

**Expanding our Tools in Our Tool Box to
Deal with High Demand Days:
Energy Efficiency, Demand Side Management and
Solar Power**

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Questions about the “rolling blackouts”

- How did the existence of a nodal market impact ERCOT prices during the problematic problems?
- Would some sort of additional oversight by PJM and ERCOT on readiness have impacted that day?
- Did anyone game the system?
- Who performed best in the crisis - coal, natural gas or wind, or none-of-the-above?
- Would policies to promote use of large-scaled and rooftop solar have helped prevent the crisis?
- Did Demand Response -- shutting down and controlling demand during the crisis -- work as needed and was it enough?
- Are there other tools through markets or incentives that would have helped avert the crisis and increase our energy diversity?

Answer: I don't know, but....

- Answer is to reduce peak demand and bills, if not rates, through programs to consumers at the retail, small commercial and industrial level to reduce energy use through energy efficiency, energy storage, demand side management and distributed renewables particularly at peak times..

Energy Efficiency

- Cheapest, quickest, cleanest way to meet our energy needs is to reduce our energy use -- about 2 cents per kilowatt;
- Our TDUs run energy efficiency programs that help reduce energy use -- must currently meet 20% of growth in demand and rising to 30% of growth in demand by 2013 through PUC oversight;
- However, the programs need to be coordinated with other programs available through SECO, ERCOT, PUC, TDHCA, Municipalities-- a Coordinating Council would help -- SB 552 and HB 773
- Legislature should again consider changing the metric to % of peak demand (0.5 percent in 2013) and expanding the goal to 1 percent of total demand by 2015

Energy Efficiency -- more changes

- Consider market-based trading program for energy efficiency like we have a Nox trading program for pollution;
- Allow TDUs more direct contact with consumers for energy efficiency programs -- particularly ones like El Paso Electric that are already vertically integrated;
- On-bill & On-property tax Financing -- encourage cities, TDUs, REPs, Munis and Cooperatives to finance energy efficiency and solar upgrades on residential and commercial customers, paid back through time. See HB 659 and SB 459

Demand Side Management

- Allow large industrial companies to bid in to the ERCOT market for demand side management in the same way you allow generators to bid in to the market -- in other words expand Load Acting As Resources programs.
- Allow aggregators and retail electric providers to work with residential and commercial consumers to also bid into the market to reduce use during peak times
- B and C committee has recommended such an approach in interim committee report
- California and PJM have successful market-based programs that have helped reduce peak demand and ultimately prices;

Energy Storage

- Create incentives for two-way electric vehicles that can be used to store energy
- Clarify the rules for owning and operating energy storage technologies and bidding into the market (see PUC legislative recommendations)

Solar: Distributed and Utility-Scale

- Need clarity on price paid for surplus electricity generated - a fair market price for energy produced -- see SB 492 by Fraser, HB 340 by Gallego and HB 776 by Anchia;
- Consider solar rebate and performance-based program -- SB 492
- Clarity on rules for solar in HOAs -- SB 492, SB 238, HB 362, etc.
- Registration rules and third-party ownership rules for solar, geothermal and even small natural gas up to a certain size need to be clarified to give clear signals to the market that Texas is open for solar (SB 94, HB 776)
- Implement existing statute of 500 MWS of non-wind resources by 2015 through PUC rule and consider 10-year goal of 1,500 MWS by 2020 (SB 330 and HB 774)

Conclusions

- Expand and coordinate energy efficiency programs
- Open up market to demand response
- Clarify energy storage rules and programs
- Create solar bill of rights for registration, third-party ownership, fair market prices, HOA and rebate issues;
- Implement 500 MW goal at PUC for non-wind renewables and expand goal to 1,500 MWs through legislative action
- IF these policies are in place, it will create jobs, reduce pollution and significantly reduce potential for rolling black-outs.