COMPETITIVENESS OF RENEWABLE ENERGY IN US MARKETS

Malcolm Woolf, Senior Vice President, Policy Advanced Energy Economy



A *national association of businesses transforming public policy* to enable the rapid growth of secure, clean, and affordable energy.

Leadership Council Members:















OP WER

















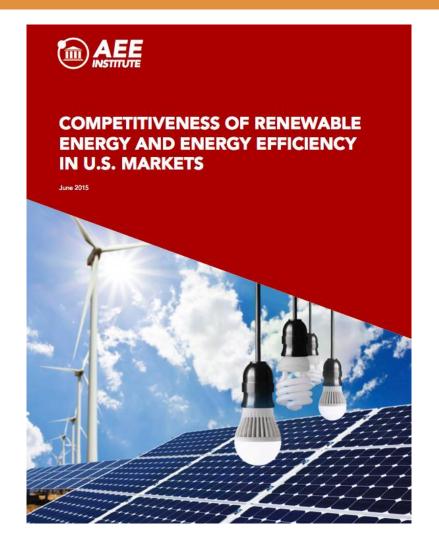






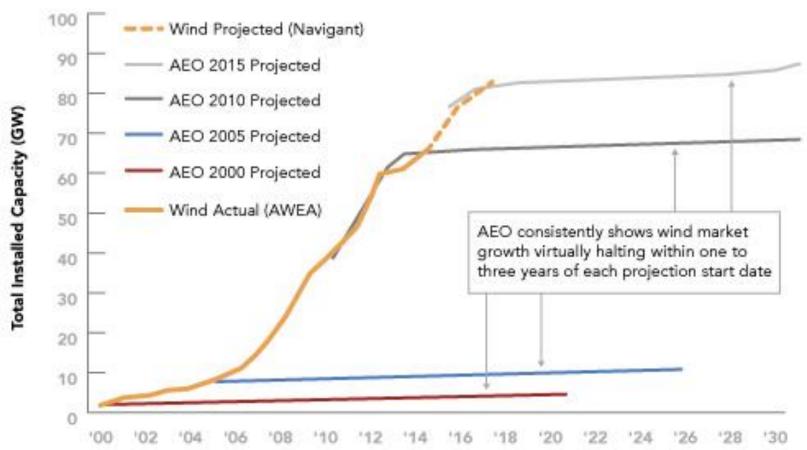
Grid Parity – Already Playing in a Market Near You

RE and EE are competitive resources in today's marketplace that should be expected to grow strictly on the basis of competitiveness – regardless of the Clean Power Plan.



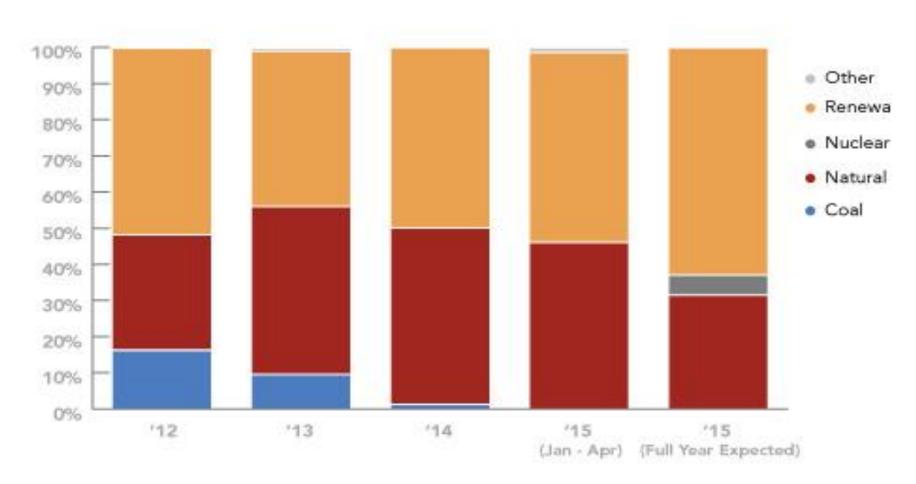
Official EIA Projections Consistently Underestimate RE (and EE), Skewing Policy

Example: Actual vs. Projected Wind Capacity





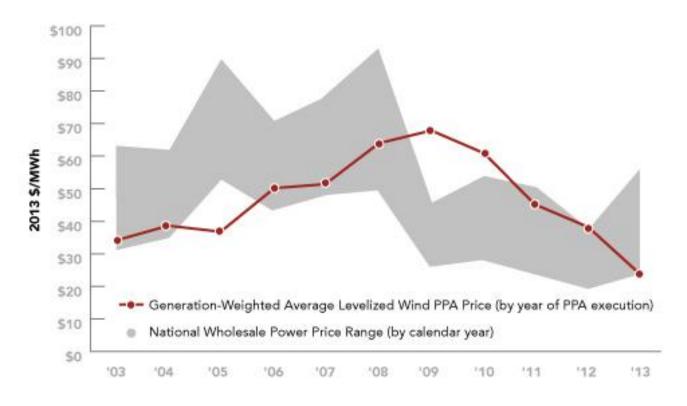
Renewables are Roughly Half of All New Power Generation Capacity Additions





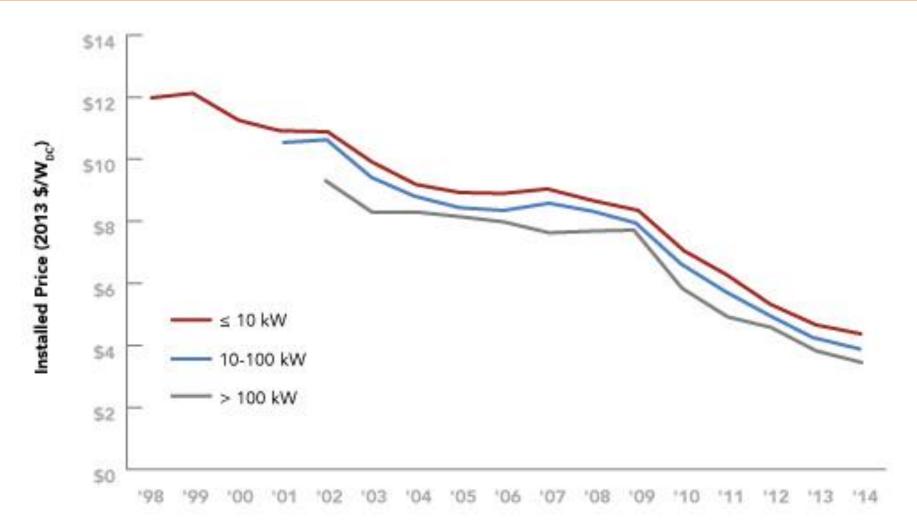
Wind Purchases Now Driven By Economics

Average Wind PPA Prices and Nationwide Wholesale Power Prices



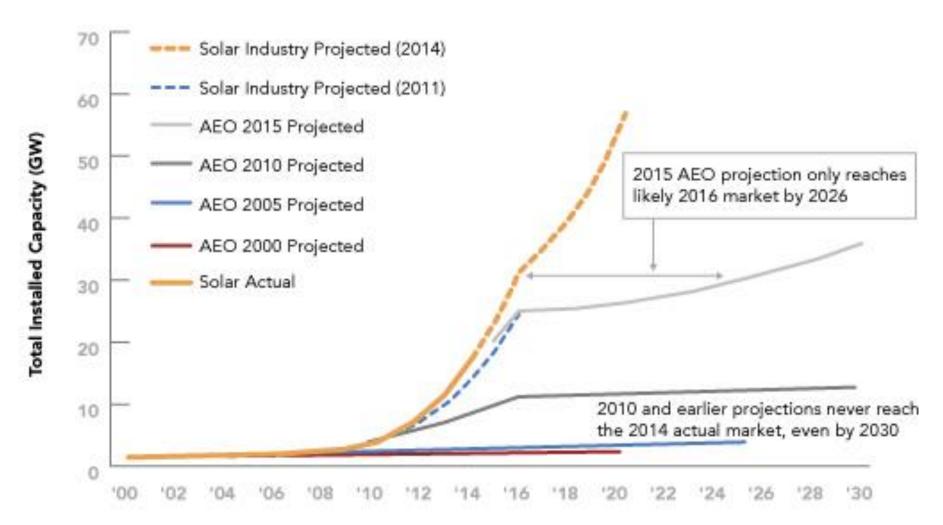


Solar Also Increasingly Competitive, Both at Utility, Commercial, and Residential Scale



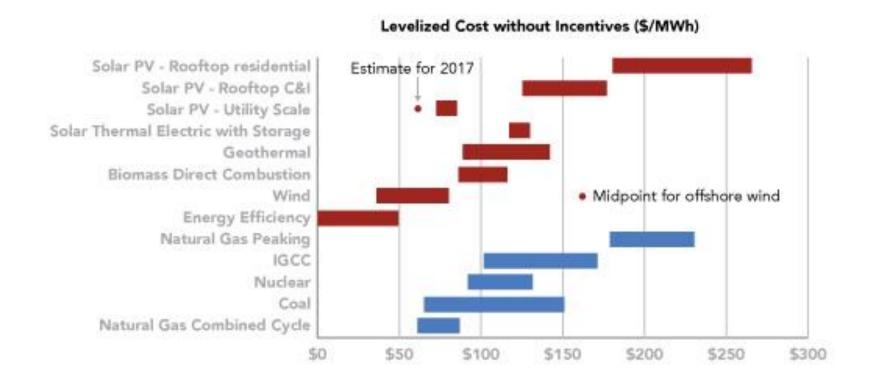


Solar Market Growth Reflects Increased Competitiveness





Renewables (& Efficiency) Are Ready to Compete; Challenge Now is Market Access



Source: Lazard's Levelized Cost of Energy Analysis—Version 8.0. "C&I" = Commercial & Industrial; "IGCC" = Integrated Gasification Combined Cycle. High end of range for IGCC and Coal includes 90% carbon capture and compression. See original report for additional assumptions.

Additional Resources Available

- Design Principles for a Rate-Based Federal Plan Under EPA's Clean Power Plan http://info.aee.net/rate-based-federal-plan-under-clean-power-plan
- Competitiveness of Renewable Energy and Energy Efficiency in U.S. Markets http://info.aee.net/competitiveness-of-renewable-energy-and-energy-efficiency-in-us
- Impacts of the Clean Power Plan on U.S. Natural Gas Markets and Pipeline Infrastructure http://info.aee.net/impacts-of-clean-power-plan-on-us-natural-gas
- Markets Drive Innovation: Why History Shows that the Clean Power Plan Will Stimulate a Robust Industry Response http://info.aee.net/market-response-to-epa-clean-power-plan
- Integrating Renewable Energy into the Electricity Grid: Case Studies Showing How Technologies and Operations are Maintaining Reliability, prepared by The Brattle Group http://info.aee.net/integrating-renewable-energy-into-the-electricity-grid
- **EPA's Clean Power Plan and Reliability:** Assessing NERC's Initial Reliability Review, prepared by The Brattle Group http://info.aee.net/brattle-reliability-report
- Advanced Energy Technologies for Greenhouse Gas Reduction http://info.aee.net/epa-advanced-energy-tech-report
- State Analysis:
 - Assessing Virginia's Energy Future: Employment Impacts of Clean Power Plan Compliance Scenarios http://info.aee.net/virginia-energy-future
 - STEER Model (forthcoming)

COMPETITIVENESS OF RENEWABLES IN US MARKETS

Malcolm Woolf

Senior Vice President, Policy and Government Affairs

Advanced Energy Economy

mwoolf@aee.net

Office: 202.391.0678

Mobile: 301.767.6698