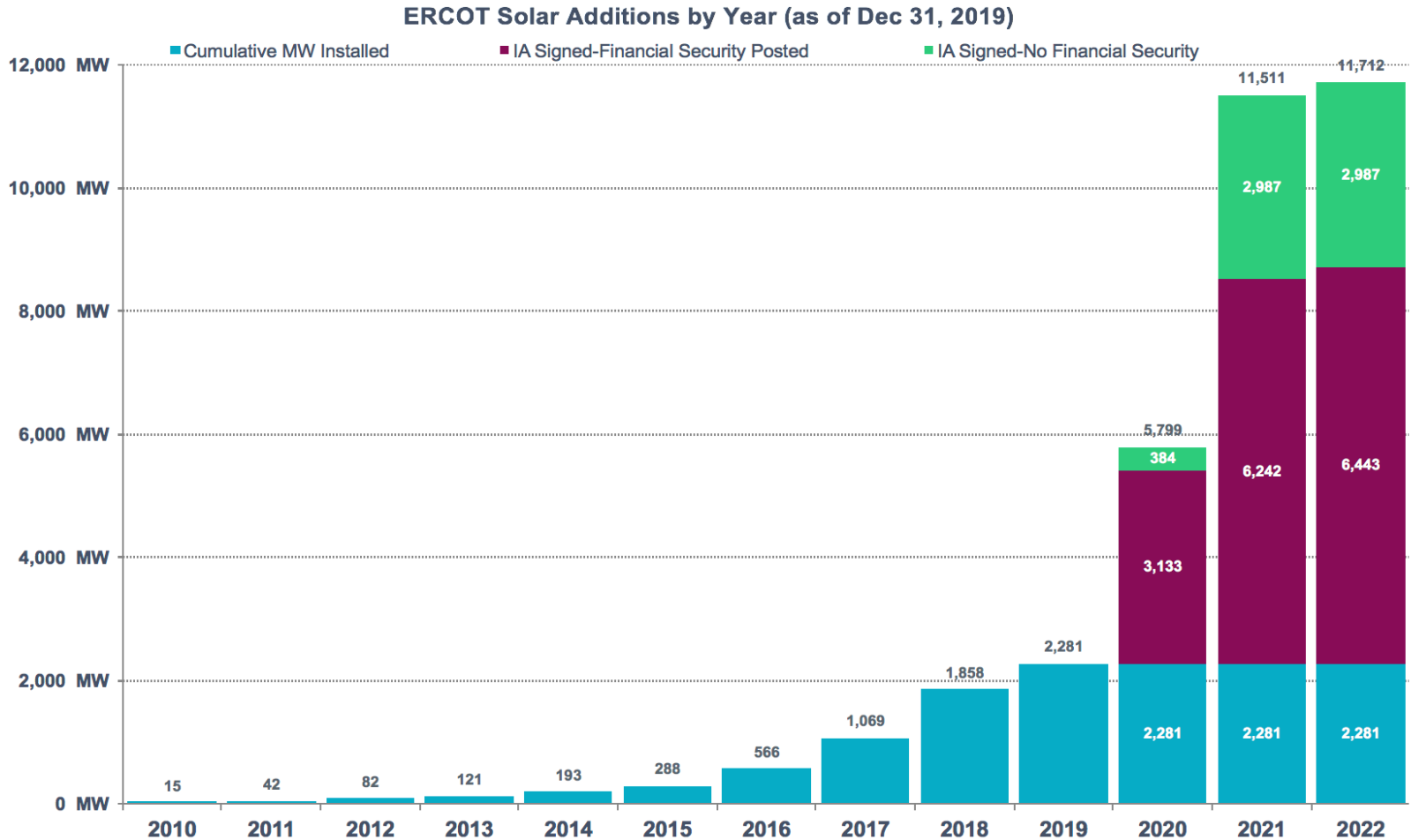
# Solar powering Texas oil & gas operations



- Occidental Petroleum builds 16 MW solar plant in Ector County to provide on-site power for Goldsmith oilfield operations
- Through its Oxy Low Carbon Ventures subsidiary, the company also signed a long-term power purchase agreement for 109 MW of solar power for use in its Permian operations beginning in 2021
- ExxonMobil, Shell Energy, and Baker Hughes recently announced PPAs for 500+ MW of large-scale solar generation



# Looking ahead: Significant near-term growth

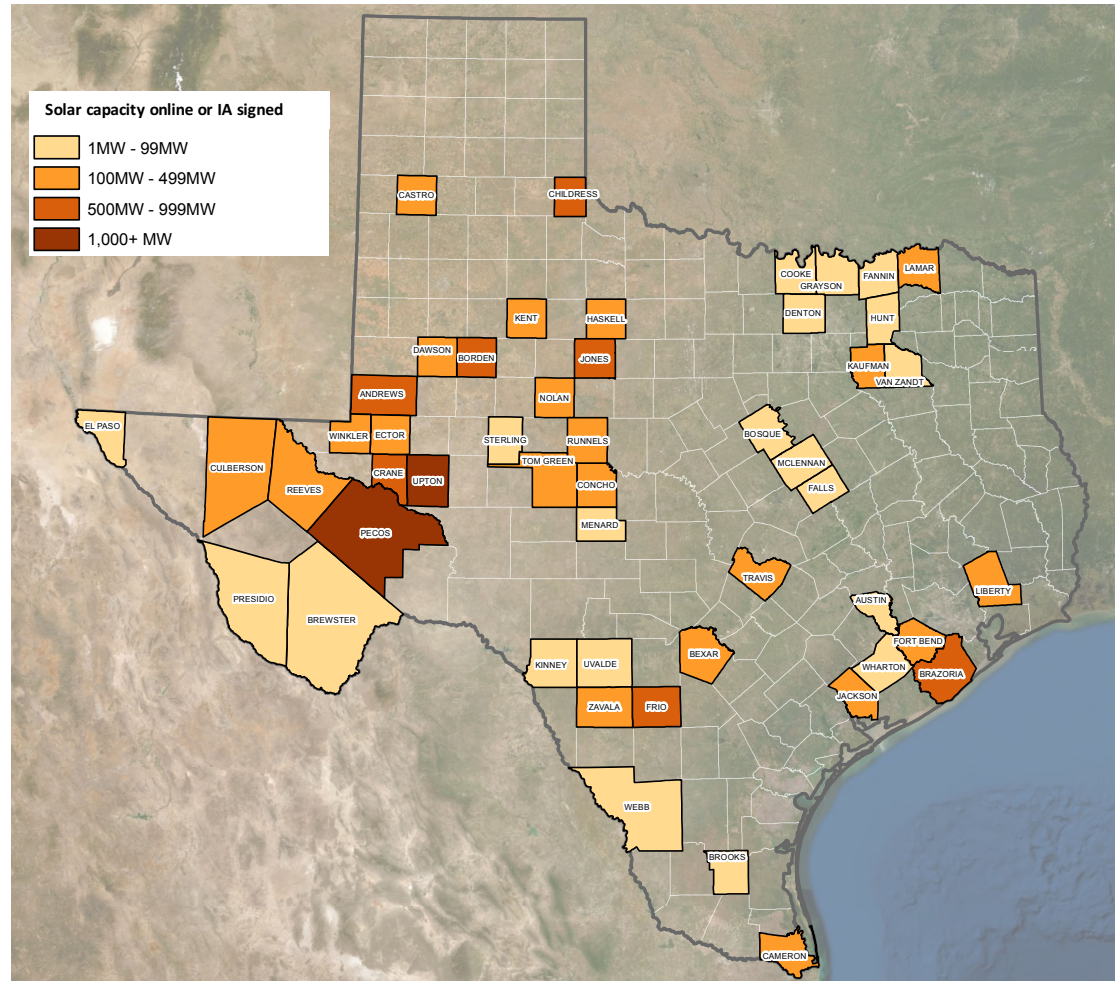


Source: ERCOT



# Solar power is expanding statewide

- 50 counties have large-scale solar projects online or that have signed agreements for grid interconnection
- More than 100 distinct projects



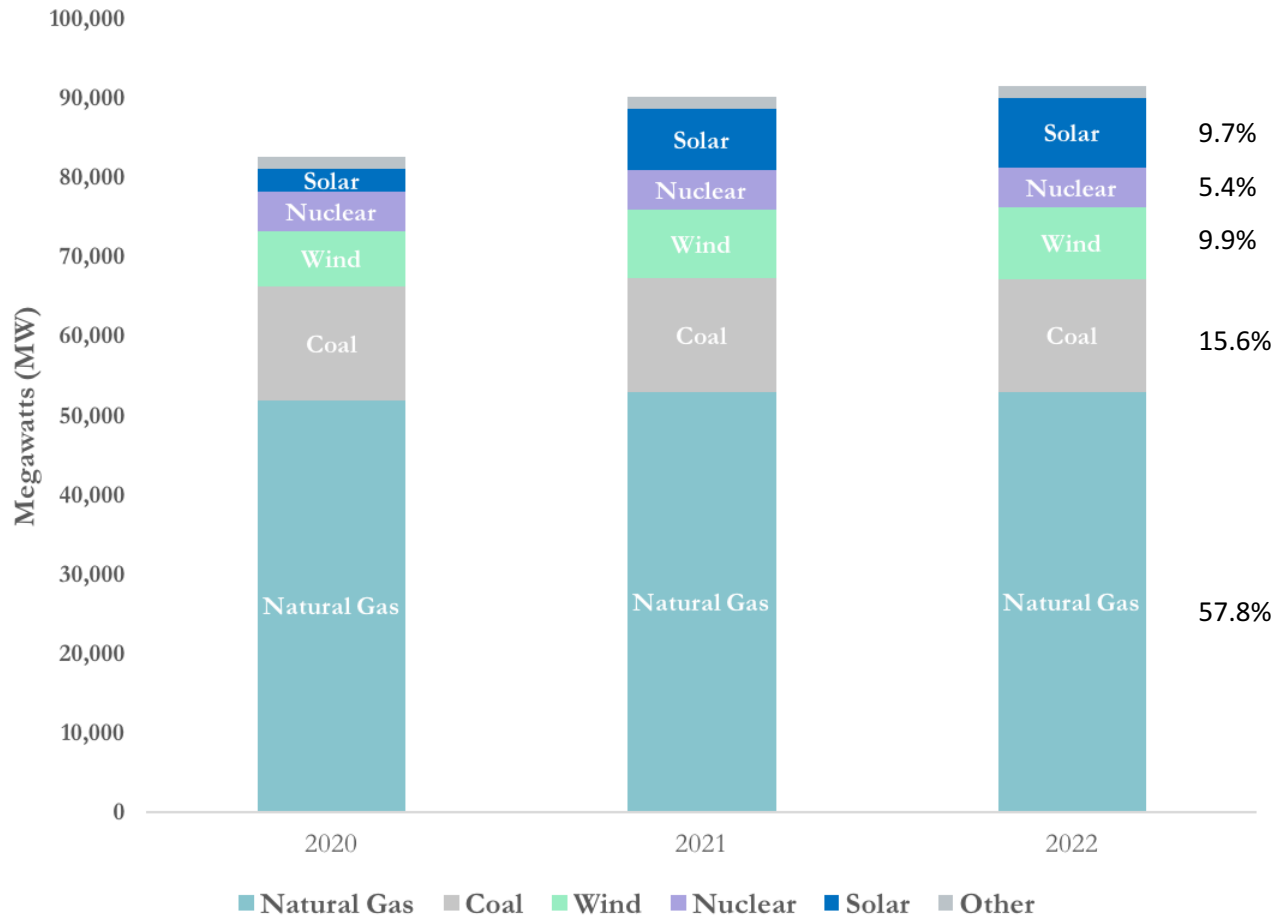
Source: ERCOT, SPP, MISO, EPE





# Solar adds peak generation capacity and diversifies the portfolio

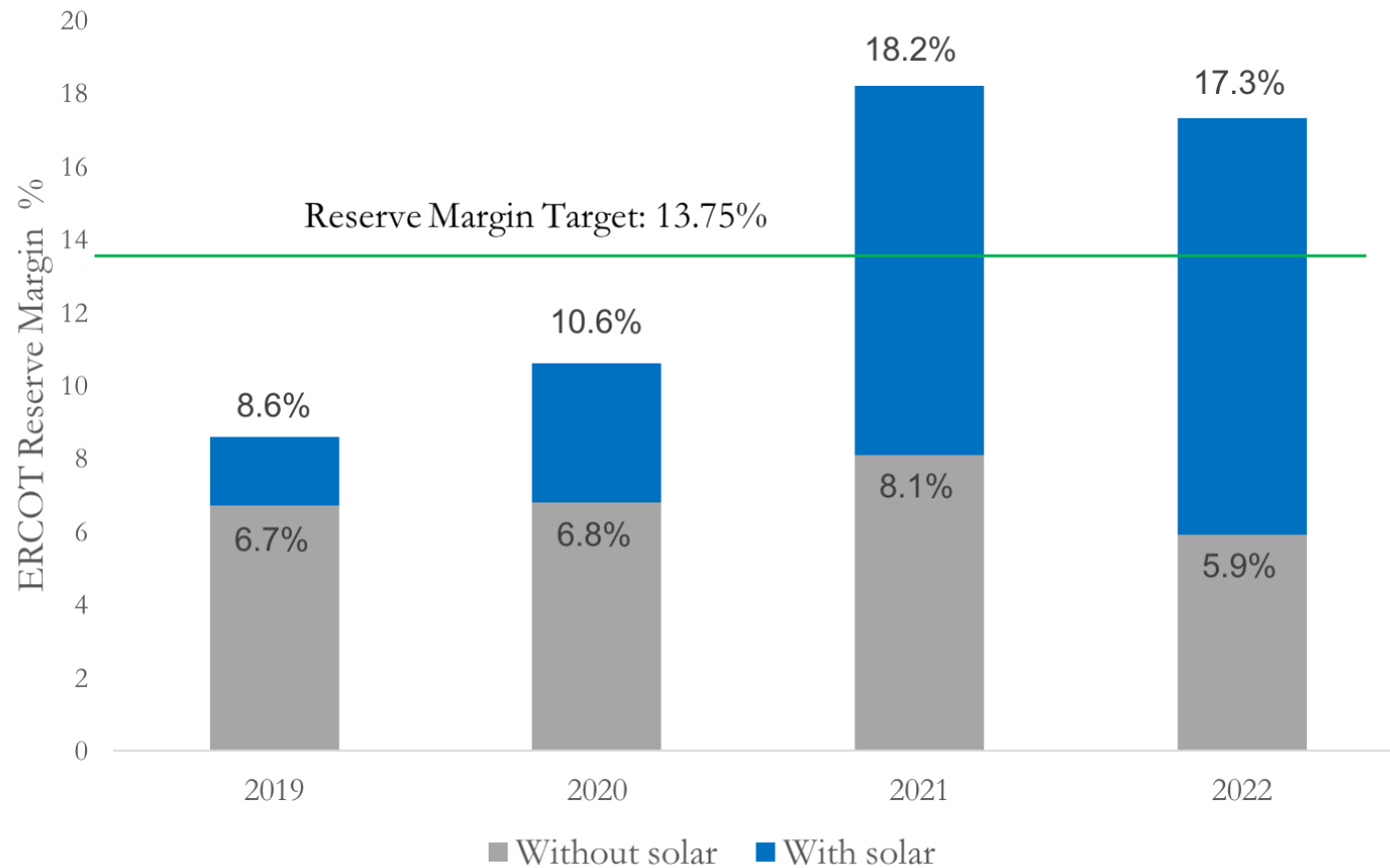
ERCOT Peak Capacity Contribution by Fuel Type



Source: ERCOT



# Solar growth is boosting generation reserves and grid reliability

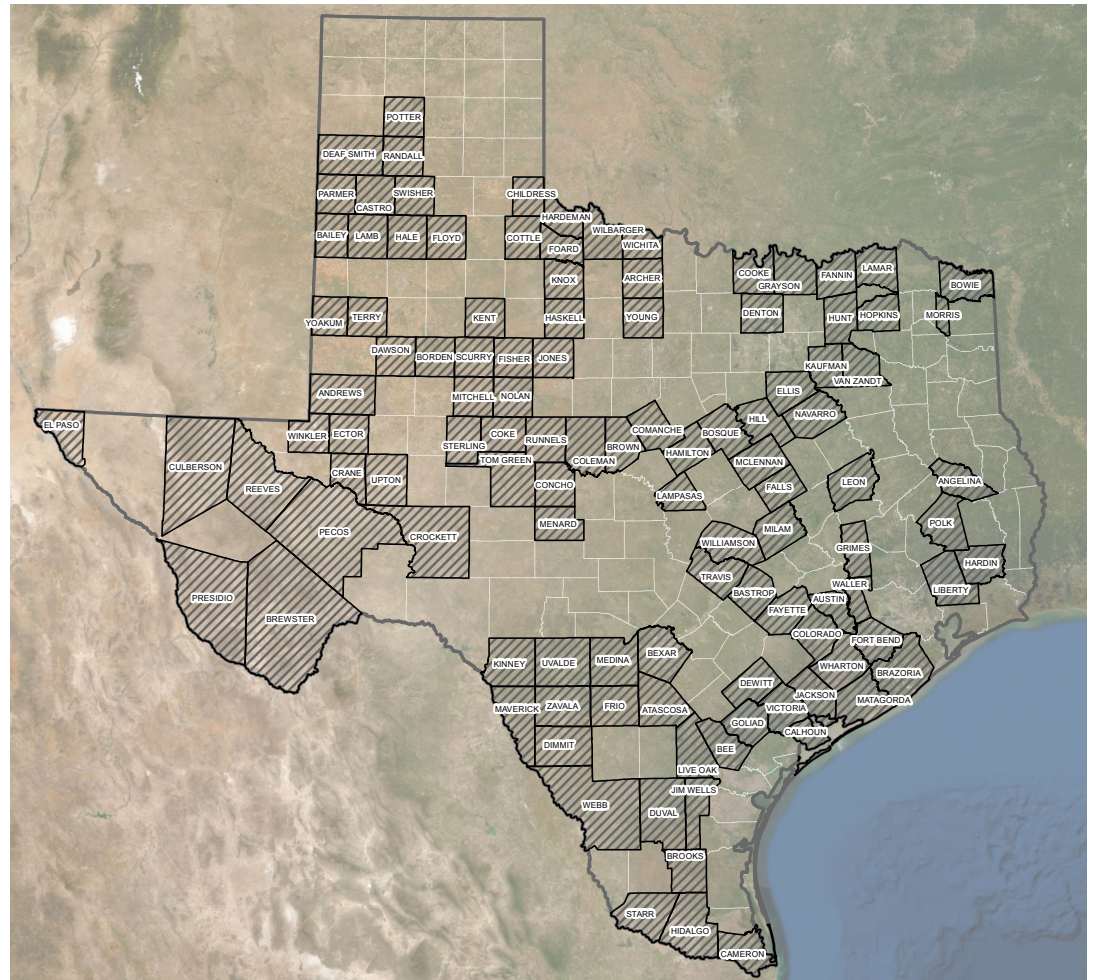


Source: ERCOT Capacity, Demand, Reserves report December 2019



# Future solar development continues

- 112 counties have seen significant solar development activity, meaning a project has at least reached the Full Interconnection Study phase
- Not all of these projects would be expected to come online anytime soon but they indicate strong industry activity and landowner interest



Source: ERCOT, SPP, MISO, EPE



Contact:  
Charlie Hemmeline  
[Charlie@txsolarpower.org](mailto:Charlie@txsolarpower.org)