EEA Newsletter and Research Highlights (March 2019)

The ESCA group recently sent out the second installment of its public newsletter. Download the PDF version of the March 2019 Newsletter. If you would like to sign up for the ESCA public mailing list, please email eea@epri.com.

EEA Recent Publications (March 2019)

The ESCA groups routinely submits publications to peer-reviewed journals and publishes research that is available to the public. A list of our recent publications include:

- Bistline, J., Santen, N., and Young, D. 2019. The economic geography of variable renewables energy and impacts of trade formulations for renewable mandates. Renewable and Sustainable Energy Reviews. 106. pp. 79-96.
- Bistline, J. 2019. Turn Down for What? The Economic Value of Operational Flexibility in Electricity Markets. IEEE Transactions on Power Systems. 34(1). pp. 527-534
- Bistline, J. 2019. The Economics of Nuclear Plant Modernization in U.S. Markets. EPRI Report 3002014737.

Technical Brief: Minnesota High Renewable Standard

"*Cost Effectively Achieving Carbon Goals: Renewable Standards vs. Technology: Neutral Policies – A scenario-based analysis of electric sector impacts through 2050*"

EEA's recently published Technical Brief highlights research results related to high renewables standards in Minnesota. This analysis investigates and compares the cost-effectiveness of renewable energy standards and technology-neutral policies for reducing carbon dioxide (CO_2) emissions from Minnesota's electric power sector between 2015 and 2050. Using EPRI's in-house electric sector capacity expansion and dispatch model, US-REGEN, the analysis quantifies the cost-differences between the policy approaches, and examines the key drivers of those differences, including (1) how generation capacity and transmission capacity investments in the state and across the region are expected to change over time; (2) the flow of electricity and renewable energy certificates (RECs) in-and-out of Minnesota; and (3) the revenues generated by in-state electric sector resources.

A two-page "Back Pocket Insight" that succinctly summarizes the research results is also available in addition to the longer technical brief.

Integrated Energy Network Planning (IEN-P): Case Studies

In July 2018, EPRI published a white paper identifying 10 complex, large-scale power system planning challenges that electric power system planners and regulators are beginning to confront today, and which are expected to become more pressing and widespread in the future.

In February 2019, EPRI published the first of a two-volume set of case studies that highlight how different electric companies in the United States have started to address the IEN-P challenges the second volume will be published in late 2019.

New ESCA Announcements Page and Public Email List

The Energy Systems and Climate Analysis (ESCA) Group has recently set up an email list open to any interested parties to facilitate greater communication between the ESCA Group and external stakeholders regarding new, publicly available research, events, and other activities. This outreach resource will help our group connect with and circulate our research among a broader network of interested individuals. We plan to

send periodic (no more than 2-3 per quarter) updates that feature publicly available ESCA research, upcoming events, and news from our group.

The new email list is paired with an 'EEA Announcements' webpage that contains a list of past announcements along with a link to sign up for the ESCA public email list at the top of the page. We hope that this webpage and our public email list will provide meaningful opportunities for engagement with the broader public and a channel through which we can share ESCA perspectives on energy, climate, and economic issues of importance to the electric power sector.