



Market Design for the Clean Energy Transition and the Role of New Generator Finance

November 28, 2018 | 8:30 AM – 5:00 PM | Large Conference Room, WRI

CONTEXT

Rapid expansion of zero- and low-carbon generating capacity requires robust and effective policy frameworks for both vertically integrated utilities and organized (restructured) electricity markets. World Resources Institute (WRI) convened a workshop in July 2018, *Market Designs for the Clean Energy Transition*, to discuss potential frameworks for market design reform and identify areas of stakeholder interest. Resources for the Future (RFF) and the National Renewable Energy Lab convened a workshop in September 2017 that considered a range of options for organizing electricity transactions in the face of rapid technological change and related areas for new research. WRI is partnering with RFF to co-host this follow-up workshop aimed at broadening and deepening stakeholder understanding of how merchant generation is financed (in the present and the future), as well as exploring the implications for wholesale market design and operations.

Investment in renewable energy and natural gas combined cycle plants has exploded over the last decade, in part due to market conditions such as cheap natural gas and falling renewable energy prices. However, these market realities only partially explain the ability of these technologies (and no others) to procure financing for the short and long-term. The next decade will likely bring continued low natural gas prices and declining renewable energy costs, in addition to possible increased penetration of demand response (DR), storage and other technologies. These will also likely be accompanied by changing policies related to incentives and goals. Understanding the underlying drivers of new generator finance and engaging in forward thinking about changing conditions provides useful context for discussion of policy levers and market design that drive decarbonization.

OBJECTIVES

This workshop aims to:

- Provide participants with education they can use to improve policy design and better inform their research agenda.
- Explain the mechanics behind the financing of renewable and natural gas plants over the past decade, and the role that ownership types, taxes and other policies play in these financial constructs.
- Explore how changing policies, such as phase-out of the PTC/ITC, creation of 45Q, a lower corporate tax rate, and potential future policies like Clean Energy Standards are expected to impact the financing and deployment of new generation in the years to come.
- Explore how climate and clean energy policies should be designed with private and public financing in mind in order to promote investment in decarbonized resources as quickly as possible.



- Convene experts and stakeholders to discuss how wholesale electricity markets should be designed in order to align with policies that promote decarbonization of the sector, and enable efficient risk sharing and access to financing at reasonable cost.

PROCESS

Karl Hausker (WRI), Karen Palmer (RFF) and Sue Tierney (Analysis Group) will facilitate the discussion. The participants are a carefully-selected group of experts in the field with various institutional perspectives. **Chatham House Rule applies.** Participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed.

AGENDA

8:30 AM	Breakfast
9:00 AM	Welcome, Introductions & Stage Setting
9:15 AM	<p>Panel 1: Retrospective 2008-2018: Financing New Generation Under Changing Policies & Markets Dan Reicher, <i>Research Fellow, Steyer-Taylor Center for Energy Policy at Stanford University</i> Elise Caplan, <i>Director of Electric Market Analysis, American Public Power Association</i> Jonathan Silver, <i>Managing Director, Tax Equity Advisors</i> Pat Eilers, <i>Managing Director, Black Rock</i></p>
10:30 AM	Break
10:45 AM	<p>Panel 2: Prospective 2019 & Beyond: The Effects of Shifting Policies & Market Conditions for New Generation Vikas Agrawal, <i>Vice President of Alternative Energy Investing, Goldman Sachs</i> Craig Gordon, <i>Vice President of Government & Regulatory Affairs, Invenergy</i> David Feldman, <i>Researcher, National Renewable Energy Laboratory</i> Scott Brown, <i>Vice President of Strategic Initiatives & Analysis, Exelon</i></p>
12:00 PM	Lunch
1:00 PM	<p>Panel 3: Policy Levers to Drive Decarbonization of the Power Sector (in RTOs), 2019 & Beyond Nancy Lange, <i>Chair, Minnesota Public Utility Commission</i> Andrew Place, <i>Vice Chairman, Pennsylvania Public Utility Commission</i> John Williams, <i>Director of Energy Analysis, New York State Energy Research & Development Authority</i> Kevin Rennert, <i>Fellow & Director of the Social Cost of Carbon Initiative, Resources for the Future</i></p>
2:15 PM	Break



2:30 PM

Panel 4: What Does This All Mean for Market Design?

Panelists presenting papers:

Eric Gimon, *Senior Fellow, Energy Innovation*

Rob Gramlich, *President, Grid Strategies*

Steve Corneli, *Principal, Strategies for Clean Energy Innovation*

Commentators:

Jennie Chen, *Senior Counsel, Federal Energy Policy, Nicholas Institute*

Cliff Hamal, *Managing Director & Principal, Navigant Economics*

Jesse Jenkins, *Postdoctoral Fellow, Harvard Kennedy School*

3:45 PM

Break

4:00 PM

**Panel 4 (continued): What Does This All Mean for Market Design?
Discussion - Research Agenda & Next Steps**

5:00 PM

Light Reception