



SEIA TALKING POINTS FOR TEXAS

SOLAR WORKS IN TEXAS

SEIA's objectives are to remove market barriers to allow solar to compete on a level playing field with other generating resources and facilitate statewide adoption of solar

- SEIA wants to focus on ensuring solar is properly valued and that market mechanisms are in place to facilitate the financing of solar plants
- We recognize widespread solar adoption is not going to happen overnight and is a long-term play to implement market modifications

Solar is a natural fit for the state that is "Open for Business"

Texas leads the nation in solar resource potential

- Texas has the largest solar resource potential of any state
- Texas's technical potential in urban locations was assessed at ~150 GW by NREL¹
- Texas averages ~ 1800 kWh/kW of solar irradiance
- To date, Texas has deployed only a small piece of the resource potential; ~80 MW of solar PV have been deployed in the state
- Texas is one of the few states experiencing load growth, equivalent to ~2%/year

Solar costs are coming down and the industry is growing

- During 2011, the price of solar panels dropped by 50%, and the industry grew 85% since Q1 2011

Texas is a leading state in which to do business and leads the nation in energy production

- This is a new opportunity to attract new business sectors and be on the cutting edge in energy innovation

TEXAS IS AN UNTAPPED MARKET WITH SIGNALS TO BUILD NOW

Solar is a prudent solution to Texas's resource adequacy challenges

- Solar energy generation coincides with Texans' peak electricity usage
 - PV electricity output peaks mid-day (average between 13:00-14:00 in West TX) when the sun is at its highest point in the sky, and can offset the most expensive electricity when daily demand is greatest.
- Solar's production is aligned with weather conditions---even the most extreme
 - Meaning when the ERCOT grid needs it most on hot, sunny days---solar is producing.
- Solar uses little to no water
 - Solar-PV uses a modest amount of water (~20 gal/MWh for panel cleaning). In comparison, a typical family uses 20,000 gal of water per year
- Solar is quick to market

¹ National Renewable Energy Laboratory "US Renewable Energy Technical Potential: A GIS-Based Analysis." 2012. <http://www.nrel.gov/docs/fy12osti/51946.pdf>



- The average construction time for a utility-scale plant in ERCOT is 18-24 months
- Solar is one of the fastest deployed resources available (aside from Demand Response measures) so we can begin addressing ERCOT's low reserve margin now
- Solar can be deployed in a variety of ways
 - Solar can act as a load-side or generating resource
 - Solar can either be deployed at distribution level behind the customer's meter or at the transmission level acting solely as a generator in the market—this versatility allows it to behave as a load-side resource when deployed on-site with load, or a generating resource when furnishing electricity to the grid to be sold in the market
 - Solar can be deployed in a geographically-targeted manner
 - Solar can be targeted to deploy in stressed and congested areas of the transmission system to provide operating system relief and defer costly upgrades or new construction.
- Solar can help with CREZ utilization
 - The CREZ line was primarily built to bring West Texas wind generation to the Houston/Dallas load pockets. Because wind mostly blows at night in Texas, solar construction in west Texas would provide another revenue stream to expedite the CREZ return on investment and fully utilize the transmission.

Solar is just another element of “choice” for the customers

- Just as customers can select their own retail electric provider, they should also have the ability to choose what type of generation they wish to power their homes with.
- Removing market barriers to allow customers the ability to interconnect an on-site PV system or purchase solar kWh from the market is just a new dimension of ERCOT's already competitive market.

Solar is a great compliment to low-cost, gas generation

Only use if needed:

Solyndra is not representative of the industry

- 100,000 Americans work in the solar industry at 5,600 companies in all 50 states
- As with any competitive and dynamic market, some companies will grow and others will be unable to compete.

Not all energy sources are the same

- For example, solar peaks between 13:00-14:00 and has a high effective peak capacity value unlike some other sources
- Solar projects utilize the Investment Tax Credit (ITC), which provides a 30% tax credit to those who install solar equipment
- Wind projects utilize the Federal Renewable Energy Production Tax Credit (PTC), which provides a tax credit of 2.2 cents/kWh for the production of electricity