EDF
ENVIRONMENTAL DEFENSE FUND
Finding the ways that work

Executive summary

Texas has a remarkable opportunity on its hands: to use a national policy to capitalize on existing momentum to the benefit of our state's economy and citizens.

On August 3, 2015, Environmental Protection Agency (EPA) finalized the Clean Power Plan, the nation's first-ever limits on climate-altering carbon pollution from existing power plants.[1] Through the new standards, EPA is establishing a flexible framework for states to reduce carbon dioxide emissions from these generation facilities by 2030 through a variety of measures. Furthermore, consistent with comments filed by Texas officials and power companies, EPA made several changes in the final rule to make compliance even more feasible.

As a result of this flexibility, Texas officials have the opportunity to develop and implement a plan that fully harnesses its unique resources and that could bring huge economic gains to the Lone Star State. However, if Texas elects not to create its own compliance strategy, as it chose to do in 2010 with greenhouse gas emissions permitting, EPA will create a plan for Texas. Ceding this critical responsibility to EPA would be an enormous lost opportunity for Texas.

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Fortunately, Texas is exceptionally well-positioned to meet its Clean Power Plan target. Market forces already are rapidly transitioning the state to a clean energy economy, and Texas has abundant clean energy resources. For example, the state leads the nation in producing natural gas, wind power, and combined heat and power and has the potential to generate more solar power than any other state.[2,3] Moreover, Texas has substantial energy efficiency and demand response potential.[4] These advantages, if embraced, can enable the state to achieve deep reductions in carbon pollution while providing direct economic benefits to its citizens.

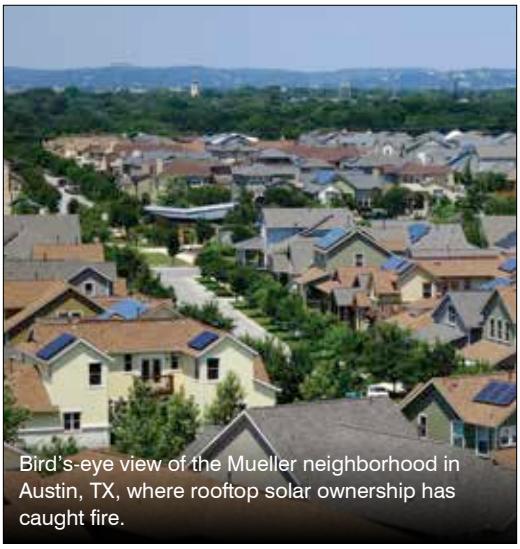
To better understand where Texas stands under the Clean Power Plan, Environmental Defense Fund (EDF) has evaluated differing forecast scenarios for the state's electricity sector, including a "Current Trends" scenario which examines compliance obligations in terms of:

- Business-as-usual trends in electricity generation based on projections from the state's primary grid operator, the Electric Reliability Council of Texas (ERCOT);
- The wind power capacity ERCOT projects will be on the grid in 2017, as well as independent sources' projections to 2029;
- The current energy efficiency results ERCOT's municipal utilities, Austin Energy, and San Antonio's CPS Energy are achieving; and
- The significant impacts that increased production and falling prices of natural gas have in reducing the demand for coal.

EDF also looks at a scenario in which Texas could go well beyond Clean Power Plan compliance in a manner that is achievable and maximizes economic, health, and water benefits.

Key findings and recommendations

These analyses show that under "Current Trends" Texas already is a long way down the road toward meeting its Clean Power Plan requirements. In fact, these trends alone will fulfill Texas' 2022–2029 interim goal and carry Texas 88 percent of the way toward achieving the 2030 goal. The state easily can fill the remaining gap with a handful of thoughtful policy changes, as long as policymakers do not undermine current market trends.



Bird's-eye view of the Mueller neighborhood in Austin, TX, where rooftop solar ownership has caught fire.

Pecan Street, Inc.

Moreover, the electric industry currently requires a significant amount of water to operate. By 2060, the Texas Water Development Board projects Texas' electricity sector will require an additional 1.1 million acre-feet of water—or enough water to fill Lake Travis—every year. By continuing to grow Texas' clean energy resources consistent with the goals of the Clean Power Plan, Texas could completely eliminate that additional need, which means more water for homes, agriculture, and businesses. In a state that has been plagued by record drought over the past five years, only to see devastating floods provide relief that lasted mere weeks, the value of saved water cannot be understated.

Current trends alone will fulfill Texas' 2022–2029 interim Clean Power Plan goal and carry Texas 88 percent of the way toward achieving the 2030 goal.

The recommendations EDF urges Texas policymakers to adopt are:

- Fully embrace Texas' clean energy resources and develop a state Clean Power Plan that will grow the economy, create jobs, and bring investment into the state.
- Place the emissions obligations of the Clean Power Plan on operating electric generating units (EGUs), or power plants, and authorize owners and operators of these facilities to use flexible mechanisms and market-based programs to achieve compliance.

Furthermore, Texas decision makers could use the opportunity to the state's economic benefit by leveraging its clean energy advantages to help other states comply. This could be achieved through both the sale of credits from surplus carbon emissions or emissions rate reductions, and the export of wind and solar energy to neighboring states.

Leaders should recognize that momentum has been building and market forces already are driving Texas toward a clean energy economy. By crafting a Texan plan that takes advantage of the state's plentiful clean energy resources, state policymakers can transform compliance with the Clean Power Plan into a robust economic development strategy.

Notes

[1] Environmental Protection Agency, Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, Docket No. EPA-HQ-OAR-2013-0602, Final Rule signed August 3, 2015 (hereinafter "Clean Power Plan" or "CPP"). All citations herein are to the initial publication of the final rule as signed on August 3, 2015 prior to publication in the Federal Register.

[2] Energy Information Administration (EIA). "State Historical Data Tables for 2013." March, 2015. Available online at: http://www.eia.gov/electricity/data/state/annual_generation_state.xls

[3] National Renewable Energy Laboratory (NREL). "Renewable Electricity Futures Study." 2012. Available online at: http://www.nrel.gov/analysis/re_futures/

[4] The Brattle Group. "Exploring Natural Gas and Renewables in ERCOT, Part III: The Role of Demand Response, Energy Efficiency, and Combined Heat & Power." Texas Clean Energy Coalition (TCEC). May, 2014. Available online at: http://www.texascleanenergy.org/Brattle%20III%20Final.pdf