

REPORT OF THE RENEWABLE ENERGY COMMITTEE

The following developments concerning renewable energy occurred during the year 2015.*

* The following Subcommittee members contributed to this report: Contributing Editor – Nidhi Thakar; Contributors – Nicole Allen, Travis Allen, Leslie Barkemeyer, Thomas Chandler, Zori Ferken, Alina Fortson, David Gold, Erik Heinle, Bonnie Heiple, Linda Hillman, Jasmine Hites, Mark Kalpin, Andrea Kells, Theodore Koroshetz, Matthew McDonnell, Alexander McDonough, John Povilaitis, and Elizabeth Stevens.

I. STATE ACTIVITY

A. Northeast

1. Connecticut

On July 2, the Governor signed into law new solar policies. Public Act 15-194 is designed to expand Connecticut Green Bank's residential solar investment program by establishing a new goal of 300 megawatts of installed solar by 2022.[1] The Green Bank (formerly the Clean Energy Finance and Investment Authority) leverages public and private funds to drive investment and expand clean energy deployment, including through incentives and low-cost financing programs. Expanding the program is projected to increase private investment in rooftop solar by over $1 billion and save ratepayers between $68-186 million by facilitating development of solar installations on approximately 40,000 homes.[2]

In March, the Connecticut Public Utilities Regulatory Authority (CT PURA) ruled that credits purchased from renewable electricity generated in Vermont may be counted toward Connecticut renewable energy portfolio standard (RPS)

1. Concerning the Encouragement of Local Economic Development and Access to Residential Renewable Energy, 2015 Conn. Acts 15-194 (Reg. Sess.).

2. *See generally* Connecticut Green Bank, *Providing Easy Access to Affordable Capital*, CONN. POWER AND ENERGY SOC'Y (Feb. 11, 2015), http://www.ctpower.org/wp-content/uploads/2015/02/Connecticut-Green-Bank_CPES_021115.pdf.

compliance.[3] CT PURA concluded that a Connecticut law which renders ineligible megawatt hours that are claimed toward another state's renewable energy program goals is not triggered by the Vermont SPEED 2012 program, since the Vermont program does not have identifiable numerical goals during the period in question.[4] Thus, a Vermont generator recognized as a renewable energy resource by Connecticut can originate RECs that can be used toward Connecticut RPS compliance. The CT PURA acknowledged that a Vermont program scheduled to go into effect on January 1, 2017, may change that landscape, but declined to reach a decision regarding that program.

In May 2014, Connecticut joined seven other states (California, Oregon, Massachusetts, Rhode Island, Vermont, Connecticut, New York and Maryland) in releasing a plan to build infrastructure and develop markets for zero-emission vehicles, with a goal of putting more than three million electric cars on the road by 2025.[5] In May 2015, Governor Malloy announced a new incentive, the Connecticut Hydrogen and Electric Automobile Purchase Rebate, or "CHEAPR" program, to make the price of alternative vehicles more competitive. Rebates of up to $3,000 are now available for the purchase or lease of an electric vehicle. The program is capped at $1 million, funds which were provided as part of an agreement relating to the 2012 merger of Northeast Utilities and NSTAR. A bill designed to improve infrastructure, merchants, and electric distribution companies and contractors for use of more electric vehicles was tabled in April 2015.[6]

2. Maine

During its 2014 session, the Maine Legislature ("Legislature") enacted the Support Solar Energy Development in Maine ("Act").[7] Section 2 of the Act requires the Public Utilities Commission ("Commission") to determine the value of distributed solar energy generation in the State, evaluate implementation options, and to deliver a report to the Legislature.[8] Accordingly, in March 2015, the Commission delivered a three-volume report outlining: (1) methodology, (2) valuation results, and (3) implementation options.[9]

The study calculates the monetary benefits of solar installations, which have an assumed 25-year useful life.[10] The study finds that the value of distributed solar power produced in Maine is 33 cents per kilowatt-hour of electricity.[11] The analysis concluded that distributed PV provides multiple, quantifiable benefits beyond the electrons produced from a solar panel. Such benefits include: (1)

3. Declaratory Ruling Regarding Conn. Gen. Stat §16-1(a)(20), as Amended by PA 13-303, Concerning The Possible Double Counting of RECs, Docket No. 15-01-03 (Pub. Utils. Regulatory Auth. Mar. 11, 2015).

4. *Id.* at 1.

5. ZEV PROGRAM IMPLEMENTATION TASK FORCE, MULTI STATE ZEV ACTION PLAN 24 (2014), *available at* http://www.nescaum.org/documents/multi-state-zev-action-plan.pdf.

6. H.R. 7009, 2015 Gen. Assemb., Jan. Sess. (Conn. 2015) (Raised Bill Concerning Electric and Zero-Emission Vehicles).

7. BENJAMIN L. NORRIS ET AL., ME. PUB. UTILS. COMM'N, MAINE DISTRIBUTED SOLAR VALUATION STUDY 2 (rev. ed. 2015).

8. *Id.*

9. *Id.*

10. *Id.* at 5.

11. *Id.* at 6.

reduced electricity prices, due to displacing more expensive power sources; (2) reduced emissions; (3) reduced costs for the electric grid; (4) reduced need to build additional power plants to meet peak demand; and (5) more stable prices and greater energy security from a diversified energy supply.[12]

In June 2015, the Legislature passed LD 1263, a legislative resolution, overriding a governor veto, to create sustainable growth in Maine's distributed energy sector that uses market forces to fairly compensate energy producers.[13] More specifically, the legislation directs the Commission to convene a stakeholder group to develop an alternative to net metering for the state legislature to take up in 2016.[14]

The bill itself does not institute any changes to Maine's existing net metering policy, but it does require stakeholders to build upon a market-based policy solution laid out in a white paper by the Maine Office of the Public Advocate, entitled "A Ratepayer-Focused Strategy for Distributed Solar in Maine."[15] The paper offers an alternative policy framework based on the concept of a Market-Based Aggregation Credit (MAC). Under this model, a central aggregator, or "Solar Standard Buyer," would aggregate solar projects to maximize and monetize the value of solar generation in relevant markets. The aggregator could be a utility or another third party selected by the Commission.

3. Massachusetts

On January 5, 2015, the Massachusetts Department of Public Utilities (DPU) adopted rules and regulations implementing a bill signed into law on August 6, 2014 by then-Governor Deval Patrick, expanding eligible resources that qualify for the Alternative Energy Portfolio Standard (APS) and increasing the state's net metering caps.[16] The Massachusetts House and Senate each passed a bill in 2015 to further increase those caps; however, the two branches did not finalize the legislation before the winter recess.[17] The state's net metering program currently caps public and private net metering facilities, respectively, at 4% and 5% of historical peak load for each distribution company.[18]

12. NORRIS, *supra* note 7, at 6.

13. Leg. Doc. 1263, § 2, 127th Legis., 1st Reg. Sess. (Me. 2015).

14. *Id.*

15. STATE OF ME. OFFICE OF THE PUB. ADVOCATE, A RATEPAYER FOCUSED STRATEGY FOR DISTRIBUTED SOLAR IN MAINE (n.d), http://www.maine.gov/meopa/news/Maine%20VOS%20White%20Paper%20V2%202.pdf.

16. Order Adopting Final Regulations, Investigation by the Department of Public Utilities on its own Motion Commencing a Rulemaking pursuant to G.L. c. 30A, § 2 and 220 C.M.R. § 2.00 et seq. to Amend 220 C.M.R. § 18.00 et seq., No. D.P.U. 14-104-A (Mass. Dep't Pub. Utils. Jan. 5, 2015), *available at* http://web1.env.state.ma.us/DPU/FileRoomAPI/api/Attachments/Get/?path=14-104%2Forder_14104a.pdf.

17. An Act Providing for the Establishment of a Comprehensive Adaptation Management Plan in Response to Climate Change, S.B. 1979, 189th Sess. (Mass. 2015), *available at* https://malegislature.gov/Bills/189/Senate/S1979/History (bill history); *see also* Matt Murphy, *Lawmakers Fail to Reach Accord on Solar Incentives*, STATE HOUSE NEWS SERVICE (Nov. 18, 2015), http://www.statehousenews.com/?login=yes&trial=yes&path=cms/news.aspx&yr=2015&select=20152326.

18. *Net Metering Frequently Asked Questions and Answers*, MASS.GOV, http://www.mass.gov/eea/grants-and-tech-assistance/guidance-technical-assistance/agencies-and-divisions/dpu/net-metering-faqs.html (last visited Mar. 26, 2016).

On May 4, 2015, DPU issued a model interconnection tariff and directed each investor-owned utility in Massachusetts to file a tariff consistent with the model.[19] The model was formulated based on the recommendations of the DPU-appointed Massachusetts Distributed Generation Interconnection Working Group, with the goal of fostering "continued growth of distributed generation in Massachusetts."[20] Each utility filed a revised tariff based on the model. The revised tariffs took effect on June 1, 2015, after a public comment period and DPU approval.[21]

On May 28, 2015, Governor Charlie Baker announced the "Energy Storage Initiative" (ESI), aimed at advancing energy storage in Massachusetts.[22] The ESI includes a $10 million commitment from the Department of Energy Resources (DOER) and a study from DOER and the Massachusetts Clean Energy Center to (1) analyze opportunities to support storage companies in the state, and (2) develop policy options to encourage energy storage deployment.

On November 18, 2015, the Massachusetts Attorney General's Office released a study evaluating options to address regional electricity reliability through 2030.[23] The study concluded that the region will continue to rely on natural gas as the dominant fuel of choice and that under existing market conditions there will be no electric sector reliability deficiency through 2030.[24] The study relied on ISO New England's declining long-term forecast of peak winter demand (due to energy-efficiency measures and other "passive demand resources"[25]) and the increasing availability of new non-gas resources, including dual-fuel capable units that could use oil to generate during peak winter periods.[26]

In 2015, DPU granted two petitions seeking exceptions to the state's "Single Parcel Rule," which limits eligibility for net metering to "energy generating equipment associated with a single parcel of land, interconnected with the electric

19. Order on the Model Interconnection Tariff, Investigation by the Department of Public Utilities on its own Motion into Distributed Generation Interconnection, No. D.P.U. 11-75-G (Mass. Dep't Pub. Utils. May 4, 2015), *available at* http://web1.env.state.ma.us/DPU/FileRoomAPI/api/Attachments/Get/?path=11-75%2fOrder_1175G_050415.pdf.

20. Vote and Order Opening Investigation, Investigation by the Department of Public Utilities on its own Motion into Distributed Generation Interconnection, No. D.P.U. 11-75, at 3 (Mass. Dep't Pub. Utils. Sept. 28, 2011), *available at* http://web1.env.state.ma.us/DPU/FileRoomAPI/api/Attachments/Get/?path=11-75%2f20110928-order.pdf; *see also* MASS. DISTRIBUTED GENERATION INTERCONNECTION WORKING GROUP, PROPOSED CHANGES TO THE UNIFORM STANDARDS FOR INTERCONNECTING DISTRIBUTED GENERATION IN MASSACHUSETTS 5 (2012), *available at* http://massdg.raabassociates.org/Articles/Final%20MA%20DG%20WG%20Report%209-14-12.pdf.

21. Department Investigation on Distributed Generation Interconnection, Docket No. 11-75 (Mass. Dep't Pub. Utils. May 29, 2015), *available at* http://web1.env.state.ma.us/DPU/FileRoom/dockets/bynumber.

22. *Baker-Polito Administration Announces $10 Million Energy Storage Initiative*, MASS.GOV (May 28, 2015), http://www.mass.gov/eea/pr-2015/10-million-energy-storage-initiative-announced.html.

23. *Regional Electric Reliability Options Study*, MASS.GOV (Nov. 18, 2015), http://www.mass.gov/ago/doing-business-in-massachusetts/energy-and-utilities/regional-electric-reliability-options-study.html#study-summary.

24. PAUL J. HIBBARD & CRAIG P. AUBUCHON, ANALYSIS GRP., INC., POWER SYSTEM RELIABILITY IN NEW ENGLAND: MEETING ELECTRIC RESOURCE NEEDS IN AN ERA OF GROWING DEPENDENCE ON NATURAL GAS iii (2015), *available at* http://www.mass.gov/ago/docs/energy-utilities/reros-study-final.pdf.

25. ISO NEW ENGLAND, INC., CAPACITY, ENERGY, LOAD AND TRANSMISSION (CELT) REPORT, SYSTEM PLANNING 1.2.1 (2015), *available at* http://www.iso-ne.com/static-assets/documents/2015/05/2015_celt_report.pdf.

26. HIBBARD, *supra* note 24, at iii.

distribution system at a single point, behind a single meter."[27] First, the DPU allowed a 61.7-kilowatt ("kW") rooftop solar project to operate as a net metering facility even though the property owner was already operating a 198.3-kW solar system on the same rooftop parcel.[28] Second, the DPU granted an exception allowing separate net metering projects to be installed at multiple individually-owned condominium units on a single parcel of land.[29] In each case, after considering the public interest and the interests of the parties, the DPU determined that there was "good cause" to grant the exceptions and that doing so would not be contrary to DPU's goals of promoting regulatory certainty and preventing manipulation of the net metering system.

4. New Hampshire

New Hampshire Governor Hassan signed three renewable energy bills into law in 2015. First, on June 8, Governor Hassan signed HB 205 into law.[30] This legislation eases restrictions for municipalities to secure private financing for energy efficiency and small-scale, clean energy projects.[31] Second, an act signed on June 16 established a commission to investigate implementation of decoupling for New Hampshire utilities.[32] Third, on July 8 House Bill 614 was enacted which implements goals of the state's 10-year energy strategy prepared by the state Office of Energy and Planning.[33] Specifically, this legislation directs the Public Utilities Commission to open a docket on electric grid modernization on or before August 1, 2015.[34]

On May 8, 2015, the New Hampshire Public Utilities Commission issued an order to open a proceeding toward establishing "an Energy Efficiency Resource Standard (EERS), a policy to establish specific targets or goals for energy savings

27. Order on Definitions of Unit and Facility, Inquiry into Net Metering and Interconnection of Distributed Generation, pursuant to an Act Relative to Green Communities, St. 2008, c. 169, §§ 138-140 and St. 2010, c. 359, §§ 25-30, No. D.P.U. 11-11-C, at 23 (Mass. Dep't Pub. Utils. Aug. 24, 2012), *available at* http://web1.env.state.ma.us/DPU/FileRoomAPI/api/Attachments/Get/?path=11-11%2f82412dpuord.pdf.

28. Petition of BCC Solar Energy Advantage, Inc. for an Exception for the Greater Boston Food Bank Phase II Solar Project from the Net Metering Regulations at 220 C.M.R. § 18.00 et seq., No. D.P.U. 14-149 (Mass. Dep't Pub. Utils. Sept. 1, 2015), *available at* http://web1.env.state.ma.us/DPU/FileRoomAPI/api/Attachments/Get/?path=14-149%2f14149_Order_9115.pdf.

29. Petition of Direct Energy Solar for an Exception for the Harvest Valley Condominium Development Solar Energy Project from the Net Metering Regulations at 220 C.M.R. § 18.00 et seq., No. D.P.U. 15-74 (Mass. Dep't Pub. Utils. Oct. 23, 2015), *available at* http://web1.env.state.ma.us/DPU/FileRoomAPI/api/Attachments/Get/?path=15-74%2fDPU1574_Order_102315.pdf.

30. Relative to Lending Practices of Energy Efficiency and Clean Energy Districts, H.B. 205, 2015 Sess. (N.H. 2015).

31. *Id.*

32. Establishing a Commission to Investigate Implementation of Decoupling for New Hampshire Utilities, S.B. 60, 2015 Sess. (N.H. 2015).

33. Implementing Goals of the State 10-year Energy Strategy, Modifying Uses of the Site Evaluation Committee Fund, Establishing Fees for Energy Facility Evaluation, and Relative to Public Information Sessions on Proposed Energy Siting, H.B. 614, 2015 Sess. (N.H. 2015).

34. *Id.*

that utilities must meet in New Hampshire."[35] In the upcoming proceeding, the Commission will seek to define the savings targets and address "issues related to public and private funding; program-cost recovery; lost-revenue recovery (e.g., decoupling); performance-based incentives and penalties; program administration; and evaluation, measurement and verification."[36] "The Commission will also consider ways to transition from the existing energy efficiency programs to programs under the EERS."[37]

5. New York

This January 13, 2015 decision of the New York Public Service Commission (NYPSC) adjudicated a petition by Global Structured Finance Advisors and GP Renewables and Trading, LLC on behalf of certain municipal customers (Muni-Petitioners).[38] The petition sought to create an opt-in mechanism to the Systems Benefit Charge (SBC) for municipal customers who wished to participate in the SBC program. The SBC program in New York supports energy efficiency, research and development, low income cost management and environmental protection initiatives (SBC Program) through a surcharge on the electric bills of investor-owned utilities' delivery customers.[39] These customers also pay a Renewable Portfolio Standards (RPS) surcharge and are thereby eligible for the programs funded by these surcharges. The Muni-Petitioners are exempt from the SBC and RPS surcharges, and therefore were not eligible to participate in the SBC and RPS programs.[40] The Muni-Petitioners requested the right to opt-in by individual meter to the SBC and RPS surcharges, and thus become eligible to participate in the SBC and RPS surcharge-funded programs.

The SBC surcharge supports the SBC Program as well as the Energy Efficiency Portfolio Standard Program (EEPS Program), which was adopted in 2008 to promote energy efficiency. The EEPC Program is administered by the New York State Energy Research and Development Authority (NYSERDA) and investor-owned utilities, while the SBC Program is administered only by NYSERDA. Funding for energy efficiency programs is provided by all customers who receive delivery services from investor-owned utilities.

The NYPSC denied the petition citing principles of equity and fairness. It noted that utility customers could not opt-out of contributing to these programs even if they did not intend to access the programs. The NYPSC stated that granting the petition would create two classes of customers. One class would consist of customers that contribute to the programs' cost by default, and another class of customers that can selectively opt in and obtain program benefits, while

35. Order of Notice, Energy Efficiency Resource Standard Order of Notice, No. DE 15-137, at 1 (N.H Pub. Util. Comm'n May 8, 2015), *available at* http://www.puc.nh.gov/Regulatory/Docketbk/2015/15-137/ORDERS/15-137%202015-05-08%20ORDER%20OF%20NOTICE.PDF.

36. *Id.*

37. *Id.*

38. Order Denying Petition Regarding Voluntary Opt-In Mechanism, *In re* System Benefits Charge IV, No. 10-M-0457, *available at* http://documents.dps.ny.gov/public/MatterManagement/MatterFilingItem.aspx?FilingSeq=134499&MatterSeq=35164.

39. *Id*. at 1.

40. *Id.* at 2.

those who do not would avoid the costs of the programs.[41] In this case, the NYPSC determined that the potential for obtaining more energy efficiency program participants did not justify modifying the regulatory concepts involved in establishing the programs.

On February 26, 2015 the New York Public Service Commission (NYPSC or "Commission") issued the policy framework for Reforming the Energy Vision (REV), a plan for reforming the retail electric industry.[42] The order addresses a host of issues including, but not limited to, a Distributed System Platform (DSP) concept, the future of the grid, the use of renewable resources and the reform of New York ratemaking practices. The REV predicts an electric system driven by consumers and non-utility providers, but enabled by utilities. The order notes that a significant penetration of renewable resources is essential to meeting NYPSC objectives, state goals, and proposed federal requirements. It also observed that grid-scale renewable resources must be strategically developed to diversify the energy supply mix, hedge the volatility of fossil fuel prices and decrease greenhouse gas and other harmful emissions.[43]

In response to comments on the order, the Commission instituted a large-scale renewables tracking system and directed its staff to work with the New York State Energy Research and Development Authority (NYSERDA) to prepare a large-scale renewables options paper for public comment. The paper, titled Large Scale Renewable Energy Development in New York: Options and Assessment was filed June 1, 2015.[44]

6. Rhode Island

On June 30, 2015 the Rhode Island Legislature established the Rhode Island Infrastructure Bank (RIIB) as part of the FY2016 Jobs Budget.[45] The RIIB will administer a new energy efficiency program for commercial and residential property owners using the Property Assessed Clean Energy (PACE) model.[46]

On December 8, 2015 Governor Gina Raimondo signed Executive Order 15-17 which directs state agencies to procure 100% of state government electricity consumption from renewable sources by 2025.[47]

41. *Id.* at 7-8.

42. Order Adopting Regulatory Policy Framework and Implementation Plan, Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision, No. 14-M-0101, *available at* http://documents.dps.ny.gov/public/MatterManagement/MatterFilingItem.aspx?FilingSeq=137167&MatterSeq=44991.

43. *Id.* at 82.

44. Notice Instituting Proceeding, In the Matter of the Implementation of a Large-Scale Renewable Program, No. 15-E-0302, *available at* http://documents.dps.ny.gov/public/MatterManagement/MatterFilingItem.aspx?FilingSeq=141914&MatterSeq=48235.

45. An Act Making Appropriations for the Support of the State for the Fiscal Year Ending June 30, 2016, 2015 R.I. Pub. Laws ch. 15-141.

46. *Id*.

47. OFFICE OF THE GOVERNOR, STATE OF R.I., EXEC. ORDER 15-17, STATE AGENCIES TO LEAD BY EXAMPLE IN ENERGY EFFICIENCY AND CLEAN ENERGY 2 (2015), *available at* http://www.ri.gov/press/view/26390.

The Rhode Island Public Utilities Commission (PUC) unanimously approved a 2015 Renewable Energy Growth Program (RE Growth Program).[48] The RE Growth Program is designed to finance the development, construction, and operation of 160 MW of renewable energy distributed generation projects over five years through a competitive performance-based incentive system.[49]

7. Vermont

Act 56, which created a renewable energy standard (RES) for the supply portfolios of Vermont electric utilities, took effect on June 11, 2015.[50] On August 7, 2015, the Vermont Public Service Board (PSB) opened a proceeding to implement provisions of Act 56 relating to sales of electric energy, RES categories, and tradable renewable energy credits.[51] Act 56 requires the PSB to issue an order by July 1, 2016 (to take effect on January 1, 2017) that initially implements these provisions.[52]

The Vermont Public Service Department (PSD) will publish the final version of the updated Vermont Comprehensive Energy Plan (CEP) in early 2016.[53] The most recent completed CEP, published in 2011, recommended that Vermont obtain 90% of its total energy from renewable sources by 2050.[54]

B. West

1. Alaska

On November 20, 2015 the Regulatory Commission of Alaska issued a final order effective April 1, 2016, adopting regulations in Title 3 of the Alaska Administrative Code dealing with the integration and purchase of electric power between an electric utility and a Qualifying Facility.[55] These changes revise and update rules governing cogeneration and small power production.[56] "The state

48. An Act Relating to Public Utilities and Carriers–The Distributed Generation Growth Program, 2014 R.I. Pub. Laws ch. 14-200, 14-216.

49. *Id.*

50. An Act Relating to Establishing a Renewable Energy Standard, H.B. 40, 2015-16 Sess. (Vt. 2015), *available at* http://legislature.vermont.gov/assets/Documents/2016/Docs/ACTS/ACT056/ACT056%20As%20Enacted.pdf (Act Summary).

51. Order Opening Investigation and Notice of Prehearing Conference and First Workshop, Investigation re: Establishment of the Renewable Energy Standard Program, Docket No. 8550 (Vt. Pub. Serv. Bd. Aug. 7, 2015).

52. *Id.*

53. VERMONT PUB. SERVICE DEP'T, COMPREHENSIVE ENERGY PLAN (2016), *available at* https://outside.vermont.gov/sov/webservices/Shared%20Documents/2016CEP_Final.pdf; *see also* Chris Recchia, *Vermont Has Integral Role in Global Climate Challenge*, VTDIGGER.ORG (Dec. 16, 2016, 7:00 PM), https://vtdigger.org/2015/12/16/chris-recchia-vermont-has-integral-role-in-global-climate-challenge/.

54. VERMONT PUB. SERVICE DEP'T, COMPREHENSIVE ENERGY PLAN (2011), http://publicservice.vermont.gov/sites/dps/files/documents/Pubs_Plans_Reports/State_Plans/Comp_Energy_Plan/2011/CEP%20Overview%20Page_Final%5B1%5D.pdf.

55. Order Adopting Regulations, Petition Filed by Alaska Environmental Power, LLC to Amend 3AAC 50.750 - 3AAC 50.820 Addressing Cogeneration and Small Power Production, No. R-13-002(5), (Regulatory Comm'n of Alaska Nov. 20, 2015), *available at* http://rca.alaska.gov/RCAWeb/ViewFile.aspx?id=3579ac01-4131-473d-af33-630343c686d7.

56. *Id.*

framework governing power purchases had not been updated since 1982."[57] "The revisions require utilities to use an incremental avoided cost methodology to determine their cost of power, which mirrors FERC requirements, versus the historical option to choose an average avoided cost model."[58] "In an incremental avoided cost model, a utility calculates the cost of each power source individually and tries to limit the amount of power purchased from its most expensive source."[59] "If a less expensive source becomes available, the most expensive power is turned off, or at least throttled back."[60] "An average avoided cost model allows utilities to average the cost of all its power generation and purchase power from another source only if it is less expensive than the averaged cost."[61] "The new regime further mirrors FERC standards by eliminating a distinction between firm and non-firm power—the difference in controlled generation such as natural gas- and oil-fired power plants or large hydropower and variable, often renewable power sources."[62]

On October 23, 2015, the Environmental Protection Agency (EPA) published in the Federal Register the final rule for its Clean Power Plan that exempts Alaska from the need to develop and implement a plan that sets emission standards for electrical generating units "because the EPA does not possess all of the information or analytical tools needed to quantify" the best system of emission reductions for the two noncontiguous states (Alaska and Hawaii).[63]

2. Arizona

In August, Arizona Public Service (APS) submitted a proposal to the Arizona Corporation Commission (AZCC) to instate a monthly $3 per kW "Grid Access Charge" for residential rooftop solar systems, a substantial increase over the $0.70 per kW charge the AZCC approved in November[64] However, in September APS withdrew the proposal and requested the Arizona Corporation Commission (ACC) to open a docket to determine the "value of solar" to be used "to inform APS's 2016 general rate case . . . ."[65]

Tucson Electric Power (TEP) is separately proposing to reduce the net metering rate for residential rooftop solar from the retail rate to the wholesale rate,

57. Elwood Brehmer, *Independent Power Producers Cheer RCA Rules Revisions*, ALASKA J. OF COMM. (Nov. 24, 2015), http://www.alaskajournal.com/2015-11-24/independent-power-producers-cheer-rca-rules-revisions.

58. *Id.*

59. *Id.*

60. *Id.*

61. *Id.*

62. Brehmer, *supra* note 57.

63. Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units; Final Rule, 80 Fed. Reg. 64661, 64664 (Oct. 23, 2015) (to be codified at 40 C.F.R. pt. 60).

64. *Arizona to consider additional charges on solar outside of APS rate case*, PV MAGAZINE (Aug. 19, 2015), http://www.pv-magazine.com/news/details/beitrag/arizona-to-consider-additional-charges-on-solar-outside-of-aps-rate-case_100020675/#ixzz3sGQIRHwV.

65. Motion to Amend Interlocutory Order, In Re: Application of Arizona Public Service Company for Approval of Net Metering Cost Shift Solution, Docket No. E-01345A-13-0248 (Ariz. Corp. Comm'n Sep. 25, 2015) *available at* https://www.azenergyfuture.com/getmedia/49cbe3e0-7055-4b10-81aa-bcc5a557e752/APSProposal_092515.pdf/?ext=.pdf.

or from roughly 12 cents to 6 cents per kWh.[66] At the same time, TEP began implementing a program to install up to 3.5 MW of its own utility-owned residential rooftop solar systems, which the AZCC approved in December 2014 along with a similar 10 MW program that APS proposed.[67] Additionally, TEP sought approval to spend $10 million to develop a 5 MW community solar array to serve participating customers.[68]

In March, SolarCity filed a lawsuit in the U.S. District Court for Arizona against the Salt River Project (SRP), arguing that SRP's new rate structure is illegal and anti-competitive under federal and state anti-trust laws.[69] On October 27, 2015, the court denied SRP's motion to dismiss the suit.[70] SRP's new rate structure reduces the net metering rate from the average roughly $0.09 per kWh retail rate to roughly $0.05 per kWh and establishes a monthly demand charge based on the customer's peak monthly usage.[71] SRP estimates that under the new customer generation price plan, if customers do not take actions to lower their peak demand, they will be charged roughly $50 more for fixed charges that are avoided under the prior price plan.[72]

3. California

Governor Brown signed S.B. 350, Clean Energy and Pollution Reduction Act of 2015, into law on October 7, 2015, which establishes targets to increase retail sales of qualified renewable electricity to at least 50% by 2030 and double the energy efficiency savings in electricity and natural gas end uses by 2030.[73]

On April 29, 2015 Governor Brown issued Executive Order B-30-15 establishing a new statewide intermediate target to reduce greenhouse gas emissions 40% below 1990 levels by 2030 in order to guide policy and maintain

66. *TEP files to decrease payment for solar PV customers*, PV MAGAZINE (Nov. 9, 2015), http://www.pv-magazine.com/news/details/beitrag/tep-files-to-decrease-payment-for-solar-pv-customers_100021909/#axzz3sHk6k0WU.

67. Julia Pyper, Arizona Utilities Get Approval to Own Rooftop Solar, GREENTECH MEDIA (DEC. 26, 2014), http://www.greentechmedia.com/articles/read/arizona-utilites-get-the-go-ahead-to-own-rooftop-solar. *See also https://www.tep.com/renewable/home/residentialsolar/.*

68. Julia Pyper, Tucson Electric Power Seeks to Expand Its Residential Solar Programs, GREENTECH MEDIA (Jul. 10, 2015), http://www.greentechmedia.com/articles/read/tucson-electric-power-seeks-to-expand-its-residential-solar-programs.

69. Press Release, SolarCity Files Lawsuit Against Arizona Utility Salt River Project for Violations of Antitrust Law (Mar. 3, 2015) *available at* http://www.solarcity.com/newsroom/press/solarcity-files-lawsuit-against-arizona-utility-salt-river-project-violations.

70. SolarCity lawsuit against Arizona utility to go forward, PV MAGAZINE (Nov. 6, 2015) http://www.pv-magazine.com/news/details/beitrag/solarcity-lawsuit-against-arizona-utility-to-go-forward_100021896/#ixzz3swAaDQCO.

71. *See* Herman Trabish, Judge allows SolarCity lawsuit against Arizona utility SRP to move forward, UTILITY DIVE (NOV. 10, 2015) http://www.utilitydive.com/news/judge-allows-solarcity-lawsuit-against-arizona-utility-srp-to-move-forward/408894/. *See also* Standard Electric Price Plans, Salt River Project Agricultural Improvement and Power District, Nov. 2015 – Apr. 2016, at 31, *available at* http://www.srpnet.com/prices/priceprocess/pdfx/TempNov2015RatebookPUBLISHED.pdf.

72. Changes for new rooftop solar customers, Salt River Project webpage, *available at* http://www.srpnet.com/prices/priceprocess/customergenerated.aspx.

73. S.B 350, 2015-16 Leg., Reg. Sess. (Cal. 2015), *available at* https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350.

momentum to reduce greenhouse gas emissions to 80% below 1990 levels by 2050.[74]

A.B 693, Multifamily Affordable Housing Solar Roofs Program, was enacted October 8, 2015 and requires the California Public Utilities Commission (CPUC) to authorize, by June 30, 2017, the award of monetary incentives for solar energy systems that are installed on qualified multifamily affordable housing properties, with the target of the program being to install a combined generating capacity of at least 300 megawatts, primarily use to offset electricity usage by low-income tenants, with such tenants receiving credits on utility bills.[75]

Under A.B. 327, enacted in 2013, CPUC had until December 31, 2015 to develop a standard contract or tariff that applies to customer-generators who own rooftop solar installations or other distributed generation and are located in the service territories of Pacific Gas and Electric (PG&E), Southern California Edison (SGE), or San Diego Gas and Electric (SDG&E).[76] This "successor" tariff could replace the current system of net energy metering (NEM), which allows rooftop-solar owners to offset their own energy use with the energy they generate and get paid retail rates for the net energy they export to the grid.[77]

A proposed decision was issued by a CPUC administrative law judge December 15, 2015, to be heard, at the earliest, at the CPUC's January 28, 2016 Business Meeting.[78] If approved by the CPUC, this decision would preserve retail payments for residential rooftop solar generators, add new interconnection costs and non-bypassable charges to distributed solar systems, impose new minimum bill requirements, and, starting in 2018, also impose time-of-use rates.[79] The proposed decision declines to "impose any demand charges, grid access charges, installed capacity fees, standby fees, or similar fixed charges on [net energy metering] residential customers, while the [CPUC] continues to evaluate the need for them."[80] Also, big solar projects larger than 1 megawatt would be eligible for net metering provided they can pay related interconnection and upgrade fees.[81]

S.B. 793, The Green Tariff Shared Renewables Program, was enacted October 8, 2015, and requires the CPUC to require that a participating utility's green tariff shared renewables program permit a participating customer to

74. *Governor Brown Establishes Most Ambitious Greenhouse Gas Reduction Target in North America*, CA.GOV (Apr. 29, 2015), https://www.gov.ca.gov/news.php?id=18938.

75. Assemb. B. 693, 2015-16 Leg., Reg. Sess. (Cal. 2015), *available at* http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB693.

76. Assemb. B. 327, 2013-14 Leg., Reg. Sess. (Cal. 2013), *available at* http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB327.

77. *Id.*

78. Proposed Decision, Adopting Successor to Net Energy Metering Tariff, Rulemaking No. 14-07-002 (Cal. Pub. Utils. Comm'n Dec. 15, 2015), *available at* http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M156/K443/156443378.PDF.

79. Jeff St. John, *California Net Metering 2.0 Keeps Retail Rates for Rooftop Solar*, GREENTECH MEDIA (Dec. 15, 2015), http://www.greentechmedia.com/articles/read/breaking-california-net-metering-2.0-keeps-retail-rates-for-rooftop-solar.

80. *Id.*

81. *Id.*

subscribe to the program and receive a reasonably estimated bill credit and bill charge, as determined by the commission, for a period of up to 20 years.[82]

S.B. 489, enacted October 1, 2015, authorizes the Department of Toxic Substances Control to adopt regulations to designate end-of-life photovoltaic modules that are identified as hazardous waste as a universal waste and subject those modules to universal waste management.[83]

A.B. 1034, enacted October 8, 2015, (1) "require[s] a lead agency to consider the construction and operation of a renewable energy generation facility on disturbed mined lands to be an interim use and would prohibit a lead agency from requiring an amendment to an approved reclamation plan if specified criteria are met," (2) "require[s] a lead agency to submit to the director an application for an operating permit for a renewable energy generation facility prior to approving the operating permit, as specified," and (3) "authorize[s] the director to prepare written comments to the operating permit application and would require the lead agency, at least 30 days prior to approving the operating permit, to prepare a written response to the director's comments."[84]

4. Colorado

On July 13, 2015, the Tenth Circuit Court of Appeals issued its decision in Energy and Environment Legal Inst., et. al. v. Joshua Epel, et. al., 793 F.3d 1169 (10th Cir. 2015). In that case, a nonprofit energy organization brought an action alleging that a Colorado statute requiring that 20% of electricity sold to Colorado consumers must come from renewable sources violated the dormant Commerce Clause. After various environmental groups intervened, the United States District Court for the District of Colorado entered summary judgment in the state's favor and the nonprofit energy organization subsequently appealed.[85] The Tenth Circuit Court of Appeals found that the Colorado statute requiring electricity generators to ensure that 20% of electricity they sold to Colorado consumers come from renewable sources did not violate the dormant Commerce Clause because the statute was not a price control statute, and it did not link prices paid in Colorado with those paid out of state.[86] As such, the statute did not discriminate against out-of-staters.[87]

On May 29, 2015, the governor of Colorado signed into law Senate Bill 15-254.[88] This bill extends the 3.0 credit multiplier for municipal owned utilities to obtain renewable energy credits for solar projects under contract for development by August 1, 2015, and producing electricity before December 31, 2015.[89]

82. S.B. 793, 2015-16 Leg., Reg. Sess. (Cal. 2015), *available at* http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB793.

83. S.B. 489, 2015-16 Leg., Reg. Sess. (Cal. 2015), *available at* http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB489.

84. Assemb. B. 1034, 2015-16 Leg., Reg. Sess. (Cal. 2015), *available at* https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160AB1034.

85. Energy and Env't Legal Inst. v. Epel, 793 F.3d 1169 (10th Cir. 2015).

86. *Id.* at 1170.

87. *Id.* at 1173, 1179.

88. S.B. 15-254, Gen. Assemb., Reg. Sess. (Colo. 2015).

89. *Id.*

5. Hawaii

In June 2015, the Hawaii Legislature (Legislature) passed Act 100, which required the State's electric utilities to file proposed community-based renewable energy tariffs with the Public Utilities Commission ("Commission") by October 1, 2015, and authorized ratepayer participation in eligible community-based renewable energy projects.[90]

The Legislature, also in June 2015, passed HB 623, which established a 100% Renewable Portfolio Standard (RPS) by 2045. The law, effective July 1, 2015, mandates the State's utilities to reach 30% RPS by 2020, 40% by 2030, and 70% by 2040.[91]

In October 2015, the Commission issued a Decision and Order capping the Hawaiian Electric Companies' net energy metering program as fully subscribed, which the Commission determined to be necessary in order to ensure a smooth transition to a redesigned market-based structure for distributed resources in Hawaii as well as the State's commitment to meet a 100% RPS by 2045.[92] The Decision and Order also approved new "self-supply" and "grid-supply" tariffs for customers to interconnect distributed energy resources to the Hawaiian Electric Companies' electric grids and required the Hawaiian Electric Companies to submit a more robust time of use (TOU) tariff.[93]

6. Idaho

The Idaho Public Utilities Commission (IPUC) approved a request from Idaho Power and PacifiCorp, operating as Rocky Mountain Power, to reduce the length of contracts for qualifying renewable energy facilities under PURPA from 20-years to two years.[94] The IPUC stated that the 20-year contracts "resulted in utilities and, consequently, customers paying unreasonable costs for renewable generation."[95] Since 2007, qualifying renewable energy facilities has increased to 1,161 MW in Idaho Power's service territory.[96] Before the commission sided with the utilities' proposal for two-year PURPA contracts, renewable energy and environmental advocates proposed limiting PURPA contracts to 10 years, and the IPUC staff proposed five-year contracts.[97]

In its 2015 Integrated Resource Plan (IRP), Idaho Power proposed the accelerated retirement of two coal plants that it co-owns with neighboring utilities

90. S.B. 1050, 28th Legis., Reg. Sess. (Haw. 2015).

91. H.B. 623, 28th Legis., Reg. Sess. (Haw. 2015).

92. Order No. 32737, In re Pub. Utils. Comm'n, Instituting a Proceeding To Investigate Distributed Energy Resource Policy, In re Public Utilities Commission, No. 2014-0192, at 2 (Haw. Pub. Utils. Comm'n. Oct. 12, 2015), *available at* http://cca.hawaii.gov/dca/files/2015/04/2014-0192-Order-32737.pdf.

93. *Id.* at 33.

94. ID. PUB. UTILS. COMM'N, IDAHO COMMISSION REDUCES CONTRACT LENGTH FOR SOME PURPA PROJECTS TO TWO YEARS 1 (2015), Case No. IPC-E-15-01, AVU-E-15-01, PAC-E-15-03, *available at* http://www.puc.idaho.gov/press/150820_PURPAfinal_files.pdf.

95. *Id.*

96. *Id.*

97. Rocky Barker, *Idaho Regulators Limit Small-Scale Renewable Energy Contracts to 2 Years*, IDAHO STATESMAN (Aug. 24, 2015, 11:29 AM), http://www.idahostatesman.com/news/local/news-columns-blogs/letters-from-the-west/article41565693.html.

in Oregon and Nevada,[98] and adding 60 MW of demand response and potentially developing a community solar project.[99] Idaho Power owns 10% (64.2 MW) of the Boardman coal-fired power plant in Boardman, Oregon; the IRP assumes the plant will be unavailable after 2020.[100] Idaho Power also proposes retiring by 2025 the North Valmy Generating Station,[101] a 522 MW coal-fired power plant that is co-owned in equal parts with NV Energy in Nevada.[102]

7. Montana

Senate Bill 111 was passed in Montana clarifying that an owner or operator of a commercial wind generation facility is subject to certain impact fees each year for the first three years after construction of the facility.[103] The Montana Public Service Commission approved the withdrawal of a proposed demand charge for residential net metering customers as a stipulation to a recent rate case.[104]

A set of citizen-proposed ballot initiatives for the fall 2016 election have been proposed to require investor-owned utilities to supply incrementally higher percentages of their electricity from renewable energy sources and establish a displaced fossil-fuel workers program and a fossil-fuel pensioner program.[105] These initiatives still have to complete a legislative and legal review, as well as complete signature collection, prior to acceptance on the ballot.[106]

8. Nevada

The Nevada Legislature passed Senate Bill 374 (SB374) replacing the existing net metering policy for customer generators, which was capped at 3% of the total peak capacity of all electric utilities in the State, with a new policy (NEM2).[107] SB374 replaced the 3% cap with a cumulative 235-megawatt cap for total net-metered systems.[108] Upon exceeding the new cap, SB374 requires utilities to offer net metering to customers in accordance with a new tariff.[109] Utilities must file a proposed net metering tariff no later than January 31, 2015

98. ID. POWER, 2015 INTEGRATED RESOURCE PLAN 8-9 (June 2015), *available at* https://www.idahopower.com/pdfs/AboutUs/PlanningForFuture/irp/2015/2015IRP.pdf.

99. *Id.* at 6.

100. *Id.* at 32.

101. *Id.* at 10.

102. *Id.* at 32.

103. S.B. 111, 64th Legis., Reg. Sess. (Mt. 2015), *available at* http://laws.leg.mt.gov/legprd/LAW0203W$BSRV.ActionQuery?P_SESS=20151&P_BLTP_BILL_TYP_CD=SB&P_BILL_NO=111&P_BILL_DFT_NO=&P_CHPT_NO=&Z_ACTION=Find&P_ENTY_ID_SEQ2=&P_SBJT_SBJ_CD=&P_ENTY_ID_SEQ=.

104. Stipulation to Narrow Scope of Rate Filing, In re The Application of Montana-Dakota Utilities Co. for Authority to Establish Increased Rates for Electric Service, No. D2015.6.51 (Mont. Pub. Service Comm'n Nov. 18, 2015), *available at* http://www.psc.mt.gov/Docs/ElectronicDocuments/pdfFiles/D2015-6-51IN15111842965SP.PDF.

105. *2016 Proposed Ballot Issues*, SOS.MT.GOV, http://sos.mt.gov/ELECTIONS/2016/BallotIssues/index.asp (last visited Mar. 26, 2016) (Issues #17-19).

106. *Id.*

107. S.B. 374, 78th Legis., Reg. Sess. (Nev. 2015), *available at* https://www.leg.state.nv.us/Session/78th2015/Bills/SB/SB374_EN.pdf.

108. *Id.*

109. *Id.*

and the Public Utilities Commission of Nevada (PUCN) must approve or disapprove of the tariff no later than December 31, 2015.[110]

Pursuant to SB374, Nevada's largest utility, Nevada Power d/b/a NV Energy filed an application to the PUCN proposing new rules and rates for NEM2.[111] In addition to lowering the NEM2 rate for customer-generators, the filing proposed that the PUCN approve creating three new charges: (1) a basic service charge; (2) a demand charge; (3) and an energy charge based on the cost of providing standby service to NEM2 customers.[112] The filing also requested the PUCN to establish separate classes of NEM2 customers.[113]

On August 26, 2015 the three-member PUCN unanimously denied NV Energy's proposed NEM2 tariff, issuing an interim order keeping the existing net metering policy in place until the PUCN issues a final order no later than December 31, 2015.[114]

Four large electricity customers filed applications with the PUCN to exit NV Energy's system and to purchase electricity, capacity and ancillary services from non-utility generators.[115] Several of the large electricity customers expressed interest in purchasing renewable energy directly from generators, and one, Switch Ltd. of Las Vegas, stated an interest in purchasing 100% renewable energy.[116]

9. New Mexico

In September 2015, the New Mexico Governor announced the state's first comprehensive energy plan in almost twenty-five years. The plan known as the Energy Policy and Implementation Plan is an all-of-the-above strategy that embraces a variety of energy sources, including solar, wind and other renewable energy sources.[117] Key components of the plan include:

- Improving New Mexico's Energy Infrastructure;
- Promoting Greater Production of ALL Sources of Energy, Especially Low-Carbon Sources;
- Improving Energy Workforce Training at Higher Education Institutions;
- Reducing Fresh Water Consumption in Energy Production Processes;

110. *Id.*

111. Application of Nevada Power Company d/b/a NV Energy for Approval of a Cost of Service Study and Net Metering Tariffs, No. 15-07041 (Nev. Pub. Utils. Comm'n July 31, 2015), *available at* http://pucweb1.state.nv.us/PUC2/DktDetail.aspx.

112. *Id.* at 11.

113. *Id.*

114. Interim Order, Application of Nevada Power Company d/b/a NV Energy for Approval of a Cost of Service Study and Net Metering Tariffs, No. 15-07041 (Nev. Pub. Utils. Comm'n July 31, 2015), *available at* http://pucweb1.state.nv.us/PDF/AxImages/DOCKETS_2015_THRU_PRESENT/2015-7/5370.pdf.

115. Applications of Switch Ltd., MGM Resorts International, Wynn Las Vegas, LCC, and Las Vegas Sands Corp. to Purchase Energy, Capacity, and/or Ancillary Services from a Provider of New Electric Resources, Docket Nos. 14-11007 (Nev. Pub. Utils. Comm'n Nov. 14, 2014), 15-05002 (Nev. Pub. Utils. Comm'n May 8, 2015), 15-05006 (Nev. Pub. Utils. Comm'n May 8, 2015), 15-05017 (Nev. Pub. Utils. Comm'n May 12, 2015), *available at* http://pucweb1.state.nv.us/puc2/Dktinfo.aspx?Util=Electric.

116. Herman K. Trabish, *Major Las Vegas Resorts Get Price Tag for Grid Defection*, UTILITY DIVE (Aug. 21, 2015), http://www.utilitydive.com/news/major-las-vegas-resorts-get-price-tag-for-grid-defection/404372/

117. *See generally* STATE OF N.M., NEW MEXICO ENERGY POLICY AND IMPLEMENTATION PLAN (2015), *available at* http://www.emnrd.state.nm.us/EnergyPolicy/documents/EMNRD_EnergyPolicy.pdf.

- Streamlining Regulatory Processes; and
- Exploring, and Potentially Seizing on, New Energy Opportunities.[118]

10. Oregon

The Oregon legislature passed House Bill 2941,[119] effective June 25, 2015, amending certain provisions of the Oregon Revised Statutes to facilitate procurement of energy generated by "community solar gardens." Such community solar gardens are described as a solar power installation that accepts capital from, and provides output credit and potential tax benefits to, utility customers who either do not have solar access or lack the financial capability to independently install full-sized solar photovoltaic systems. The bill required the Oregon Public Utility Commission (OR PUC) to establish criteria for such solar garden projects and to develop rules requiring investor-owned utilities to purchase the resulting electricity and to credit participating customers through bill credits. The OR PUC commenced an expedited docket exploring the issues.[120] On October 28, 2015, the OR PUC made its initial high-level, commendations, with recommendations for more detailed determinations to be made in a future, formal rulemaking proceeding.[121]

In June of 2015, the Oregon Department of Energy (ODOE) made a request for proposals for an electrical energy storage demonstration projects.[122] The chosen project would be offered up to $250,000 in federal funding with Oregon proving up to $45,000 in additional funds. The U.S. Department of Energy's Office of Electricity Delivery and Energy Reliability provided the federal funding and the Sandia National Laboratories will be available to provide technical project management assistance to the chosen recipient. ODOE also announced that $1.5 million in grants would once again be available for renewable energy projects.[123] Grants may not exceed 35% of the cost of the renewable energy project and may not exceed $250,000 per system.[124] Eligible projects include biomass, solar, geothermal, hydroelectric, wind, landfill gas, biogas or wave, tidal or ocean thermal energy technology projects that are used to produce electrical energy.[125]

11. Utah

No developments.

118. *Id.* at iv.

119. H.B. 2941, 78th Legis., Reg. Sess. (Or. 2015).

120. Expedited Schedule for Implementation of Section 3 of HB 2941, No. UM1746 (Or. Pub. Util. Comm'n Jul. 21, 2015) *available at* http://edocs.puc.state.or.us/efdocs/HAH/um1746hah1352.pdf.

121. Attributes for the Design of a Community Solar Program, No. UM 1746 (Or. Pub. Util. Comm'n Oct. 26, 2015) *available at* http://edocs.puc.state.or.us/efdocs/HAH/um1746hah131652.pdf.

122. *ODOE to Offer Research and Development Funds for Energy Storage*, OR. DEP'T OF ENERGY (May 21, 2015), https://www.oregon.gov/energy/Pages/2015-20-Storage-award.aspx.

123. *ODOE Announces $1.5 Million for Renewables Energy Projects Across State*, OR. DEP'T OF ENERGY (May 20, 2015), https://www.oregon.gov/energy/Pages/2015-19-RED-grants.aspx.

124. OR. DEP'T OF ENERGY, RENEWABLE ENERGY DEVELOPMENT GRANTS OPPORTUNITY ANNOUNCEMENT 12 (2015), *available at* http://www.oregon.gov/energy/business/incentives/docs/EIP-OA-REDG.pdf.

125. *Id.* at 4.

12. Washington

On March 12, 2015, the Washington Utilities and Transportation Commission (WA UTC) adopted revised rules incorporating legislative changes to the state's Energy Independence Act (EIA).[126] The new rules govern how investor-owned utilities purchase renewable energy, report conservation efforts, and facilitate the expansion of weatherization programs for low-income customers. The WA UTC explained that the new rules will help to provide clarity to the standards set out in the EIA.[127]

C. South

1. Arkansas

Arkansas enacted Arkansas House Bill 1004, which revised several rules for net metering, including expanding the cap on net metering to include either twenty-five kilowatts or 100% of the customer's highest monthly usage for residential customers and greater than three hundred kilowatts for non-residential customers; requiring that rates charged to net metering customers include the utility's entire costs of providing the net metering service; and allowing net excess generation credits to be carried forward indefinitely.[128]

Additionally, Arkansas passed Arkansas House Bill 1191, known as Act 78, which limits the degree to which customers can opt-out of charges under Arkansas' Energy Efficiency Targets.[129]

2. Florida

In December 2014 the Florida Public Service Commission (FPSC) approved new numerical conservation goals for the five . . . utilities subject to the Florida Energy Efficiency and Conservation Act (FEECA)," as well as the two utilities that file on a "proxy basis"[130] The new numerical conservation goals were published in FPSC's annual report on FEECA activities in February 2015.[131] Revised goals include a total summer demand goal of 926.57 megawatts and a

126. General Order R-578, In re Amending, Adopting and Repealing Rules in WAC 480-109 Relating to the Energy Independence Act, No. UE-13723 (Wash. Utils. & Transp. Comm'n Mar. 12, 2015) *available at* http://www.utc.wa.gov/_layouts/CasesPublicWebsite/GetDocument.ashx?docID=196&year=2013&docketNumber=131723.

127. *State Regulators Roll Out New Rules for Energy Conservation and Renewables*, WASH. UTILS. & TRANSP. COMM'N (Mar. 13, 2015), http://www.utc.wa.gov/aboutUs/Lists/News/DispForm.aspx?ID=310.

128. H.B. 1004, 90th Gen. Assemb., Reg. Sess. (Ark. 2015) *available at* http://www.arkleg.state.ar.us/assembly/2015/2015R/Bills/HB1004.pdf.

129. H.B. 1191, 90th Gen. Assemb., Reg. Sess. (Ark. 2015) *available at* http://www.arkleg.state.ar.us/assembly/2015/2015R/Acts/Act78.pdf.

130. *Energy Efficiency Goals*, ENERGY.GOV, http://energy.gov/savings/energy-efficiency-goals (last visited Mar. 26, 2016).

131. FLORIDA PUB. SERVICE COMM'N, ANNUAL REPORT ON ACTIVITIES PURSUANT TO THE FLORIDA ENERGY EFFICIENCY & CONSERVATION ACT (2015), *available at* http://www.psc.state.fl.us/Files/PDF/Publications/Reports/Electricgas/AnnualsReport/2015.pdf.

total winter demand goal of 877.02 megawatts,[132] targets that critics claim represent a greater than 90% reduction in the state's energy efficiency goals.[133]

3. Georgia

The Solar Power Free-Market Financing Act of 2015[134] (HB 57) reduces up-front costs of solar technology by allowing third-party leasing, solar energy procurement agreements, and similar financing tools, including those with payments based on the performance and output of the installed solar technology, without regulating participants as electric service providers. Residential customers are limited to 10 kW facilities to avoid additional requirements. Commercial customers are limited to 125% of the actual or expected peak demand of the premises, with additional requirements for systems larger than 100 kW. The law will adversely impact tax-exempt entities that cannot receive federal tax credits. For example Atlanta will install solar panels on the roofs of 28 municipal buildings. Net metering is voluntary—Georgia Power has no net metering tariff[135]—and net excess generation is credited to the customer's next bill at a PSC-approved rate (currently Georgia Power's 2014 avoided cost projections[136]).

Southern Company and the Electric Power Research Institute unveiled a new 1 MW/2 MWh lithium ion battery storage project in Cedartown, Georgia, and began a three-year study of how the project will support a nearby 1 MW solar PV system.[137] The study will consider smoothing integration, peak shaving, voltage support, and other benefits.

4. Louisiana

House Bill 749 was passed in Louisiana requiring the House Ways and Means and Senate Revenue and Fiscal Affairs committees to review certain tax credits, including tax credits for solar energy systems, beginning no later than Jan. 31, 2016. These committees are then to make recommendations to either continue or terminate credits. In addition, the bill repeals certain expired or inactive tax credits.[138] The House also passed (House Bill 779) to reduce the maximum

132. *Id.* at 15.

133. James Ayre, *Florida "Gutting" Energy Efficiency Goals, Terminating Solar Power Rebates*, CLEAN TECHNIA (Nov. 30, 2014), http://cleantechnica.com/2014/11/30/florida-gutting-energy-efficiency-goals-terminating-solar-power-rebates/.

134. Ga. Code Ann. §§ 46-3-60 through 46-3-66 (West 2015).

135. *Georgia EMC Tariffs Docket No. 31536*, GA. PUB. SERV. COMM'N, http://www.psc.state.ga.us/factsv2/Docket.aspx?docketNumber=31536 (last visited Mar. 26, 2016) (cooperatives' net energy metering tariffs).

136. *2014 Avoided Cost Projections and Solar Avoided Cost Projections Docket No. 156405*, GA. PUB. SERV. COMM'N, http://www.psc.state.ga.us/factsv2/Document.aspx?documentNumber=156405(last visited Mar. 26, 2016).

137. *System Shaping the Future of Energy Storage Technologies Through New Research Demonstration*, S. CO. (Sept. 17, 2015), http://investor.southerncompany.com/information-for-investors/latest-news/latest-news-releases/press-release-details/2015/Southern-Company-system-shaping-the-future-of-energy-storage-technologies-through-new-research-demonstration/default.aspx.

138. H.B. 749, 2015 Legis., Reg. Sess. (La. 2015), *available at* https://www.legis.la.gov/legis/BillInfo.aspx?i=227496.

amount of the credit for a solar energy system, the amount of credits that would be given, and certain timing changes.[139]

5. Mississippi

On December 3, 2015, the Mississippi Public Service Commission issued an order in Docket No. 2011-AD-2 establishing a net metering program for the state along with interconnection standards for distributed generation facilities.[140] The decision comes after five years of deliberation.

The standard applies to investor-owned utilities in the state under the jurisdiction of the Mississippi Public Service Customer. Customers are credited at the wholesale electricity rate plus 2.5 cents per kilowatt-hour.[141] Additionally, the first 1,000 customers to enroll in the program will receive an extra 2 cents per kilowatt-hour for generation produced in excess of use.[142] Residential solar projects up to 20 KW and non-residential projects up to 2 MW are eligible.[143]

The new net metering standard went in to effect on January 4, 2016.[144]

6. South Carolina

In Order No. 2015-194[145] the South Carolina Public Service Commission approved a settlement agreement implementing the 2014 Distributed Energy Resource Program Act (SB 1189).[146] The Act requires that utilities obtain in-state distributed energy equal to 2% of the previous five-year average retail peak demand.[147] Half must come from facilities between 10,000 kW and 1,000 kW of capacity.[148] Half must come from customer-generators' facilities below 1,000 kW of capacity, with a quarter of these below 20 kW of capacity.[149]

The PSC established a 1:1 net metering rate for customer-generators receiving service under utilities' Net Metering Tariffs prior to January 1, 2021 (the expiration of the Settlement Agreement) through December 31 ,2025. The utility credits excess generation forward each month until a year-end payout. A utility's annual under-recovered or over-recovered revenue from net metering customers, based on the utility's cost-of-service study in its last general rate case, will be

139. H.B. 779, 2015 Legis., Reg. Sess. (La. 2015), *available at* https://www.legis.la.gov/legis/BillInfo.aspx?s=15RS&b=HB779&sbi=y.

140. Order Adopting Net Metering Rule, In Re: Order Establishing Docket to Investigate the Development and Implementation of Net Metering Programs and Standards, No. 2011-AD-2 (Miss. Pub. Serv. Comm'n Dec. 3, 2015), *available at* http://www.psc.state.ms.us/InsiteConnect/InSiteView.aspx?model=INSITE_CONNECT&queue=CTS_ARCHIVEQ&docid=362179.

141. *Id.* at 14.

142. *Id.* at 16.

143. *Id.* at 17.

144. *Id.* at 23.

145. Order No. 2015-194, In Re: Petition of the Office of Regulatory Staff to Establish Generic Proceeding Pursuant to the Distributed Energy Resource Program Act, No. 2014-246-E (S.C. Pub. Serv. Comm'n Mar. 20, 2015), *available at* https://dms.psc.sc.gov/Attachments/Order/29CF4369-155D-141F-23B1536C046AEBC5.

146. 2014 S.C. Acts 236 (amending or adding S.C. Code Ann. §§ 58-27-865, 58-39-110 to -150, 58-40-10 to -20, 58-27-2600 to -2650, 58-27-1050, 58-27-460).

147. S.C. Code Ann. § 58-39-130(C) (2015).

148. *Id.* § 58-39-130(C)(1).

149. *Id.* § 58-39-130(C)(2).

reflected in the utility's annual fuel clause filing. The Act also allows third-party leasing to finance renewable facilities, which especially benefits tax exempt entities such as schools, local governments, and nonprofits, which cannot receive federal tax incentives. The SC PSC has now certified five companies (all outside SC) as "Fit, Willing and Able" under the statute to provide leases.[150]

7. Tennessee

The Tennessee Regulatory Authority (TRA) granted a certificate of public convenience and necessity to Plains & Eastern Clean Line LLC (Clean Line) to construct an approximately 700-mile, 600-kV high voltage direct current electric transmission system to bring renewable wind energy from Oklahoma to load serving entities in Tennessee and elsewhere in the Southeast.[151] The TRA also granted Clean Line's request for authority to operate as a public utility providing electric transmission service in Tennessee.[152] The project is planned to have the capacity to deliver approximately 3,500 megawatts of power.[153]

8. Texas

On June 10, 2015, Texas enacted H.B. 706, which simplifies the procedure for claiming a tax exemption for property on which a solar or wind-powered energy facility is installed or constructed.[154] The new law, which will facilitate property owners' installing alternative energy production on their property, took effect on January 1, 2016.[155]

D. Mid-Atlantic

1. Delaware

Delaware expanded its Sustainable Energy Utility (SEU) program to offer customized loans for agricultural customers. The program is available to Delaware agricultural producers who wish to install energy efficiency projects which result in a total energy savings over the useful life of the project greater than the total amount requested for the loan. Loan amounts can total up to $400,000 with maximum of $250,000 per project at a 2% fixed interest rate.[156] This expansion is part of the Delaware SEU's Strategic Plan.[157]

150. S.C. Office of Regulatory Staff, *Renewable Electric Generation Facilities – Leasing Certificates*, SC.GOV, http://www.regulatorystaff.sc.gov/Documents/Electric%20and%20Gas/Website%20List%20for%20Leasing%20Certificates%20Updated%2011-09-15.pdf (last updated Nov. 09, 2015).

151. Order Granting Certificate of Public Convenience and Necessity, Petition of Plains and Eastern Clean Line LLC for a Certificate of Convenience and Necessity Approving a Plan to Construct a Transmission Line and to Operate as an Electric Transmission Public Utility, Docket No. 14-00036, at 1-2 (Tenn. Reg. Auth. May 5, 2015).

152. *Id.* at 7.

153. *Id.* at 2.

154. H.B. 706, 84th Legis., Reg. Sess. (Tex. 2015).

155. *Id.*

156. *Energize Delaware Program*, ENSAVE, *available at* http://www.ensave.com/agricultural/energize-delaware-program/ (last visited Mar. 27, 2016).

157. DEL. SUSTAINABLE ENERGY UTIL., STRATEGIC PLAN (2015), *available at* https://imageserv11.team-logic.com/mediaLibrary/191/SEU_STRATEGIC_PLAN_-_FINAL.pdf.

2. District of Columbia

In July of 2015, the District of Columbia's Mayor, Muriel Bowser, announced that the District has committed to a 20-year Power Purchase Agreement ("PPA") with Iberdrola Renewables, LLC.[158] Under the PPA, the District's government will purchase the entire output of Iberdrola Renewable's 46 MW South Chestnut wind farm in southwestern Pennsylvania. These purchases will supply 35% of the District's electricity needs from wind power. Execution of the PPA is part of a broader initiative by the District to reduce its greenhouse gas emissions and rely on renewable energy resources to serve 50% of its energy needs by 2032.

3. Maryland

In May of 2015, Maryland Governor Larry Hogan (R) signed House Bill 1087,[159] which authorizes the Maryland Public Service Commission ("PSC") to establish a three year pilot program for community solar projects. The Maryland PSC is tasked with adopting regulations for implementation of the pilot program by no later than May 15, 2016. The program is limited to projects that are 2 MW or less and is open to all customer classes. Compensation for electricity generated by community solar projects will be credited by way of net metering. The bill also directs that any unsubscribed energy generated by a community solar project will be sold back to the utility at the utility's avoided cost.

Maryland Senate Bill 353,[160] which became effective October 1, 2015, establishes interconnection procedures for small solar projects. The bill concerns utility customers who enter into agreements with a third-party for the installation of a solar generating facility on the customer's property. Under such circumstances, the third-party may charge the customer for installation-related costs, but must refund any payments if the utility ultimately denies a request for interconnection of the installed solar facility.

The Maryland Public Service Commission ("PSC") issued Order No. 87082[161] on July 16, 2015, in which it establishes new energy efficiency goals for electric utilities within the state. The current goals were adopted as part of the EmPower Maryland Energy Efficiency Act of 2008[162] and are set to expire at the end of the year. The new goals will require utilities to implement energy

158. *Mayor Bowser Announces Groundbreaking Wind Power Purchase Agreement*, DC.GOV (July 14, 2015), http://dc.gov/release/mayor-bowser-announces-groundbreaking-wind-power-purchase-agreement; *Washington D.C Signs 20-year PPA for 35% Wind Power*, U.S. DEP'T OF ENERGY (July 2015), http://apps3.eere.energy.gov/greenpower/news/news_template.shtml?id=2053; Paul Copleman, *Iberdrola Renewables and Washington DC Strike Groundbreaking Wind Power Purchase Agreement*, GLOBENEWSWIRE (July 14, 2015 16:02 ET), http://globenewswire.com/news-release/2015/07/14/752029/10141704/en/Iberdrola-Renewables-and-Washington-DC-Strike-Groundbreaking-Wind-Power-Purchase-Agreement.html.

159. H.B. 1087, 435th Gen. Assemb., ch. 347 (Md. 2015), *available at* http://mgaleg.maryland.gov/2015RS/bills/hb/hb1087t.pdf.

160. S.B. 353, 435th Gen. Assemb., ch. 161 (Md. 2015), *available at* http://mgaleg.maryland.gov/2015RS/Chapters_noln/CH_161_sb0353t.pdf.

161. Order No. 87082, In the Matter of Potomac Edison Co. d/b/a Allegheny Powers Energy Efficiency, Conservation & Demand Response Programs Pursuant to the Empower Maryland Energy Efficiency Act of 2008, 323 P.U.R.4th 239 (Md. Pub. Serv. Comm'n July 16, 2015).

162. Md. Pub. Util. Code § 7-211 (2013).

efficiency investments at a ramp-up rate of 0.20% per year until they achieve a 2% annual incremental savings. Utilities were required to file a report no later September 1, 2015 depicting their forecasted gross electric savings for the 2015-2017 program cycle to enable PSC Staff to being analyzing each utility's progress towards its 2016 and 2017 goal.

4. New Jersey

New Jersey Senate Bill 2420 increased the net metering capacity to 2.9% of total annual kilowatt-hours of electricity sold in New Jersey.[163] Observers note that while this change represents a roughly four-fold increase in the capacity of solar PV which can be installed under the policy, the previous cap was only discretionary and state regulators had declined to limit residential and commercial PV systems from participating in the program. [164]

5. North Carolina

In May 2015, the North Carolina Utilities Commission (NC Utilities Commission) approved a revised interconnection standard to govern interconnection of distributed generation to the distribution systems of the state's three investor-owned utilities: Duke Energy Progress, Duke Energy Carolinas, and Dominion North Carolina Power.[165] The new standard uses the Federal Energy Regulatory Commission's most recent Small Generator Interconnection Procedures as their basis, with some modifications.[166]

In July, the NC Utilities Commission issued an order providing more guidance regarding how an existing facility that increases its renewable generating capacity can qualify the increased portion of its energy output as "new" under the North Carolina Renewable Energy and Energy Efficiency Portfolio Standard (REPS).[167] In granting "new" renewable energy facility status to the additional portion of capacity added by a biomass-fueled combined heat and power facility, the NC Utilities Commission relied on previous precedent that, where increments of additional energy capacity were put into service after January 1, 2007, that additional capacity may be considered "new" for purposes of the REPS.[168] Capacity designated as "new" may be used by the state's electric utilities to meet their renewable energy obligations under the North Carolina REPS.[169]

163. S.B. 2420, 216th Legis., Reg. Sess. (N.J. 2015) *available at* http://www.njleg.state.nj.us/2014/Bills/S2500/2420_R2.PDF.

164. *New Jersey Expands Limit on Net Metered Solar While Nevada Keeps Cap*, PV MAGAZINE (Aug. 13, 2015), http://www.pv-magazine.com/news/details/beitrag/new-jersey-expands-limit-on-net-metered-solar-while-nevada-keeps-cap_100020602/#ixzz3vpeIgq7c.

165. Order Approving Revised Interconnection Standard, In the Matter of Petition for Approval of Revisions to Generator Interconnection Standards, No. E-100, Sub 101, at 1-3 (N.C. Utils. Comm'n May 15, 2015).

166. *Id.* at 2-3.

167. Order Accepting Registration of Incremental Capacity as a New Renewable Energy Facility, In the Matter of Application of Weyerhaeuser NR Company for Registration of a New Renewable Energy Facility, No. SP-2285, Sub 0, at 3-4 (N.C. Utils. Comm'n July 21, 2015).

168. *Id.* at 3.

169. N.C. Gen. Stat. § 62-133.8(b) (2012).

Senate Bill 372, enacted on April 30, 2015, provides a delayed sunset of the North Carolina tax credit for renewable energy projects that meet certain criteria.[170] The tax credit was slated to end on December 31, 2015 but will now expire on December 31, 2016.[171] A project with a total size of less than 65 MW can qualify for the delayed sunset if it incurred 80% of its costs and completed 80% of the construction by December 31, 2015.[172] A project with a total size of 65 MW or greater can qualify for the delayed sunset if it incurred 50% of its costs and completed 50% of the construction by December 31, 2015.[173] The legislation provides further stipulations about certain documentation and application fees that must be provided in order to qualify.[174]

Finally, the NC Utilities Commission issued an order on December 1, 2015 in which it modified the North Carolina REPS requirements for utilities to procure energy derived from swine and poultry waste, by delaying by one year both the deadline for commencing compliance with the swine waste requirement and date on which the poultry waste requirement will increase.[175] Pursuant to the decision, beginning with calendar years 2016-2017, electric utilities in the state must procure 0.07% of their energy requirements from swine waste resources (with that percentage rising to 0.14% in calendar years 2018-2020 and 0.20% in 2012 and afterward.[176] In addition, the requirement to procure 170,000 MWh of electric energy from poultry waste resources remained the same for calendar year 2015, with the required increase to 700,000 MWh being pushed back to 2016 and the increase to 900,000 MWh being pushed back to 2017 and thereafter.[177]

6. Pennsylvania

Implementation of the Alternative Energy Portfolio Standards Act of 2004. This Advanced Notice of Final Rulemaking Order by the Pennsylvania Public Utility Commission ("PaPUC" or "Commission") addresses the latest set of regulations in a jurisdiction that has been implementing a renewable portfolio standard requirement since 2005.[178] The proposed final regulations are promulgated by the PaPUC pursuant to their authority under the Alternative Energy Portfolio Standards Act of 2005 ("AEPS Act") to implement and enforce electric utility net metering, interconnection and portfolio standard requirements.

The rulemaking order revises the definition of customer-generator which refers to such an entity being a "nonutility owner or operator." This clarifies that the term customer-generator applies to retail electric customers and not electric

170. S.B. 372, 2015 Gen. Assemb., Reg. Sess. (N.C. 2015).

171. *Id.*

172. *Id.*

173. *Id.*

174. *Id.*

175. Order Modifying the Swine and Poultry Waste Set-Aside Requirements and Providing Other Relief, In the Matter of Rulemaking Proceeding to Implement Session Law 2007-397, No. E-100, Sub 113, at 6-7 (N.C. Utils. Comm'n Dec. 1, 2015).

176. *Id.* at 6.

177. *Id.* at 7.

178. Proposed Rulemaking Order, Implementation of the Alternative Energy Portfolio Standards Act of 2004, No. L-2014-2404361 (Penn. Pub. Util. Comm'n April 23, 2015), *available at* http://www.puc.state.pa.us//pcdocs/1269782.doc.

utilities such as electric distribution companies ("EDCs") and merchant generators that are in the business of providing electric services.[179] The PaPUC also increased the alternative energy size limit from 110% to no more than 200% of the customer-generator's annual electric consumption relative to the date of the interconnection application.[180] However, the customer-generator would not lose net metering status if generation exceeded 200% of annual electric consumption in a subsequent year provided that the alternative system's capacity was not increased subsequent to initial approval.[181]

The PaPUC continued to propose a process for Commission approval of all customer-generator applications for systems with nameplate capacity of 500 kilowatts or greater. However, this order shortened the time an applicant would wait for a decision by staff from 70 days to 25 days where the EDC recommends approval of the application or no more than 40 days for an application the EDC recommends denying.

7. Virginia

On November 24, 2015, the Virginia State Corporation Commission issued an order adopting revised rules related the requirements for participation by an eligible customer generator in net energy metering.[182] The revised rules increase from 500 kW to 1 MW the capacity limits for participation by nonresidential customers in the net energy metering program. The revised rules also (i) require eligible customer generators seeking to participate in net energy metering to provide advanced notice and receive interconnection approval prior to installing an electric generating facility, and (ii) clarify the requirements regarding the customer-generator's obligation to bear the costs of equipment required for interconnection with the supplier's distribution system.

8. West Virginia

House Bill 2001 was passed in West Virginia repealing certain provisions of the Alternative and Renewable Energy Portfolio Act.[183] In addition, House Bill 2201 requires the Public Service Commission to adopt certain net metering and interconnection rules and standards.[184]

E. Midwest

1. Illinois

Illinois extended the Renewable Energy, Energy Efficiency, and Coal Resources Development Law until December 31, 2020.[185] The extension became

179. *Id.* at 8.

180. *Id.* at 11.

181. *Id.* at 12.

182. Order Adopting Regulations, Commonwealth of Va. *ex rel.* State Corp. Comm'n,, Case No. PUE-2015-00057 (Commw. of Va. State Corp. Comm'n Nov. 24, 2015).

183. H.B. 2001, 2015 Legis., Reg. Sess. (W. Va. 2015) *available at* http://www.legis.state.wv.us/Bill_Status/bills_history.cfm?INPUT=2001&year=2015&sessiontype=RS .

184. H.B. 2201, 2015 Legis., Reg. Sess. (W. Va. 2015) *available at* http://www.legis.state.wv.us/Bill_Status/bills_history.cfm?INPUT=2201&year=2015&sessiontype=RS.

185. H.B. 1365, Pub. Act 099-0489 (Ill. 2015).

effective December 4, 2015, just days before the Law was set to expire on December 12.[186] The Law authorizes the Renewable Energy Resources Program (RERP), which provides grants, loans and other incentives for investment, development and use of renewable energy resources. According to the most recent report from the Department of Commerce and Economic Opportunity, RERP has provided approximately $63 million toward Illinois renewable energy projects since its inception.[187] The extension of the Law will continue to help make renewable energy projects, in particular wind and solar, more competitive with conventional sources of electricity generation in Illinois.

At the same time, however, Illinois recently passed a law which may slow or discourage wind energy development in Illinois. The Wind Energy Facilities Agricultural Impact Mitigation Act became effective on July 24, 2015.[188] The Act requires commercial wind energy facility owners to enter into Agricultural Impact Mitigation Agreements with the Illinois Department of Agriculture.[189] Such Agreements must be entered into prior to any decision by a county or municipality to issue a permit, permit extension, siting decision or other approval to a wind energy facility.[190] The Agreements will address potential impacts to agricultural land during construction and deconstruction of wind energy facilities, and will cover topics such as compensation for damages to private property, indemnification of landowners, and financial assurance for deconstruction or abandonment.[191] The Department of Agriculture has not yet promulgated regulations for implementing the Act.[192]

2. Indiana

In 2015 the American Lung Association of the Upper Midwest, along with various partners, commenced a grant program aimed at replacing residential outdoor wood boilers in Indiana with renewable solar, geothermal or combination systems.[193] Indiana residents may apply for a grant, which will cover up to 100% of the costs associated with the replacement, through December 31, 2015. The group has approximately $500,000 to award.[194]

Indiana Michigan Power, a division of American Electric Power, recently launched IM Solar, a voluntary renewable energy program for residential,

186. *Id.*

187. ILL. DEP'T OF COMMERCE AND ECON., OPPORTUNITY, RENEWABLE ENERGY RESOURCES PROGRAM REPORT 1 (2014), *available at* http://www.illinois.gov/dceo/AboutDCEO/ReportsRequiredByStatute/2014%20RERP%20Annual%20Report_FINAL.pdf.

188. H.B. 3523, Pub. Act 099-0132 (Ill. 2015).

189. 505 ILL. COMP. STAT. 147/15(a) (2015).

190. 505 ILL. COMP. STAT. 147/15(c), (d).

191. 505 ILL. COMP. STAT. 147/15(a), (b).

192. 505 ILL. COMP. STAT. 147/15(e).

193. *Make the Change*, ITSDOABLEGORENEWABLE.ORG, http://www.itsdoablegorenewable.org/ (last visited Mar. 26, 2016). Partners include Hoosier Environmental Council, Indiana Wildlife Federation, Citizens Action Coalition, Indiana Department of Environmental Management, United States Environmental Protection Agency and LaPorte County Health Department.

194. Erica Peterson, *Indiana Program Aims to Replace Polluting Wood Boilers with Renewable Energy*, 89.3 WFPL (Oct. 17, 2015), http://wfpl.org/indiana-program-aims-replace-polluting-wood-boilers-renewable-energy/.

commercial and industrial customers in Indiana. The first of four planned solar facilities, located in Marion, Indiana, started operating in 2015. The remaining facilities, to be located in Mishawaka, New Carlisle and Watervliet, will begin operating in 2016.[195]

3. Kansas

On May 28, 2015, Governor Brownback signed into law SB 91, which repealed the mandatory 20% renewable energy portfolio standard (RPS) for the state and made the RPS voluntary.[196] SB 91 also repeals a lifetime property tax exemption businesses were receiving for on-site renewable energy generation. Additionally, the new law provides new renewable energy facilities a 10-year property tax exemption, so long as the facilities are not behind the meter.[197]

4. Michigan

Michigan's renewable portfolio standard, the Clean, Renewable, and Efficient Energy Act (Public Act 295), enacted in 2008 called for Michigan utilities to generate 10% of their retail electricity from renewables by 2015.[198] By most accounts this mandate was satisfied and the end of 2015 saw many utilities discontinue their rebate and feed-in-tariff programs, including DTE Energy's SolarCurrents pilot program and Consumers Energy's incentive program.[199] In November of 2015, twin bills were introduced to address renewable energy, as well as energy efficiency, HB 4297 and HB 4298.[200] The House is set to vote on the bills the week of December 9, 2015.

5. Minnesota

On October 15, 2015, the Minnesota Public Utilities Commission (MPUC) issued an order further clarifying the scope and location requirements of the Community Solar Garden Program.[201] The Program caps solar systems at 1 MW

195. *IM Solar*, IND. MICH. POWER, https://www.indianamichiganpower.com/account/bills/manage/IMSolar/ (last visited Feb. 29, 2016).

196. Luke Hagedorn, *Kansas Wind Project Property Tax: What Recent Changes Mean for Existing and Future Projects*, RENEWABLE ENERGY L. INSIDER (June 2015), http://www.renewableenergylawinsider.com/.

197. *Id.*

198. 2008 Mich. Pub. Acts 295.

199. *See generally* DEP'T OF LICENSING AND REG. AFFAIRS, MICH. PUB. SERV. COMM'N, REPORT ON THE IMPLEMENTATION OF PA 295 RENEWABLE ENERGY STANDARD AND THE COST EFFECTIVENESS OF THE ENERGY STANDARDS (2015), *available at* http://www.michigan.gov/documents/mpsc/PA_295_Renewable_Energy_481423_7.pdf; *see also Solar Currents*, DTE ENERGY, https://www2.dteenergy.com/wps/portal/dte/residential/productsPrograms/details/SolarCurrents/ (last visited Mar. 26, 2016); *Experimental Advanced Renewable Program (EARP)*, CONSUMER ENERGY https://www.consumersenergy.com/content.aspx?id=4844 (last visited Mar. 26, 2016).

200. H.B. 4297, Comm. on Energy Policy, 2015-16 Sess. (Mich. 2015), *available at* http://www.legislature.mi.gov/(S(pobvh0zsgmjwpa10ybcgoy44))/mileg.aspx?page=getobject&objectname=2015-HB-4297; H.B. 4298, Comm. on Energy Policy, 2015-16 Sess. (Mich. 2015), *available at https://www.legislature.mi.gov/(S(v1e0fu12jjn3anrfcpx0dfxy))/mileg.aspx?page=getObject&objectName=2015-HB-4298*.

201. Order Denying Petitions, In the Matter of the Petition of Northern States Power Co., dba Xcel Energy, for Approval of Its Proposed Community Solar Garden Program, No. E-002/M-13-867, at 3 (Minn. Pub. Utils.

each.[202] The order restricted the co-location of solar projects, in response to plans to co-locate multiple 1 WM projects, which would have increased an array size to more than 20 MW, thereby effectively avoiding the cap.[203] The MPUC "grandfathered" co-located projects of up to 5 MW for projects approved before September 2015. All other projects must strictly comply with the 1 MW cap. The public utility, Northern States Power Company ("Xcel Energy"), reported a surge in projects prior to the ruling.

On November 18, 2015, Xcel Energy filed a proposal with the MPUC for a program entitled "Renewable*Connect," which would give retail customers the ability to select generation sources, including wind and solar.[204] The MPUC did not address the proposal in 2015.

6. Missouri

On February 10, 2015, the Missouri Supreme Court ruled on *Earth Island Institute v. Empire District Electric Co*.[205] Petitioners in *Earth Island* asserted that the Missouri Public Service Commission (MO PSC) wrongly exempted Empire District Electric Company from the 2% solar carve-out in Missouri's renewable portfolio standard (RPS).[206] MO PSC asserted that the utility already receives 15% of its generation from renewable sources, thereby meeting the RPS requirements, and that adding a 2% solar carve-out would impose an unnecessary compliance burden.[207] The court ruled that the utility has complied with the RSP without having to fulfill the 2% solar carve-out.[208]

7. Ohio

On March 28, 2014, the Ohio General Assembly introduced Sub.SB 310[209]; this bill amended several sections of the Ohio Revised Code to make changes to the renewable energy, energy efficiency, and peak demand reduction requirements, among other provisions.[210] Specifically, the bill froze the renewable and solar energy benchmarks at the 2014 level (2.5% of the electricity supply from renewable energy resources, including 0.12% from solar energy resources) for 2015 and 2016,[211] but the benchmarks resume in 2017.[212] However, they will

Comm'n Oct. 15, 2015), *available at* https://www.edockets.state.mn.us/EFiling/edockets/searchDocuments.do?method=showPoup&documentId=%7bFD00D1BC-2F93-4FD1-B431-7D2BD30EF6CB%7d&documentTitle=201510-114857-01.

202. Minn. Stat. Ann. § 216B.1641(b) (West 2012).

203. Order Denying Petitions, *supra* note 202 at 2.

204. Filing not yet available on-line. More information can be found at *Xcel Energy Proposes Exclusive Renewable Energy Option*, T&D WORLD MAG. (Nov. 18, 2015), http://tdworld.com/generation-renewables/xcel-energy-proposes-exclusive-renewable-energy-option.

205. Earth Island Inst. v. Union Elec. Co., 456 S.W.3d 27 (Mo. 2015).

206. Brief of Appellant at 29, Earth Island Inst. v. Union Elec. Co., No. SC93944 (Mo. Apr. 25, 2014).

207. *Id.*

208. *Earth Island Inst.*, 456 S.W.3d at 29.

209. *Status Report of Legislation*, OHIO LEGIS. SERV. COMM'N, https://www.legislature.ohio.gov/legislation/status-reports (last visited July 3, 2014).

210. S.B. 310, 130th Gen. Assemb., Reg. Sess. (Ohio 2014).

211. *Id.* at 19.

212. *Id.*

resume at the 2015 levels provided in current law and be extended for two years, until 2027, to accommodate the two-year freeze.[213]

Additionally, Sub.SB 310 created the Energy Mandates Study Committee (study committee) which was tasked with studying Ohio's renewable energy, energy efficiency, and peak demand reduction mandates until September 30, 2015, at which time it would submit a report of its findings to the House of Representatives and the Senate.[214] The report was released on September 30, 2015.[215] In the report, the study committee recommended that the benchmarks should be frozen indefinitely until the EPA provided greater clarity on the operation of the Clean Power Plan, in addition to a resolution of all pending federal litigation concerning the Clean Power Plan.[216]

The study committee further recommended that the Ohio General Assembly should investigate and ensure maximum credit for all of Ohio's energy initiatives. Specifically, the Ohio General Assembly should determine the most effective way to further incentivize the deployment and counting of combined heat and power, which may include double counting as both energy efficient and a renewable energy resource.[217] Lastly, the report recommended that any renewable energy and energy efficiency benchmarks should switch from mandates to incentives. The study committee reasoned that these mandates are costly for Ohioans and the penalties are overly punitive.[218]

On November 8, 2015, the Public Utilities Commission of Ohio ("Commission") issued a Commission entry seeking comments on staff's amended net metering draft rules.[219] Initial comments were due December 18, 2015, and reply comments were due on January 8, 2016.[220] Additionally, the Commission intends on holding an additional en banc hearing in 2016 to receive additional input from stakeholders regarding the net metering rules.[221]

8. South Dakota

South Dakota's state production tax for wind energy facilities was amended in 2015.[222] In 2007, the state adopted a 2% tax on revenues generated by the amount of wind energy produced multiplied by a presumed sales price per unit of production. The law escalated the presumed sales price by 2.5% on an annual

213. OHIO LEGISLATIVE SERV. COMM'N, BILL ANALYSIS: SUB. S.B. 310 130TH GENERAL ASSEMBLY (AS REPORTED BY H. PUBLIC UTILITIES) 8 (2014), *available at* http://www.lsc.ohio.gov/analyses130/s0310-rh-130.pdf.

214. *Id.* at 19-20.

215. ENERGY MANDATES STUDY COMM., CO-CHAIRS' REPORT (2015), *available at* http://emsc.legislature.ohio.gov/Assets/Reports/emsc-final-report.pdf (last visited Dec. 20, 2015).

216. *Id.* at 11.

217. *Id.* at 13-14.

218. *Id.* at 15.

219. In the Matter of the Commission's Review of Chapter 4901:1-10 of the Ohio Administrative Code, Case No. 12-2050-EL-ORD (Pub. Utils. Comm'n of Ohio Nov. 18, 2015).

220. *Id.* at 3.

221. *Id.*

222. S.D. Codified Laws § 10-35-17 (2015). Wind farms in South Dakota also pay an annual tax of three dollars multiplied by the nameplate capacity of the wind farm. S.D. Codified Laws § 10-35-18 (2007). The annual tax based on nameplate capacity was not affected by the 2015 legislation.

basis, generating increasing tax dollars per unit of wind electricity production.[223] The law also provided wind project developers the opportunity to claim a tax rebate, based upon the developer's investment in transmission lines or in wind farm collector systems.[224] The new law, effective April 1, 2015, assesses production taxes on wind generation based upon a fixed dollar amount per unit of production, depending upon the vintage of the wind project. For wind farms that produce power for the first time on or after April 1, 2015, production taxes will be $.00045 per kilowatt-hour of electricity produced by the wind farm.[225] For wind farms that produced power for the first time prior to April 1, 2015, and on or after July 1, 2007, production taxes will be $.00065 per kilowatt-hour of electricity produced by the wind farm.[226] The tax rebate that had been available to wind project developers was repealed.[227]

II. FEDERAL ACTIVITY

A. EPA

On August 3, 2015, the U.S. Environmental Protection Agency (EPA) announced the Clean Power Plan (CPP)—establishing the first national limits on carbon pollution from existing and new power plants.[228] The CPP establishes state-by-state targets for carbon emissions reductions from power plants and provides states an opportunity to either choose a plan set by EPA or to draft their own compliance plan.

For example, under the CPP, Georgia must either reduce its 2012 carbon dioxide emissions rate by 34% or mass by 26%.[229] South Carolina must either reduce its 2012 carbon dioxide emissions rate by 35% or mass by 28%. States can use a variety of options for compliance with reduced CO2 emission targets, including investing in renewable energy, energy efficiency, natural gas, and nuclear power, and shifting away from coal-fired power. South Carolina is subject to a standard of EPA projects that the CPP would reduce national electricity sector emissions by an estimated 32% below 2005 levels by 2030.[230]

223. S.D. CODIFIED LAWS § 10-35-17 (2007).

224. S.D. CODIFIED LAWS § 10-35-22 (2007).

225. S.D. CODIFIED LAWS §§10-35-17, 10-35-19.1 (2015).

226. S.D. CODIFIED LAWS §§ 10-35-17, 10-35-19.

227. S.D. Sess. Laws 2015, ch. 66, § 4, eff. Apr. 1, 2015.

228. Proposed Rule, Federal Plan Requirements for Greenhouse Gas Emissions from Electric Utility Generating Units Constructed on or Before January 8, 2014; Model Trading Rules; Amendments to Framework Regulations, 80 Fed. Reg. 64,966 (Oct. 23, 2015) (to be codified at 40 C.F.R. pts. 60, 62, 78).

229. Final Rule, Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electricity Utility Generating Units, 80 Fed. Reg. 64,662 (Oct. 23, 2015) (to be codified at 40 C.F.R. pt. 60); ENVTL. PROT. AGENCY, CLEAN POWER PLAN: STATE AT A GLANCE, GEORGIA (2015), *available at* http://www3.epa.gov/airquality/cpptoolbox/georgia.pdf.

230. Electricity Utility Generating Units, 80 Fed. Reg. at 64,665.

B. IRS

On December 18, 2015, President Obama signed the "Consolidated Appropriations Act, 2016[sic]."[231] The Act extends the renewable electricity production tax credit (PTC)[232] for two years through 2016 for closed-loop biomass, open-loop biomass, geothermal, landfill gas, municipal solid waste, qualified hydropower, and marine and hydrokinetic facilities.[233] The PTC for wind generation will remain at 2.3 cents/kWh for facilities that commence construction by the end of 2016 and will then decrease by 20% for facilities commencing construction in 2017, by 40% in 2018, and by 60% in 2019 with complete expiration on January 1, 2020.[234]

The Act extends the energy investment tax credit (ITC),[235] equal to 30% of the cost basis for specified "energy property," for two years through 2016 for the same technologies above.[236] The ITC for wind facilities will phase out on the same schedule as the PTC for wind facilities above.[237] The ITC for solar facilities will phase out to 26% of cost basis if construction commences in 2020, 22% if construction commences in 2021, and 10%, regardless of the construction date, if the facilities do not enter service before January 1, 2024.[238] The Act extends several other energy-related incentives by two years through 2016.[239] All changes are retroactive to January 1, 2015.

On June 5, 2015, IRS Private Letter Ruling 2015-23-014 concluded that equipment installed to make a roof more reflective to enhance a solar PV system's output would be "equipment which uses solar energy to generate electricity" and thus be ITC-eligible "energy property," regardless that Treasury Department regulations exclude "passive solar systems."[240] The ITC would apply to the portion of the cost that exceeds a baseline cost to install a non-reflective roof.

On January 12, 2015, in W.E. Partners II, LLC v. United States the Court of Federal Claims held that the definitions of qualifying facility for the PTC and of qualified property for the ITC implicitly limited the eligible cost basis for an open-loop biomass boiler cogeneration facility to only those costs associated with the portion of the facility necessary to produce electricity.[241] On March 31, 2015, in RP1 Fuel Cell, LLC v. United States, the Court of Federal Claims held that gas-

231. H.R. 2029, Pub. L. No. 114-113, div. P §§ 301-304, div. Q, §§ 181-193, *available at* https://www.congress.gov/bill/114th-congress/house-bill/2029.

232. 26 U.S.C. § 45 (2012).

233. H.R. 2029, Pub. L. No. 114-113, div. Q, § 187(a) (amending 26 U.S.C. § 45(d)).

234. *Id.* div. P, § 301 (amending 26 U.S.C. § 45(b), (d)).

235. 26 U.S.C. § 48 (2012).

236. H.R. 2029, Pub. L. No. 114-113, div. Q, § 187(b) (amending 26 U.S.C. § 48(a) (2011)).

237. *Id.* div. P, § 302 (amending 26 U.S.C. § 48(a)).

238. *Id.* div. P, § 303 (amending 26 U.S.C. § 48(a)).

239. *Id.* div. Q, §§ 181-193 (extending credits and other incentives for nonbusiness energy property, alternative vehicle refueling property, two-wheeled plug-in electric vehicles, second generation biofuel producers; biodiesel and renewable diesel, energy-efficient new homes, second generation biofuel plant property, energy efficient commercial buildings, sales or dispositions to implement FERC or State electricity restructuring policy, excise tax for alternative fuels, and new qualified fuel cell motor vehicles).

240. Private Letter Ruling 2015-23-014 (Internal Revenue Serv. June 5, 2015) (applying 26 U.S.C. § 48(a)(3)(A)(i) and 26 C.F.R. § 1.48-9(d)(3)), *available at* https://www.irs.gov/pub/irs-wd/201523014.pdf.

241. W.E. Partners II, LLC v. U.S., 119 Fed. Cl. 684, 688-89 (Jan. 12, 2015).

conditioning equipment to prepare biogas from a municipal solid waste treatment facility for use in co-located fuel cell power plants constituted "trash facilities" eligible for the ITC as "qualified facilities."[242]

C. FERC

In June 2015, the FERC approved PJM's proposal to introduce a pay-for-performance incentive (and penalty for nonperformance) to its capacity market.[243] The new mechanism compensates companies that adapt facilities for fuel-switching. In October, the FERC directed NYISO to revise its buyer-side market power mitigation rules, which require a 12-month price floor for new capacity, to exempt certain intermittent renewables.[244] In November, the FERC proposed to revise its standard Generator Interconnection Agreements to require currently exempt wind generators to provide reactive power.[245]

1. Clean Power Plan

The FERC held a series of technical conferences to discuss the implications of compliance approaches to the proposed CPP for state regulators and other energy stakeholders.[246] The final rule allows states to exceed carbon emissions limits for up to 90 days during emergencies.[247] The FERC, EPA, and DOE will coordinate to implement the CPP, including scheduling quarterly meetings.

2. LNG Exports

In Sierra Club v. FERC, the first LNG export-related appeal to reach the D.C. Circuit, the Sierra Club argues that the FERC should have considered the proposed facilities' implications for upstream hydraulic fracturing, climate change, and natural gas prices that may influence a resurgence of coal.[248]

3. Appellate Review

In Western Minnesota Municipal Power Agency v. FERC, the DC Circuit held that section 7(a) of the Federal Power Act unambiguously grants preference to preliminary hydroelectric permit applications by states and municipalities,

242. RP1 Fuel Cell, LLC v. U.S., 120 Fed. Cl. 288 (Mar. 3, 2015).

243. Order on Proposed Tariff Revisions, *PJM Interconnection, L.L.C.*, 151 F.E.R.C. ¶ 61,208 (2015).

244. Order on Complaint and Directing Compliance Filing, *New York Pub. Serv. Comm'n v. N.Y. Indep. Sys. Operator, Inc*., 153, F.E.R.C. ¶ 61,022 (2015).

245. *Reactive Power Requirements for Non-Synchronous Generation*, 153 F.E.R.C. ¶ 61,175 at P 1 (2015) (comments are due January 25, 2016).

246. Technical Conference on Environmental Regulations and Electric Reliability, Wholesale Electricity Markets, and Energy Infrastructure, 80 Fed. Reg. 1501 (Jan. 12, 2015) (scheduling conferences for Western, Eastern, and Central regions in addition to National Overview).

247. Final Rule, Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electricity Utility Generating Units, 80 Fed. Reg. 64,662, 64,671, 64,877-79 (Oct. 23, 2015) (to be codified at 40 C.F.R. pt. 60).

248. Sierra Club v. FERC, No. 14-1249 (D.C. Cir. filed Nov. 17, 2014) (re Freeport LNG Development, L.P.); Sierra Club v. FERC, No. 14-1275 (D.C. Cir. filed Dec. 10, 2014) (re Sabine Pass Liquefaction, LLC). *See also* Sierra Club v. FERC, No. 15-1133 (D.C. Cir. filed May 11, 2015) (re Corpus Christi Liquefaction, LLC), EarthReports, Inc. v. FERC, No. 15-1127 (D.C. Cir. filed May 7, 2015) (re Dominion Cove Point LNG, LP).

without any geographic limitation.[249] In P.C. Landing Corporation v. FERC, the 9th Circuit will review the Commission's 2014 issuance of a license for an experimental tidal energy hydroelectric project in the Puget Sound which petitioners allege will threaten a submarine fiber optic telecommunication system and tribal fishing rights and fish species.[250] In October, the United States Supreme Court heard oral arguments in FERC v. Electric Power Supply Association about whether the Commission's Order 745, which required that providers of demand-response be compensated in the energy markets at the same rate as an electric supply offer, went beyond the FERC's jurisdiction over wholesale transactions, as the D.C. Circuit ruled last year.[251] Demand response encourages time-differentiated use to match the availability of intermittent renewable resources. The Court also granted certiorari in the cases Fiordaliso v. PPL EnergyPlus, LLC[252] and CPV Power Holdings, LP v. PPL EnergyPlus, LLC[253] to determine whether states' incentive programs for preferred generation are preempted as interference with Federal Power Act authority over interstate wholesale markets.

249. Western Minn. Mun. Power Agency v. FERC, 806 F.3d 588, 590-92 (D.C. Cir. 2015).

250. P.C. Landing Corp. v. FERC, Nos. 15-70331, 15-70332 (9th Cir. filed Feb. 2, 2015) (on appeal from *Pub. Util. Dist. No. 1 of Snohomish Cty, Wash*., 146 F.E.R.C. ¶ 61,197 and 147 F.E.R.C ¶ 61,215, *reh'g denied*, 149 F.E.R.C. ¶ 61,206 (2014)).

251. FERC v. Elec. Power Supply Ass'n, No. 14-840 (U.S. filed Jan. 15, 2015).

252. Fiordaliso v. PPL EnergyPlus, L.L.C., No. 14-694 (U.S. filed Dec. 10, 2014).

253. CPV Power Holdings, LP v. PPL EnergyPlus, L.L.C., No. 14-634 (U.S. filed Nov. 26, 2014).

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