

**HARVARD ELECTRICITY POLICY GROUP
NINETY-FIFTH PLENARY SESSION**

Harvard Kennedy School
Taubman Center Fifth Floor
Cambridge, Massachusetts
THURSDAY AND FRIDAY, JUNE 13-14, 2019

AGENDA

Thursday, June 13

8:30 am **Breakfast and Informal Discussion**

9:00 am **Session One.**
More Renewables, Less Carbon: How Fast, How Far, and at What Cost?

In proposing plans for carbon reduction, policy makers and advocates envision, or mandate, a heavy reliance on deploying renewable energy. In the beginning, it was clear that the system could accommodate expanded renewables without much cost beyond the direct subsidies. Early studies showed few immediate limits or unintended consequences. Now, the accumulating experience with increasing penetration of renewables, and accelerating plans for more, continue to bring pesky questions to the forefront. There is a wide public perception that more renewables means less carbon, almost without limit. At the same time, there is an active public policy debate that implies the absence of a free lunch. While wind and solar emit no pollutants, what more have we learned about the constraints on their role in carbon reduction that some envision? Does intermittency or location result in secondary effects that dilute their ability to address the larger problem of reducing carbon emission? What new market products, market designs, or technology will be needed or available to facilitate progress? How does the introduction of new products, designs, or technology play out? And at what cost? What are the critical assumptions, and what policy choices are needed to meet our ambitious goals for reduced carbon emissions?

Moderator: **Cheryl LaFleur**, Federal Energy Regulatory Commission

Michael Goggin, Grid Strategies
Karen Palmer, Resources for the Future
Lawrence Makovich, IHS Markit
Jurgen Weiss, The Brattle Group

Thursday, June 13 (cont'd)10:30 am **Coffee Break**10:45 am **Discussion**12:00 pm **Lunch**1:00 pm **Session Two.**
Volumetric Residential Rates: Socially Progressive or Regressive?

While the costs incurred in serving residential load are fixed, demand, and variable in nature, the prices charged are disproportionately volumetric in character. That disconnect between how costs are incurred and how they are passed on to consumers distorts price signals to users and incentives for utilities. Volumetric pricing presents a disincentive to utilities to help customers be more efficient in their use of energy. Decoupling was supposed to be a remedy. While decoupling may or may not ameliorate the adverse impact on conservation, it does little to create a better nexus between costs and prices. While those defects in volumetric pricing have been known for some time, little has been done to reform that basic flaw in retail residential tariffs. One of the reasons for resistance to reform has been concerns about the impact on low income consumers. Are cost reflective and fixed cost charges socially regressive? Is it possible that, in fact, appropriate fixed cost-based prices are more progressive in impact than volumetric tariffs? Even assuming, for the sake of argument, that volumetric pricing is less regressive than the alternative, is it justifiable to structure all residential rates on that basis? Are there not more efficient ways to protect low income customers than to distort all residential rates in ways that do not reflect costs?

Moderator: **Jerrold Oppenheim**, Democracy and Regulation**Scott Burger**, Massachusetts Institute of Technology**John Howat**, National Consumer Law Center**Pasi Miettinen**, Sagewell**Agustin Ros**, The Brattle Group2:30 pm **Coffee Break**2:45 pm **Discussion**4:00 pm **Adjourn**6:00 pm **Reception and Dinner, The Glass Box, Smith Campus Center, Harvard University**

Tenth Floor, Smith Campus Center, 1350 Massachusetts Avenue

Enter through Security Gate (across from Bon Me) and take Elevator to 10th floor

Please bring identification.

Friday, June 14

8:30 am **Breakfast and Informal Discussion**

9:00 am **Session Three.**
Market Reforms for Stressed Conditions

Real-time electricity markets, and the organized forward markets supporting real-time commitments, confront increasingly stressed conditions. The growth of intermittent renewables, limits on fuel availability, and coordination across multiple energy markets have been cited as presenting new challenges that were unknown, or less material, in the early designs of organized electricity markets. Long-term forward auctions and capacity markets help address some, but not all, of the requirements of reliable operation and efficient dispatch decisions. Pricing and new market definitions are topics of great interest and many debates. What pricing reforms are being considered, and how do they relate across the different organized markets? What new products will drive changes in market design? What are common problems across organized markets, and where are there major differences? How can sequences of markets maintain consistency of prices, commitment, and dispatch to support efficient solutions? How do proposed market reforms address uncertainty, intertemporal optimization, coordination across markets, or other major challenges?

Moderator: **John Shelk**, Electric Power Supply Association (EPSA)

Adam Keech, PJM Interconnection
Sainath Moorthy, Electric Reliability Council of Texas (ERCOT)
Anthony Papavasiliou, Universite catholique de Louvain
Matthew White, ISO-New England

10:30 am **Coffee Break**

10:45 am **Discussion**

12:00 pm **Adjourn**