

WORKING GROUP 6: REGULATORY AND ENVIRONMENTAL POLICY ISSUES

DRAFT REPORT APPENDIX A – AS OF SEPTEMBER 14, 2018

APPENDIX A: WORKING GROUP 6 READING LISTS

The following are the collected reading lists circulated by the Working Group Facilitator prior to each workshop session.

1. SESSION 1: ENVIRONMENTAL IMPACTS OF DISTRIBUTED ENERGY RESOURCES

Value of Solar:

“Distributed Generation Valuation and Compensation Whitepaper.” Pacific Northwest National Laboratory for the Illinois Commerce Commission. 2018.

<https://www.icc.illinois.gov/downloads/public/DG%20Valuation%20and%20Compensation%20White%20Paper-PNNL.pdf>

“A Review of Solar PV Benefit & Cost Studies.” Rocky Mountain Institute. 2013.

https://rmi.org/wp-content/uploads/2017/05/RMI_Document_Repository_Public-Reports_eLab-DER-Benefit-Cost-Deck_2nd_Edition131015.pdf

Widely-cited overview of various solar cost-benefit studies conducted in different states and municipalities that shows different approaches to solar valuation

“Value of Solar: Program Design and Implementation Considerations.” National Renewable Energy Laboratory. 2015. <https://www.nrel.gov/docs/fy15osti/62361.pdf>

An overview of how regulators can design and implement a value of solar tariff that is meant to provide a framework

“A Regulator’s Guidebook: Calculating the Benefits and Costs of Distributed Solar Generation.” Interstate Renewable Energy Council. 2013. http://www.irecusa.org/wp-content/uploads/2013/10/IREC_Rabago_Regulators-Guidebook-to-Assessing-Benefits-and-Costs-of-DSG.pdf

An overview of how regulators can approach calculating the costs and benefits of solar generation, with recommendations for developing a standardized national approach to value of solar

“Minnesota Value of Solar: Methodology.” Clean Power Research. Minnesota Department of Commerce. 2014. <https://www.cleanpower.com/wp-content/uploads/MN-VOS-Methodology-2014-01-30-FINAL.pdf>

This research looks at how Minnesota, as a nearby upper Midwest state, could approach determining a value of solar energy generation. Minnesota did end up creating a tariff based on value of solar

“PV Valuation Methodology: Recommendations for Regulated Utilities in Wisconsin.” Clean Power Research. Midwest Renewable Energy Association. 2016.

<https://www.growsolar.org/wp-content/uploads/2016/03/PV-Valuation-in-Wisconsin.pdf>

This research looks at how Wisconsin, as a neighboring upper Midwest state, could approach determining a value of solar energy generation

“Assessing the Value of Distributed Solar.” Yale Center for Business and the Environment. 2017.

http://cbey.yale.edu/sites/default/files/Distributed%20Solar_FINAL.pdf

Provides another overview of different approaches to determining the value of solar

Value of Energy Storage:

“The Economics of Battery Energy Storage.” Rocky Mountain Institute. 2015.

<https://www.rmi.org/wp-content/uploads/2017/03/RMI-TheEconomicsOfBatteryEnergyStorage-FullReport-FINAL.pdf>

Detailed overview that distills the findings of a number of energy storage studies to present the advantages and challenges for the grid associated with batteries, as an example of energy storage technology

“Batteries perform many different functions on the power grid.” US Energy Information Administration. 2018. <https://www.eia.gov/todayinenergy/detail.php?id=34432>

Brief, high-level overview of how batteries, as an example of energy storage technology, benefit the grid

“State of Charge: Massachusetts Energy Storage Initiative Study.” Massachusetts Department of Energy Resources. 2015. <https://www.mass.gov/files/2017-07/state-of-charge-executive-summary.pdf>

Provides an overview of how Massachusetts regulators have approached the state’s push to expand energy storage capacity. Discusses both the benefits of and obstacles to storage technologies

2. SESSION 2: CLIMATE AND GRID RESILIENCY

Climate

“National Climate Assessment: Energy Supply and Use.” 2014.

<https://nca2014.globalchange.gov/report/sectors/energy>

“National Climate Assessment: Midwest.” 2014.

<https://nca2014.globalchange.gov/report/regions/midwest>

“Illinois: Findings from Confronting Climate Change in the Great Lakes Region.” Union of Concerned Scientists. 2003.

https://www.ucsusa.org/sites/default/files/legacy/assets/documents/global_warming/ucssummaryifinal.pdf?_ga=2.42270371.743196983.1523547707-31463476.1523547707

Grid Resiliency

“Resilience and the Electric Grid.” 2015. <http://themilitaryengineer.com/index.php/tme-articles/tme-magazine-online/item/456-resilience-and-the-electric-grid>

“State Energy Resilience Framework.” 2016
<https://www.energy.gov/sites/prod/files/2017/01/f34/State%20Energy%20Resilience%20Framework.pdf#page=1&zoom=auto,-13,792>

“Rebuilding infrastructure to a more resilient standard.” Zurich. 2018.
<https://www.zurichna.com/resilientinfrastructure>

3. SESSION 3: BENEFICIAL ELECTRIFICATION

“The key to tackling climate change: electrify everything” by David Roberts, Vox.com, October 2017
<https://www.vox.com/2016/9/19/12938086/electrify-everything>

“Beneficial Electrification: Ensuring Electrification in the Public Interest” by David Farnsworth, Jessica Shipley, Jim Lazar, Nancy Seidman, the Regulatory Assistance Project, June 2018.
<https://www.raonline.org/wp-content/uploads/2018/06/6-19-2018-RAP-BE-Principles2.pdf>

“Getting From Here to There: Regulatory Considerations for Transportation Electrification” by the Regulatory Assistance Project, May 2017.
<https://www.raonline.org/wp-content/uploads/2017/06/RAP-regulatory-considerations-transportation-electrification-2017-may.pdf>

“Electrification of buildings and industry in the United States: Drivers, barriers, prospects, and policy approaches” by Jeff Deason, Max Wei, Greg Leventis, Sarah Smith and Lisa Schwartz, Lawrence Berkeley National Lab, March 2018.
http://eta-publications.lbl.gov/sites/default/files/electrification_of_buildings_and_industry_final_0.pdf

“The Economics of Electrifying Buildings” by Sherri Billimoria, Leia Guccione, Mike Henchen, and Leah Louis-Prescott, Rocky Mountain Institute, June 2018.
<https://rmi.org/insight/the-economics-of-electrifying-buildings/>

4. SESSION 4: PATHWAYS TO DECARBONIZATION

“A Road Map to Decarbonization in the Midcontinent” by Great Plains Institute, July 2018.
http://roadmap.betterenergy.org/wp-content/uploads/2018/07/GPI_Roadmap_lr.pdf

“Carbon Tax Research Series” by Columbia University, July 2018.
<http://energypolicy.columbia.edu/july-2018-carbon-tax-research-series>

“NextGrid: Carbon Reduction Policy Considerations” by Sari Amiel, University of Chicago Law School, July 2018.

<https://www.dropbox.com/s/hi8d1pmewhsuvrf/Amiel%20Illinois%20carbon%20paper%20draft.docx?dl=0>.

“Economic Impacts of the Regional Greenhouse Gas Initiative on Nine Northeast and Mid-Atlantic States” by Paul Hibbard, Susan Tierney, Pavel Darling and Sarah Cullinan, Analysis Group, April 2018.

http://www.analysisgroup.com/uploadedfiles/content/insights/publishing/analysis_group_rggi_report_april_2018.pdf

“Illinois State Profile and Energy Estimates” by US Energy Information Administration, April 2018.

<https://www.eia.gov/state/analysis.php?sid=IL#5>

“Advancing Zero Emissions Objectives through PJM’s Energy Markets: A Review of Carbon-Pricing Frameworks” by PJM, August 2017.

<https://pjm.com/~media/library/reports-notice/special-reports/20170502-advancing-zero-emission-objectives-through-pjms-energy-markets.ashx>

“Learning from Thirty Years of Experience with Cap-and-Trade Systems” by Robert Stavins, August 2017.

<http://www.robertstavinsblog.org/2017/08/25/learning-thirty-years-experience-cap-trade-systems/>

“The Carbon-Free City Handbook” by Rocky Mountain Institute, 2017.

<https://rmi.org/insight/the-carbon-free-city-handbook/>

“State of Illinois Energy Sector Risk Profile” by US Department of Energy, September 2016.

https://www.energy.gov/sites/prod/files/2016/09/f33/IL_Energy%20Sector%20Risk%20Profile.pdf

“Growing Clean Energy Markets with Green Bank Financing” by Coalition for Green Capital, August 2015.

<http://coalitionforgreencapital.com/wp-content/uploads/2015/08/CGC-Green-Bank-White-Paper.pdf>

“Illinois State Building Energy Expense Study FY2014 And Projected FY2015-2017” by Illinois Department of Commerce and Economic Opportunity, 2014.

https://www.illinois.gov/dceo/AboutDCEO/ReportsRequiredByStatute/IL%20state%20bldg%20energy%20expense%20study%20FY14_CLEAN.pdf

“Carbon Taxes vs. Cap and Trade: A Critical Review” by Lawrence H. Goulder and Andrew Schein, National Bureau of Economic Research, August 2013.

<http://www.nber.org/papers/w19338>

“Effects of a Carbon Tax on the Economy and the Environment” by the Congressional Budget Office, May 2013.

<https://www.cbo.gov/publication/44223>

“Putting a Price on Carbon: An Emissions Cap or a Tax?” by Yale Environment 360, May 2009.

https://e360.yale.edu/features/putting_a_price_on_carbon_an_emissions_cap_or_a_tax

Carbon Tax Center

<https://www.carbontax.org/states/>