REPORT OF THE RENEWABLE ENERGY COMMITTEE

This report summarizes key legislative, regulatory, and judicial developments affecting renewable energy, both on a state and federal level, during 2011. This report is organized by region, with key information presented for each state that has had significant changes in policy or legislation over the past year.*

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I. NORTHEAST

A. Connecticut

Connecticut significantly changed its energy law in 2011 with the passage of Public Act 11-80, An Act Concerning the Establishment of the Department of Energy and Environmental Protection and Planning for Connecticut's Energy Future (Public Act 11-80).[1] Public Act 11-80 consolidated the development and implementation of Connecticut's environmental and energy policies within a newly created Department of Energy and Environmental Protection.[2]

1. Act of July 1, 2011, 2011 Conn. Acts 11-80 (creating the Conn. Dep't. of Energy and Envtl. Protection), *available at* http://www.cga.ct.gov/2011/ACT/PA/2011PA-00080-R00SB-01243-PA.htm; *see also* S.B. 1243, 2011-2012 Gen. Assemb., Reg. Sess. (Conn. 2011).

2. *Id.* § 1.

Many of the changes implemented by Public Act 11-80 relate to the area of renewable energy. One significant change was the creation of a new quasi-public authority, known as the Clean Energy Finance and Investment Authority (CEFIA), to administer the Clean Energy Fund.[3] Resources available for inclusion in the Clean Energy Fund were also expanded by Public Act 11-80, to include private capital and revenues reallocated by the legislature for that purpose.[4] The CEFIA is required by the act to, among other things, develop "programs to finance and . . . support clean energy investment" in various areas, including residential, "stimulate demand for clean energy . . . in the state," and "support financing or other expenditures that promote investment in clean energy sources."[5] In addition, the act requires the CEFIA to establish a program to promote residential photovoltaic (PV) systems, resulting in at least thirty megawatts (MW) of new PV installed capacity by December 31, 2022,[6] and to establish a three-year pilot program to provide financial incentives for installing small combined heat and power and on-site anaerobic digestion facilities.[7]

Public Act 11-80 also creates two new types of renewable energy credits that electric distribution companies (EDCs) are required to procure through long-term contracts; "ZRECs," which will be produced by on-site zero emission Class I generation projects, and "LRECs," which will be produced by on-site low emission Class I technologies.[8] Finally, the act allows state EDCs to build, own, or operate up to a per-company aggregate of thirty MWs of grid-side renewable generation and allows municipalities to adopt ordinances exempting class I renewable energy projects from municipal building permit fees.[9]

B. Maine

In June 2011, Maine enacted two new pieces of legislation relating to renewable energy. An Act to Reduce Maine's Dependence on Oil (L.D. 553) directs the Efficiency Maine Trust (EMT) to develop a plan to reduce Maine's dependence on "oil by at least 30% from 2007 levels by 2030 and by at least 50% from 2007 levels by 2050."[10] The EMT must consider a number of reduction strategies, including transitioning to renewable energy for heating, including energy from offshore wind, solar, geothermal, tidal, and sustainable biomass.[11] L.D. 553 also requires the EMT to report to the State of Maine's Joint Standing Committee on Energy, Utilities, and Technology by December 1, 2012, with recommendations for policies and legislative actions needed to achieve overall reductions in oil use.[12] The second piece of legislation, An Act to Provide Rebates for Renewable Energy Technologies, allocates funds to the

3. *Id.* § 99(c),(d).

4. *Id.* § 99(d)(2)(c)(i), § 99(d)(2)(c)(vi).

5. *Id.* § 99(d)(1).

6. *Id.* §§ 106, 109.

7. *Id.* § 103.

8. *Id.* §§ 107, 108, 110.

9. *Id.* §§ 127, 128.

10. Act of June 9, 2011, 2011 Me. Laws 965, § 2 (formerly L.D. 553, 125th Leg., 1st Reg. Sess (Me. 2011)) (amending ME. REV. STAT. tit. 2, § 9(5) (2011)), *available at* http://www.mainelegislature.org/LawMakerWeb/summary.asp?ID=280039734.

11. *Id.*

12. *Id.* § 3.

EMT to "provide rebates for cost-effective renewable energy technologies" utilized by government and nonprofit entities subjected to a competitive bid process.[13]

C. Massachusetts

The Massachusetts Department of Energy Resources (MA DOER) submitted new proposed regulations for biomass facilities under its Renewable Energy Portfolio Standard to the state legislature in May 2011.[14] These proposed regulations would require biomass generators to meet stricter greenhouse gas emissions standards for clean energy financing.[15] The state legislature's Joint Committee on Telecommunications, Utilities, and Energy provided a report to the MA DOER in June 2011 commenting on the RPS biomass draft regulation.[16] The MA DOER plans to file its final regulation after considering the Committee's report.[17]

The Massachusetts Department of Public Utilities (MA DPU) initiated two proceedings related to net metering in 2011 in response to legislation passed by the Commonwealth in 2010, An Act Making Appropriations for the Fiscal Years 2010 and 2011 to Provide for Supplementing Certain Existing Appropriations and for Certain Other Activities and Projects (2010 Net Metering Act).[18] The first was opened in February to examine net metering and interconnection of distributed generation.[19] In July 2011, the MA DPU instituted a second proceeding to revise the regulations pertaining to net metering as required by the 2010 Net Metering Act, which introduced a new definition for "net metering of a municipality or other government entity."[20]

D. New Hampshire

In July 2011, the New Hampshire Public Utilities Commission issued an order increasing the amount of state Renewable Energy Funds (REF) available to residential customers in order to "sustain [active] participation in the residential

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13. Act of June 3, 2011, 2011 Me. Laws 461, § 2 (emergency effective June 3, 2011), *available at* http://www.mainelegislature.org/legis/bills/display_ps.asp?LD=761&snum=125.

14. The Massachusetts Department of Energy Resources (DOER) filed its draft regulation with the Clerk of the Massachusetts House of Representatives on May 3, 2011. Mass. Dep't of Energy Resources, 225 CMR 14.00 Draft Regulation (with Tracked Revisions), *available at* http://www.mass.gov/eea/docs/doer/renewables/biomass/225-cmr-14-00-050311-biomass-draft-reg-with-tracked-changes.pdf (codified at 225 MASS. CODE REGS. §§ 14.01-14.13).

15. *Id.* § 14.05(1)(a)(7)(a)-(e).

16. Letter from the Mass. Joint Comm. on Telecomm., Utils. and Energy to Comm'r Mark Sylvia, Dep't of Energy Resources (June 10, 2011), *available at* http://www.mass.gov/eea/docs/doer/renewables/biomass/committee-biomass-rpt-jun10-2011.pdf.

17. The DOER intended to file the final regulations 30 days after the Report was issued, but as of the date of this Committee Report, February 26, 2012, the final regulation had not been published.

18. An Act Making Appropriations for the Fiscal Years 2010 and 2011 to Provide for Supplementing Certain Existing Appropriations and for Certain Other Activities and Projects, 2010 Mass. Acts ch. 359.

19. Inquiry into Net Metering and Interconnection of Distributed Generation, Mass. Dep't of Pub. Utils. Docket No. 11-11, *available at* http://db.state.ma.us/dpu/qorders/frmDocketSingle.asp?docknum=11-11.

20. Order Opening Rulemaking, Mass. Dep't. of Pub. Utils. Docket No. 11-10 at 2 (July 22, 2010) (capitalization omitted), *available at* http://www.env.state.ma.us/dpu/docs/electric/11-10/72211dpuord.pdf.

solar water heating rebate program" (Order No. 25,258).[21] The original program provided rebates to residential customers in three tiers, based upon the annual system output of the solar water heating system installed by such customer, measured in million British Thermal Units (MMBtu).[22] Under this new funding source structure as implemented by Order No. 25,258, REF rebates increase from $600 to $1,500 for Tier 1 systems (5.5 MMBtu - 19.9 MMBtu), $750 to $1,700 for Tier 2 systems (20 MMBtu - 29.9 MMBtu), and $900 to $1,900 for Tier 3 systems (30 MMBtu or greater).[23] Order No. 25,258 also decreases the minimum output level required to qualify for the Tier 1 rebate from 6 MMBtu to 5.5 MMBtu and approves an "automatic reduction of rebates by $150 for each tier once the" amount remaining in the allocated budget "is depleted down to $100,000 or [the] total program participation reaches 400 applicants" (whichever occurs first).[24]

E. New York

In August 2011, Governor Andrew Cuomo signed into law the Power NY Act of 2011 (Power NY Act).[25] The Power NY Act, among other things, directs the New York State Energy Research and Development Authority, the state's energy authority, to study potential policy approaches to increasing solar energy development in New York.[26]

F. Rhode Island

In 2011, Rhode Island enacted three new renewable energy bills. The first bill creates new net-metering rules for selling electricity, with pricing criteria adjusted according to whether a power provider is small (*i.e.*, a home), a large private developer, or a municipal energy project.[27] This bill also creates new rules making it clear that net metering is available to all renewable technologies.[28] A second bill expands distributed generation, whereby developers of small wind, solar, hydro, biomass and other renewable-energy systems feed power directly into the power grid.[29] Finally, in June of 2011, Rhode Island enacted legislation which reduces delays in starting renewable energy projects by setting timelines for utilities to complete engineering studies for connecting projects to the grid.[30]

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21. Order No. 25,258, Residential Solar Water Heating Rebate Program Incentive Levels, N.H. Pub. Utils. Comm'n (PUC) Docket No. DE 10-024 at 3 (July 29, 2011) [hereinafter Order No. 25,258]. The program was initially established in Order No. 25,092, N.H. PUC Docket No. DE 10-024 (Apr. 21, 2010) [hereinafter Order No. 25,092].

22. Order No. 25,092, *supra* note 21, at 6.

23. Order. No 25,258, *supra* note 21, at 2-3.

24. *Id.* at 5.

25. Power NY Act of 2011, 2011 N.Y. Laws ch. 388, *available at* http://assembly.state.ny.us/leg/?sh=printbill&bn=A08510&term=2011.

26. *Id.* § 22.

27. Act of June 29, 2011, 2011 R.I. Pub. Laws ch. 147, § 39-26.4-2(2), *available at* http://www.rilin.state.ri.us/PublicLaws/law11/law11147.htm.

28. *Id.* § 39-26.4-1.

29. The Distributed Generation Standard Contracts Act, 2011 R.I. Pub. Laws ch. 143, § 39-26.2-2, *available at* http://www.rilin.state.ri.us/PublicLaws/law11/law11143.htm.

30. Act of June 29, 2011, 2011 R.I. Pub. Laws ch. 144, § 39-26.3-1, *available at* http://www.rilin.state.

G. Vermont

In May 2011, the Vermont legislature passed the Vermont Energy Act of 2011.[31] This Act creates a statewide solar benefit, expands net metering, streamlines the "solar registration" permitting process, and establishes incentives for biomass heating.[32]

II. WEST

A. Arizona

In April 2011, the Arizona Court of Appeals rejected a challenge by the Goldwater Institute to the Arizona Corporation Commission's Renewable Energy Standard and Tariff (REST rules).[33] *Miller v. Arizona Corporation Commission* presented the issue whether the Commission overstepped the bounds of its constitutional authority when it promulgated the REST rules,[34] which require utilities to obtain 15% of their energy from renewable sources by 2025.[35] The Court of Appeals rejected the plaintiffs' arguments that the Commission lacked jurisdiction to promulgate the rules and in so doing improperly interfered with the internal management of regulated utilities.[36] The court affirmed the Commission's authority to promulgate the REST rules, relying on the Commission's "plenary power over ratemaking under Article 15, Section 3" of the Arizona Constitution.[37] The court noted that the Commission had undertaken extensive factual findings and reasoned that the REST rules represented "[p]rophylactic measures designed to prevent adverse effects on ratepayers due to a failure to diversify electrical energy sources."[38] The Arizona Supreme Court in September 2011 declined without comment to hear the Goldwater Institute's appeal of this decision, thus allowing the REST rules to stand.[39]

B. California

California enacted Senate Bill X1-2, which increases its Renewable Portfolio Standard (RPS) to 33% by 2020, up from a prior statutory requirement of 20%.[40] Senate Bill X1-2 requires the new RPS to be implemented in three compliance periods.[41] The measure also establishes a complicated, three-tiered formula governing the amount of renewable energy that a utility may purchase

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ri.us/PublicLaws/law11/law11144.htm.

31. Vermont Energy Act of 2011, 2011-2012 Vt. Acts & Resolves No. 47, § 1, *available at* http://www.leg.state.vt.us/docs/2012/acts/act047.pdf.

32. *Id.* §§ 1, 20a.

33. Miller v. Arizona Corp. Comm'n, 251 P.3d 400 (Ariz. Ct. App. 2011).

34. *Id.* at 401.

35. *Id.* at 408; *see generally* ARIZ. ADMIN. CODE §§ 14-2-1801 to 14-2-1816 (2011).

36. *Miller*, 251 P.3d at 405-06.

37. *Id.* at 406.

38. *Id.* at 408.

39. Associated Press, *Arizona High Court Won't Hear Energy Rules Challenge*, ARIZ. CAPITOL TIMES, September 20, 2011, http://azcapitoltimes.com/news/2011/09/20/arizona-high-court-wont-hear-energy-rules-challenge/.

40. S.B. 2, 2011-2012 Leg., 1st Extraordinary Sess. § 20(b)(2)(B) (Cal. 2011).

41. *Id.* § 20(b)(1).

from non-California sources, an issue that was contentious in the debate over increasing the state's RPS.[42]

The California Public Utilities Commission established a new protocol governing procurement of small, distributed generation projects by the state's three largest regulated utilities, Pacific Gas & Electric, Southern California Edison, and San Diego Gas & Electric.[43] The Renewable Auction Mechanism (RAM) represents a market-based, reverse auction mechanism.[44] Under the RAM, each utility will develop a standard, non-negotiable contract with certain requisite terms and conditions, including a requirement that the project be online within eighteen months of contract execution, with one allowable six-month extension for regulatory delays.[45] At auction, bids will be selected by least-cost price until auction capacity is reached.[46] The Commission stated in its adopting decision that RAM will "complement the RPS Program by reducing transaction costs and providing a procurement opportunity for smaller RPS-eligible projects, which have not been able to effectively participate in the annual RPS solicitations to date."[47]

C. Colorado

In June 2011, Colorado enacted legislation taking an initial step toward increasing the amount of renewables' transmission in the state.[48] Senate Bill 11-045 creates the Task Force on Statewide Transmission Siting and Permitting.[49] The Task Force is charged with evaluating Colorado's existing framework for permitting electric transmission facilities, which is comprised of a patchwork of state and local requirements.[50] The Task Force will research how other states permit transmission facilities, hold public meetings, and identify "recommended actions to streamline siting and permitting processes"[51] and will examine the pros and cons of establishing a "statewide siting and permitting framework" administered by a state-level siting entity.[52]

D. Idaho

In March 2011, Idaho enacted several pieces of legislation aimed at promoting development of the state's geothermal resources.[53] The new laws empower the State Land Board to execute longer leases,[54] grant the Board

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42. *Id.* § 22(b), (c).

43. Decision No. 10-12-048, Adopting the Renewable Auction Mechanism, Order Instituting Rulemaking to Continue Implementation and Administration of California Renewables Portfolio Standard Program, Cal. PUC Docket no. 08-08-009, at p. 93, ¶ 1 (Dec. 16, 2010).

44. *Id.* at p. 81, ¶ 3.

45. *Id.* at pp. 89-90.

46. *Id.* at p. 87, ¶ 10; p. 88 ¶ 18.

47. *Id.* at p. 2.

48. S.B. 11-045, 68th Leg., Reg. Sess. (Colo. 2011) (codified at COLO. REV. STAT. § 40-4-119 (2012)).

49. *Id.* at sec. 1, § 40-4-119(2).

50. *Id.* at sec. 1, § 40-4-119(4)(a)-(f).

51. *Id.* at sec. 1, § 40-4-119(4)(d).

52. *Id.* at sec. 1, § 40-4-119(4)(e)-(f).

53. *See generally* H.B. 52, 61st Leg., Reg. Sess. (Idaho 2011); H.B. 53, 61st Leg., Reg. Sess. (Idaho 2011); H.B. 54, 61st Leg., Reg. Sess. (Idaho 2011); H.B. 56, 61st Leg., Reg. Sess. (Idaho 2011).

54. H.B. 52, § 1 (amending IDAHO CODE ANN. § 47-1601).

greater flexibility in negotiating rent and royalty rates,[55] and remove fixed bond requirements.[56] These laws also remove a condition in the former law that limited geothermal leases to a single section of land and permit the Board to negotiate for a single geothermal lease covering all state lands within a designated geothermal area.[57] Together, these changes grant the Board significantly greater flexibility in leasing the state's geothermal resources.

E. New Mexico

New Mexico enacted legislation in 2011 designed to promote renewable energy development. Senate Bill 549 provides an incentive for certain governmental entities to invest in their own renewable energy systems.[58] Specifically, the law exempts political subdivisions that own some type of renewable generation system and annually consume above a certain level of electricity from having to pay utility renewable energy procurement charges.[59] To qualify for the exemption, the subdivision must agree to spend 2.5% of its annual electricity charges to develop its renewable generation system.[60]

Additionally, House Memorial 36 directs the Economic Development Department to "identify the benefits and barriers to developing renewable energy resources and make recommendations to promote the development and use of renewable energy resources and associated transmission of electricity in New Mexico."[61]

F. Oregon

Oregon enacted legislation in 2011 overhauling the state's Business Energy Tax Credit incentive program, which had included various tax incentives for renewable projects.[62] In its place, however, House Bill 3672 creates a new tax credit and grant for renewable energy production systems.[63] Specifically, the bill creates the Renewable Energy Development Subaccount (the Fund), a fund that is to be financed by taxpayer contributions, in the absence of legislative appropriation.[64] Taxpayer contributions to the Fund are eligible for tax credits, up to a statewide annual maximum of $1.5 million and will be granted through an auction process.[65] Monies in the Fund will be used to make grants for the installation or construction of renewable energy production systems.[66]

House Bill 3672 also provides income tax credits for qualifying energy conservation projects[67] and qualifying transportation projects, including

55. H.B. 53, § 1 (amending IDAHO CODE ANN. § 47-1605).
56. H.B. 56, § 1 (amending IDAHO CODE ANN. § 47-1608).
57. H.B. 54, § 1 (amending IDAHO CODE ANN. § 47-1604).
58. S.B. 549, 50th Leg., Reg. Sess. (N.M. 2011).
59. *Id.* at sec. 1, § 62-16-4(A)(3).
60. *Id.*
61. H.M. 36, 50th Leg., Reg. Sess. (N.M. 2011) (capitalization omitted).
62. H.B. 3672, 76th Leg., Reg. Sess. (Ore. 2011).
63. *Id.* § 23 (to be codified in OR. REV. STAT. tit. 29, Ch. 315).
64. *Id.* §§ 23(3), 23(4)(a), 24a(1).
65. *Id.* § 23(4)(a).
66. *Id.* §§ 27(3), 29.
67. *Id.* §§ 34-51.

alternative fuel vehicle projects[68] and preserves the existing tax credit for residential alternative energy devices.[69]

G. South Dakota

In March 2011, South Dakota enacted legislation aimed at promoting the development of the state's wind energy resources.[70] Senate Bill 194 creates the Wind Energy Competitive Advisory Task Force.[71] The Task Force is charged with evaluating current incentives for wind energy and advising the governor and legislature regarding the competitive atmosphere for wind energy.[72] The Task Force is to "make recommendations as to the proper mechanisms to tax wind energy and compete with surrounding states for the construction and maintenance of wind energy installations."[73]

H. Utah

By legislation signed in March 2011, Utah created a new Office of Energy Development and shifted responsibility for the state's renewable energy programs to that office.[74]

I. Washington

In June 2011, the Utilities and Transportation Commission issued a policy statement that establishes two ways for utilities and developers of renewable energy projects to obtain assurance that a proposed project qualifies as an "eligible renewable resource" under the state's RPS.[75] The policy statement explains that "uncertainty" regarding whether a proposed project would qualify under the RPS "creates impediments for financing, establishment of project partnerships, and commitments of renewable research and development funding."[76] To alleviate this uncertainty and facilitate renewable resource development, a utility or project developer may seek either a non-binding technical analysis or a formal binding determination with respect to a proposed project.[77] Under the first option, a utility or developer may submit an inquiry to a newly formed technical working group comprised of Commission staff together with staff from the Department of Commerce.[78] The working group will issue an informal analysis whether the proposed project qualifies under the RPS. This analysis will not be binding on the Commission.[79]

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68. *Id.* §§ 52-66.

69. *Id.* §§ 67-72.

70. S.B. 194, 86th Leg. Assemb., Reg. Sess. (S.D. 2011).

71. *Id.* § 1 (codified at S.D. CODIFIED LAWS § 2-6-25 (2011)).

72. *Id.*

73. *Id.*

74. H.B. 475, 59th Leg., Gen. Sess. (Utah 2011).

75. Policy Statement Regarding Processes for Determining Whether Projects Are "Eligible Renewable Resources" Under RCW 19.285 and WAC 480-109, Wash. Utils. & Transp. Comm'n Docket No. UE-111016 at ¶ 1 (June 7, 2011).

76. *Id.* ¶ 5.

77. *Id.* ¶ 6.

78. *Id.* ¶ 8.

79. *Id.*

Under the second option, a "person may petition the Commission for a declaratory order" determining whether a proposed project qualifies under the RPS.[80] The policy statement advises that persons with standing to file such petitions "may include investor-owned utilities and entities that propose to sell projects, project output, or [Renewable Energy Certificates] from projects to investor-owned utilities."[81] Consumer-owned utilities may not avail themselves of this option because the Commission does not enforce the RPS against these entities.[82]

III. SOUTH

A. Florida

The City of Fort Lauderdale, Florida rolled out potential rebates for certain solar water heaters and solar PV systems.[83] The rebate program provides a 50% match on funding, up to $1,000, and is intended to encourage the development of small-scale solar throughout the city.[84]

Progress Energy Florida offered a similar rebate program for residential solar PV systems.[85] The incentive is based on the size of the system and is limited to a maximum of $20,000 per residence.[86] The program has an annual rebate cap of $1 million.[87]

B. Georgia

In May 2011, Georgia enacted House Bill 346, which extended the state's personal and corporate tax credits for clean energy by two additional years, to December 31, 2014.[88] The tax credits provide for a maximum of $2,500 per residence for solar water heating, up to $10,500 per residence for solar PV, active space heating, and wind energy systems, and up to $2,000 per installation for certain geothermal systems.[89] The aggregate program cap was also raised from $2.5 million to $5 million for 2012-2014.[90] At the behest of the Georgia Public Service Commission, Georgia Power issued a Request for Proposal (RFP) to procure up to 50 MW of solar power.[91] The Public Service Commission

80. *Id.* ¶ 9.

81. *Id.* ¶ 10.

82. *Id.* ¶ 12.

83. *Save Energy and Money with a Smart Watts Rebate*, CITY OF FORT LAUDERDALE, http://www.fortlauderdale.gov/rebates/ (last visited Feb. 16, 2012).

84. *Id.*

85. *SunSense Solar PV Program*, PROGRESS ENERGY, https://www.progress-energy.com/florida/home/save-energy-money/energy-efficiency-improvements/sunsense/solar-pv.page? (last visited Feb. 16, 2012).

86. *Id.*

87. *Id.*

88. H.B. 346, 2011-2012 Gen. Assemb., Reg. Sess. at sec. 3A (Ga. 2011), *available at* http://www1.legis.ga.gov/legis/2011_12/pdf/hb346.pdf.

89. GA. CODE ANN. § 48-7-29.14(b)(5)(B) (2011).

90. H.B. 346 at sec. 3A.

91. *Georgia Power Company's 50 Megawatt Large Scale Solar Offering*, GA. PUB. SERV. COMM'N (Sept. 15, 2011), http://www.psc.state.ga.us/projects/Sept2011LargeScaleSolarOffering.aspx.

received significant interest in the RFP, with "28 applications from 14 different solar developers" submitted.[92]

C. Kentucky

The Kentucky Governor's Office of Agricultural Policy offers funding through the County Agricultural Investment Program (CAIP)[93] "for the adoption of a proactive and systematic approach to incorporating energy efficiency into the farm operation, production of biomass crops, or production of alternative energy for on-farm use."[94] The program provides funds to cover 25% of the cost of certain systems, with a maximum award of $10,000, but is now closed.[95]

D. Louisiana

In July 2010, the Louisiana Public Service Commission opened a docket to consider increasing the state mandated 300 kW limit for net metering facilities.[96] "The [Public Service Commission] approved the increase in May 2011."[97] Shortly thereafter, in July 2011, the Public Service Commission adopted net metering standards which confirmed that pricing will be considered on a case-by-case basis for facilities larger than 300 kW.[98]

E. Mississippi

In January 2011, the Mississippi Public Service Commission initiated Docket No. 2011-AD-2 to investigate "the development and implementation of net metering and interconnection standards."[99]

F. Tennessee

Tennessee has enacted legislation that allows a 100% refund of sales and use taxes paid on purchases of machinery and equipment used to produce electricity in a certified green energy production facility.[100] Facilities must be certified by the Tennessee Department of Environment and Conservation as producing electricity for use and consumption off the premises using "clean

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92. *Id.*

93. *County Agriculture Investment Program*, GOVERNOR'S OFFICE OF AGRIC. POLICY, http://agpolicy.ky.gov/funds/energy.shtml (last visited Feb. 16, 2012).

94. *Id.*

95. GOVERNOR'S OFFICE OF AGRIC. POLICY, 2011 CAIP INVESTMENT AREAS STANDARD GUIDELINES 1, *available at* http://agpolicy.ky.gov/funds/documents/caip_guidelines-standard-2011.pdf.

96. Louisiana Pub. Serv. Comm'n (PSC), *Interconnection Guidelines*, ENERGY.GOV, http://energy.gov/savings/interconnection-guidelines-4 (last visited Feb. 16, 2012) (La. PSC Docket No. R-31417).

97. *Id.*

98. General Order, In Re: Re-examination of the Commission's Net Energy Meeting Rules Found in General Order No. R-27558, Dated November 30, 2005 (the "Net Metering Order"), La. PSC Docket No. R-31417 (June 22, 2011), *available at* http://www.dsireusa.org/documents/Incentives/LA02R1.pdf.

99. In Re: Order Establishing Docket to Investigate the Development and Implementation of Net Metering Programs and Standards, Miss. PSC Docket No. 2011-AD-2 (Jan. 6, 2011), *available at* http://irecusa.org/wp-content/uploads/2011/01/Docket-2011-AD-2-Order-for-Net-Metering.pdf; *Mississippi Opens the Door to Interconnection and Net Metering*, INTERSTATE RENEWABLE ENERGY COUNCIL, http://www.irecusa.org/2011/01/mississippi-opens-the-door-to-interconnection-and-net-metering/ (last visited Feb. 16, 2012).

100. TENN. CODE. ANN. § 67-6-346 (2011).

energy technology," which is defined as "technology used to generate energy from geothermal, hydrogen, solar, and wind sources."[101]

G. Texas

On June 17, 2011, Texas enacted Senate Bill 981,[102] effective September 1, 2011, which eliminates concerns that small-scale renewable generation developers in the residential market would be regulated by the state utility commission as utilities.[103] Also on June 17, 2011, the Texas legislature passed House Bill 362, which limits homeowners' associations from adopting or enforcing rules that prohibit or restrict homeowners from installing a solar energy device.[104]

IV. MID-ATLANTIC

A. Delaware

In September 2011, the Delaware public utility, Delmarva Power & Light, filed an application with the Delaware Public Service Commission seeking approval to implement a pilot program for the procurement of solar renewable energy credits.[105]

B. Maryland

In May 2011, the Maryland legislature enacted Senate Bill 398[106] "to level the playing field [between] customer purchases of electricity from [a] grid" and residential solar or wind retail power purchase agreements.[107] The legislation provides an exemption from the sales and use tax for the "sale of electricity generated by [certain] solar energy and wind energy equipment."[108]

In addition, state agencies have implemented several programs to incentivize renewable energy participation. The Maryland Department of Housing and Community Development has instituted the Be SMART Business, Homes, and Multi-Family Programs, which offer loans to its respective targeted groups (*e.g.*, businesses, homes, or multi-family rental properties) in certain communities for the purpose of making energy efficiency improvements.[109]

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101. TENN. CODE ANN. § 67-4-2004(9) (2011).

102. S.B. 981, 82d Leg., Reg. Sess. (Tex. 2011).

103. Bill Analysis, S.B. 981, *available at* http://www.capitol.state.tx.us/tlodocs/82R/analysis/pdf/SB00981F.pdf.

104. H.B. 362, 82d Leg., Reg. Sess. (Tex. 2011); *see also*, *Texas: Incentives/Policies for Renewables & Efficiency: Solar Rights*, DSIRE (June 24, 2011), http://dsireusa.org/incentives/incentive.cfm?Incentive_Code=TX33R&currentpageid=3&EE=1&RE=1.

105. Report of Delmarva Power & Light Co.'s Application for Approval of a Pilot Program for the Procurement of Solar Renewable Energy Credits, Del. PSC Docket No. 11-399 at ¶ 1 (Sept. 16, 2011), *available at* http://depsc.delaware.gov/electric/11399.shtml.

106. S.B. 398, 428th Gen. Assembly, Reg. Sess. (Md. 2011); *see also*, *Maryland: Incentive/Policies for Renewables & Efficiency: Sales and Use Tax Exemption for Residential Solar and Wind Electricity Sales*, DSIRE (June 3, 2011), http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=MD73F&currentpageid=3&EE=1&RE=1.

107. *Maryland: Sales and Use Tax Exemption*, *supra* note 106.

108. MD. CODE ANN., TAX-GEN. § 11-207(a)(5) (West 2011).

109. *Be SMART Program*, MD. DEP'T OF HOUS. & CMTY. DEV., http://www.mdhousing.org/website/prog

Similarly, the Maryland Energy Administration offered a rebate program for energy efficiency improvements for homeowners in Maryland.[110] After applicants complete a required audit and use approved contractors for improvements, the program offers rebates of 35% of the improvement costs for up to $1,500 per measure and a cap of $3,100 per customer.[111]

C. New Jersey

The New Jersey Economic Development Authority offers two loan programs for supporting renewable energy initiatives. The first, through the Clean Energy Solutions Energy Efficiency Revolving Loan Fund, offers loans to commercial, industrial, and institutional entities for energy efficiency improvements supported by the New Jersey Office of Clean Energy "Pay for Performance" incentive program.[112] The second loan program is the Edison Innovation Green Growth Fund.[113] This program provides loans to for-profit companies developing renewable energy and energy efficiency products.[114]

D. North Carolina

North Carolina local governments offer rebates and low interest rate loans to incentivize energy efficiency initiatives. In particular, Chatham County provides three types of rebates on permitting fees for green building certifications and techniques.[115] The program limits rebates to $450 per home and $1,000 per year.[116] Meanwhile, Chapel Hill's WISE Home and Buildings Program subsidizes energy efficiency improvements in residences by 20% or 40% of the project cost, after utility rates have been deducted.[117]

E. Pennsylvania

In January 2011, the Pennsylvania Public Utilities Commission approved the by-laws for the Pennsylvania Sustainable Energy Board (PASEB).[118] The PASEB was established by the Commission "to provide 'oversight, guidance and

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rams/BeSmart/Default.aspx (last visited Feb. 16, 2012).

110. *Home Performance Rebate Program*, MD. ENERGY ADMIN., http://energy.maryland.gov/homeperformance/ (last visited Feb. 16, 2012).

111. *Id.*

112. *Financing Programs – Energy Efficiency Revolving Loan Fund (EE RLF)*, N.J. ECON. DEV. AUTH., http://www.njeda.com/web/Aspx_pg/Templates/Npic_Text.aspx?Doc_Id=1465&menuid=1514&topid=718&levelid=6&midid=1175.

113. *Financing Programs – Edison Innovation Green Growth Fund (EIGGF)*, N.J. ECON. DEV. AUTH., http://www.njeda.com/web/Aspx_pg/Templates/Npic_Text.aspx?Doc_Id=1454&menuid=1509&topid=718&levelid=6&midid=1175.

114. *Id.*

115. *Chatham County Green Building Permit Rebate Policy*, CHATHAM CNTY., N.C., http://www.chathamnc.org/Modules/ShowDocument.aspx?documentid=13827 (last visited Feb. 28, 2012).

116. *Id.*

117. *Chapel Hill WISE Homes & Buildings Program*, TOWN OF CHAPEL HILL, http://www.townofchapelhill.org/index.aspx?page=1666 (last visited Feb. 28, 2012).

118. Order Approving the By-laws of the Sustainable Energy Board, Pa. PUC Docket No. M-00031715 at 1 (Jan. 27, 2011) (quoting *Electric Distribution Companies' Sustainable Energy Funds*, Pa. PUC Docket Nos. R-00973953 et al. (Order entered July 1, 1999)), *available at* http://www.puc.state.pa.us/electric/electric_renew_sus_energy.aspx.

technical assistance' to the [R]egional [S]ustainable [E]nergy [F]unds in 1999."[119]

In Philadelphia, as part of its sustainability effort, the city has streamlined permitting requirements and reduced fees for the installation of PV systems of 10 kW or less in family residences.[120] Qualified PV projects can use a combined electrical and building permit instead of two separate permits.[121]

F. South Carolina

This year there have been several rebate and other financial incentive programs to improve energy efficiency in South Carolina. In Charleston, the city partnered with Abundant Power and the Sustainability Institute to support the CharlestonWISE energy efficiency program for homeowners and small businesses; "the program offers instant rebates, low interest loans, and other" measures to assist energy efficiency developments.[122] Similarly, South Carolina Electric and Gas commenced a program in March 2011 that offers energy reduction incentives for residential and non-residential property owners in its service territory.[123]

G. Virginia

The Virginia legislature passed legislation this year concerning renewable energy. In April 2011, the commonwealth enacted House Bill 2316 to create the Clean Energy Manufacturing Incentive Grant Program to replace predecessor programs.[124] The program provides grants to renewable or nuclear energy manufacturers for up to six years if, on or after July 1, 2011, it either expands or begins operations, invests over $50 million in capital in Virginia, and creates at least two hundred full-time jobs.[125] In the same month, the Virginia legislature created the Voluntary Solar Resource Development Fund, by passing House Bill 2191, to provide residential, commercial, or nonprofit loans for solar energy projects.[126] In March 2011, House Bill 2389 authorized the Virginia Resources Authority to provide financial assistance for renewable energy projects,[127] such as the Virginia Pooled Financing Program, Revolving Loan Funds, and Term Financing.[128] The Virginia legislature also passed Senate Bill 862 in March

119. *Id.*

120. U.S. DEP'T OF ENERGY ET AL., GUIDEBOOK FOR SOLAR PHOTOVOLTAIC PROJECTS IN PHILADEPHIA at C-4 (2d ed. 2011), *available at* http://www.phila.gov/green/PDFs/PhillySolarGuidebookFinal.pdf.

121. *Id.*

122. *South Carolina: Incentives/Policies for Renewables & Efficiency: CharlestonWISE Program*, DSIRE, http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=SC56F&re=1&ee=1; *see also*, *Rebates and Incentives*, CHARLESTONWISE, http://www.charlestonwise.org/rebates.php.

123. *See generally*, *Be EnergyWise and Save*, S.C. ELEC. & GAS, http://www.sceg.com/en/energywise-and-save/ (last visited Feb. 28, 2012).

124. H.B 2316, 2011 Gen. Assemb., Reg. Sess. at sec. 1, §59.1-284.25 (Va. 2011), *available at* http://leg1.state.va.us/cgi-bin/legp504.exe?111+ful+HB2316ER+pdf.

125. VA. CODE ANN. § 59.1-284.27 (2011).

126. H.B. 2191, 2011 Gen. Assemb., Reg. Sess. (Va. 2011) (codified at VA. CODE ANN. §§ 67-1300 to 67-1305 (2011)).

127. H.B. 2389, 2011 Gen. Assemb., Reg. Sess. (Va. 2011) (codified at VA. CODE ANN. §§ 62.1-198 to 62.1-199 (2011)).

128. *Project & Equipment Financing*, VA. RES. AUTH., http://www.virginiaresources.org/projectfinancin

2011, which provided general guidelines for local ordinances regarding solar and wind energy facilities.[129]

H. West Virginia

In West Virginia, Appalachian Power and American Electric Power have offered commercial and industrial customers "rebates on energy efficient lighting and HVAC equipment."[130]

V. MIDWEST

A. Illinois

In 2011, the General Assembly enacted Senate Bill 1652, amending the Illinois Power Agency (IPA) Act.[131] The changes impact the manner in which renewable energy resources are to be procured by the IPA. Among other things, Senate Bill 1652 defines "distributed renewable energy generation device"[132] and sets out how distributed renewable energy resources will be treated in the context of the IPA's electricity procurement and application of the RPS.[133] One "half of the renewable energy resources procured from distributed renewable energy generation [is to] come from devices of less than 25 kilowatts in nameplate capacity."[134] The IPA is to provide "credit requirements for suppliers of distributed renewable energy" and use a third-party for contracting with suppliers and aggregating sources of distributed renewable energy.[135] Senate Bill 1652 also makes changes to provisions relating to net electricity metering,[136] while enacted House Bill 1458 broadens the definition of "renewable energy resources" by including an anaerobic digestion.[137]

On December 21, 2011, the Illinois Commerce Commission (ILCC) approved the IPA 2012 Electric Procurement Plan.[138] Originally, as part of its obligation to meet the RPS, the IPA proposed to procure long-term renewable energy credits and to purchase electricity from small to mid-sized solar generators.[139] The IPA subsequently withdrew these proposals due to the uncertainty of the electric markets and the enactment of Senate Bill 1652, which

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g.shtml (last visited Feb. 28, 2012).

129. S.B. 862, 2011 Gen. Assemb., Reg. Sess. (Va. 2011) (codified at VA. CODE ANN. § 67-103 (2011)).

130. *AEP Appalachian Power – Commercial and Industrial Rebate Program*, DSIRE (Oct. 25, 2011), http://dsireusa.org/incentives/incentive.cfm?Incentive_Code=WV10F&re=1&ee=1.

131. S.B. 1652, 97th Gen. Assemb., Reg. Sess. (Ill. 2011); Pub. Act No. 616, 2011 Ill. Legis. Serv. P.A. 97-616 (West).

132. S.B. 1652 § 1-10.

133. *Id.* § 1-56.

134. *Id.* § 1-75(c)(1).

135. *Id.*

136. *Id.* § 16-107.5.

137. H.B. 1458, 97th Gen. Assemb., Reg. Sess. § 1-10 (Ill. 2011); Pub. Act No. 97-0491, 2011 Ill. Legis. Serv. P.A. 97-491 (West), *available at* http://www.ilga.gov/legislation/publicacts/fulltext.asp?name=097-0491.

138. Final Order, *Illinois Power Agency* (IPA), Ill. Commerce Comm'n Docket No. 11-0660, 186-187 (Dec. 21, 2011) [hereinafter Final Order], *available at* http://www.icc.illinois.gov/docket/files.aspx?no=11-0660&docId=175468 (search e-docket 11-0660, click Documents, click Order - Final, click on Final Order).

139. IPA, 2012 POWER PROCUREMENT PLAN 1, *available at* http://www.icc.illinois.gov/docket/files.aspx ?no=11-0660&docId=171964.

impacted the manner of procuring renewable energy, as well as potentially impacting the portfolio volumes subject to the procurement. The ILCC approved the purchase of one-year renewable energy credits (RECs) to meet the RPS for this year and ordered the IPA to conduct workshops in 2012 to determine how alternative energy resources will be integrated into the IPA's future electric supply portfolios.[140] House Bill 991 was enacted to address the incorporation of renewable energy into common interest housing.[141]

House Bill 1487 creates the Renewable Energy Production District Act, which provides that an area within "a single county may be incorporated as a renewable energy production district" for purposes of the sale of renewable energy from renewable energy facilities.[142] The Act sets forth the procedures for establishing the district and its governing Board of Trustees.[143] For this purpose, renewable energy facilities include electric generating facilities powered by solar, wind, dedicated energy crops, and anaerobic digestion of livestock and food processing wastes, cells and microturbines powered by renewable fuels, and hydroelectric power.[144]

Finally the Illinois General Assembly enacted House Bill 2073, which amends the State Finance Act.[145] House Bill 2073 creates the Small Business Development Grant Fund whose purpose is to make grants to small business that will create jobs within the State.[146] Priority is given to certain types of businesses, including those whose primary purpose is to provide energy derived from renewable energy technology.[147]

B. Indiana

Indiana's general assembly has been active in passing legislation related to renewable energy this year. In April 2011, Indiana enacted Senate Bill 481 which specifies that a wind power device does not qualify for the assessed value deduction if it is owned or operated by: "(1) a public utility . . . ; or (2) another entity that provides electricity at wholesale or retail for consideration, other than a person who participates in a net metering program offered by an electric utility."[148]

In May 2011, Indiana enacted Senate Bill 66 which provides financial incentives to certain renewable energy technologies.[149] Also enacted in May

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140. Final Order, *supra* note 138, at 38, 82.

141. H.B. 991, 97th Gen. Assemb., Reg. Sess. § 20 (Ill. 2011); Pub. Act No. 105, 2011 Ill. Legis. Serv. P.A. 97-105 (West), *available at* http://www.ilga.gov/legislation/publicacts/fulltext.asp?Name=097-0105.

142. H.B. 1487, 97th Gen. Assemb., Reg. Sess. § 10 (Ill. 2011); Renewable Energy Production District Act, Pub. Act No. 97-265, 2011 Ill. Legis. Serv. P.A. 97-265 (West), *available at* http://www.ilga.gov/legislation/publicacts/97/PDF/097-0265.pdf.

143. H.B. 1487 §§ 10, 15.

144. *Id.* § 1.

145. H.B. 2073, 97th Gen. Assemb., Reg. Sess. at sec. 5 (Ill. 2011); Pub. Act No. 406, 2011 Ill. Legis. Serv. P.A. 97-265, *available at* http://www.ilga.gov/legislation/publicacts/fulltext.asp?Name=097-0406.

146. *Id.* at sec. 5, § 6z-87.

147. *Id.* § 6z-87(e).

148. S.B. 481, 117th Gen. Assemb., 1st Reg. Sess. (Ind. 2011), *available at* http://www.in.gov/legislative/bills/2011/SE/SE0481.1.html; *see also* Ind. Pub. L. No. 46-2011, 2011 Ind. Legis. Serv. P.L. 46-2011 (West).

149. S.B. 66, 117th Gen. Assemb., 1st Reg. Sess. (Ind. 2011), *available at* http://www.in.gov/legislative/bills/2011/IN/IN0066.1.html; *see also* Ind. Pub. L. No. 96-2011, 2011 Ind. Legis. Serv. P.L. 96-2011 (West).

2011 was Senate Bill 251 which, among other things, allows a nuclear energy production or generating facility to qualify for certain financial incentives available for clean energy projects if certain conditions are met.[150] It also requires the Indiana Utility Regulatory Commission (IURC) to adopt rules to establish the voluntary clean energy portfolio standard program and amends the definition of "renewable energy resources" for purposes of the statute providing financial incentives for clean energy projects to consist of certain clean energy resources that qualify for the voluntary clean energy portfolio standard program.[151]

In a July 13 2011 Order, the IURC approved a settlement agreement between Northern Indiana Public Service Company (NIPSCO), the Office of the Utility Consumer Counselor , Sierra Club, Citizens Action Coalition of Indiana, Inc., Indiana Distributed Energy Advocates, Inc., and Bio Town Ag, Inc.[152] NIPSCO modified the rules and regulations of its net metering to make it available to a larger base of customers and increase the eligible unit size to 1 MW and agreed to develop a pilot feed-in tariff program.[153]

C. Iowa

On May 26, 2011, the Iowa legislature enacted House File 672, which, among other things, reduces the maximum amount of nameplate generating capacity for all qualified facilities determined eligible to receive the wind energy tax credit from 150 MW to 50 MW[154] and reserves an amount equivalent to 10 MW of nameplate generating capacity for eligible renewable energy facilities incorporated within or associated with an ethanol cogeneration plant engaged in the sale of ethanol to states to meet a low carbon fuel standard.citations to sections of the law[155]

D. Kansas

On April 13, 2011, the Kansas legislature enacted Senate Bill 227, which extends the informational requirements on instruments that convey an estate or interest created by a lease or easement involving wind resources and technologies to solar resources and technologies[156] and provides that "no person other than the surface owner of a tract of land [has] the right to use [the] land for the production of wind or solar generated energy unless granted such right by the lawful owner of the surface estate by lease or easement for a definite period."[157]

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150. S.B. 251, 117th Gen. Assemb., 1st Reg. Sess. (Ind. 2011), *available at* http://www.in.gov/legislative/bills/2011/SE/SE0251.1.html; *see also* Ind. Pub. L. No. 96-2011, 2011 Ind. Legis. Serv. P.L. 150-2011 (West).

151. *Id.* § 12(a)-(c).

152. *In Re Northern Indiana Public Service Company*, Ind. Util. Regulatory Comm'n Cause No. 43922, at p. 16 (July 13, 2011), *available at* http://indianadg.files.wordpress.com/2011/07/43922order_071311.pdf.

153. *Id.* at 15.

154. H. File 672, 84th Gen. Assemb., Reg. Sess. at sec. 2, § 476B.5(4) (Iowa 2011), *available at* http://coolice.legis.state.ia.us/linc/84/external/HF672_Enrolled.pdf.

155. *Id.* at sec. 8, § 476C.3(4)(b).

156. S.B. 227, 2011-2012 Leg., Reg. Sess. § 2(a)-(d) (Kan. 2011), *available at* http://www.kslegislature.org/li/b2011_12/measures/documents/sb227_enrolled.pdf.

157. *Id.* § 2(b).

E. Michigan

While the Michigan legislature did not pass any significant laws affecting renewable energy resources in 2011, the Michigan Public Service Commission did issue a *Report on the Implementation of the P.A. 295 Renewable Energy Standard and the Cost-Effectiveness of the Energy Standards* on February 15, 2011.[158]

F. Minnesota

The Minnesota legislature enacted an omnibus energy bill in 2011 which, among other things, made changes to the State's Renewable Development Fund (RDF).[159] Minnesota's largest electric utility, Xcel Energy, operates two nuclear energy plants and is required to transfer significant annual payments to the RDF in connection with spent nuclear fuel stored in dry casks at the plants.[160] The purpose of the RDF is to promote the development of new sources of renewable energy.[161]

In addition, enacted Senate File 1197 made changes to the state's Energy Conservation Improvement Program (CIP) which has the statutory objective of achieving energy savings of "1.5 percent of annual retail energy sales for electricity and natural gas . . . through energy conservation programs and rate design."[162] The CIP is a utility-administered program that requires natural gas and electric utilities to invest a portion of their revenues in programs that promote energy efficiency technologies and practices.[163] CIP expenditures are recovered through customer rates.[164] The new provisions of Senate File 1197 deal primarily with requirements pertaining to large energy customers.[165]

Senate File 1197 also added a provision requiring utilities to file a report with the state regulatory commission and the legislature estimating the rate impact of activities relating to compliance with the state's renewable energy objectives[166] and changed the definition of "total retail electric sales" used for purposes of complying with the state's renewable energy objectives, excluding purchases from federal hydroelectric facilities.[167]

G. Missouri

In the first half of 2011, there was a significant amount of legislative activity around Missouri's electric utility renewable energy standard

158. MICH. PSC, REPORT ON THE IMPLEMENTATION OF THE P.A. 295 RENEWABLE ENERGY STANDARD AND THE COST-EFFECTIVENESS OF THE ENERGY STANDARDS 3 (Feb. 15, 2011), *available at* http://www.michigan.gov/documents/mpsc/Report_on_Implementation_of_PA_295_RE_Standards_and_Cost_Effectiveness_of_Standards_345871_7.pdf.

159. S. File 1197, 87th Leg., Reg. Sess. at sec. 2, § 116C.779(1) (Minn. 2011), *available at* https://www.revisor.mn.gov/bin/bldbill.php?bill=S1197.3.html&session=ls87.

160. *Id.*

161. *Id.* at sec. 3, § 116C.779(3).

162. *Id.* at sec. 17, § 216B.2401.

163. *Id.* at sec. 21, § 216B.241(2).

164. *Id.* at sec. 8, § 216B.16(6b)(c).

165. *Id.* at secs. 8, 17-21.

166. *Id.* at sec. 15, § 216B.1691(2e).

167. *Id.* at sec. 14, § 216B.1691(1)(c).

requirements, which were promulgated in response to the approval by Missouri voters of an initiative petition, designated Proposition C, that established a renewable energy standard (RES) for utility companies operating in Missouri.[168] On June 2, 2010, the Missouri Public Service Commission (PSC) filed "final orders of rulemaking to promulgate rules 4 CSR [§] 240-3.156 and 4 CSR [§] 240-20.100 regarding electric utility renewable energy standard requirements."[169] In response to the Joint Committee on Administrative Rules' concerns, the PSC "issued a revised order of rulemaking regarding 4 CSR § 240-20.100" on July 1, 2010.[170] In January 2011, the Missouri General Assembly enacted Senate Concurrent Resolution 1 (SCR1), which permanently disapproved and suspended the revised order of rulemaking and thereby removed the requirement that utilities generate renewable electricity from in-state projects or from surrounding states that deliver power into Missouri.[171] SCR1 went into effect in February 2011.[172]

Missouri lawmakers attempted to address the effects of SCR1 through House Bill 613 and House Bill 747, but neither bill made it to a vote.[173] House Bill 737, a renewable energy related bill, was enacted in 2011, which, among other things, provides for the designation of a renewable energy generation zone as an enhanced enterprise zone under specified conditions,[174] provides that real property improvements in a renewable energy generation zone designated as an enhanced enterprise zone may be exempt, in whole or in part, from assessment and payment of ad valorem taxes of one or more affected political subdivisions,[175] and defines hydroelectric power generating equipment.[176]

H. Nebraska

In May 2011, the Nebraska legislature enacted Legislative Bill 360, which, among other things, narrows the definition of the term "tangible personal property"[177] so that it only includes "depreciable tangible personal property used directly in the generation of electricity using wind as the fuel source" rather than all property utilized in such generation of electricity.[178] It also narrows the property tax exemption for personal property used directly in the generation of electricity using wind as the fuel source to an exemption for depreciable tangible

168. *See generally* MO. REV. STAT. §§ 393.1020 to 393.1030 (2011).

169. Order Denying Motion and Applications for Rehearing and Requests for Stay, *In re a Proposed Rulemaking Regarding Electric Utility Renewable Energy Standard Requirements*, Mo. PSC File No. EX-2010-0169 at 1 (July 6, 2010), *available at* http://pre.psc.mo.gov/orders/2010/070610169.htm.

170. *Id.*

171. S. Con. Res. 1, 96th Gen. Assemb., 1st Reg. Sess. (Mo. 2011), *available at* http://www.senate.mo.gov/11info/pdf-bill/intro/SCR1.pdf.

172. *Id.*

173. *Missouri Renewable Energy Bill Gets Stuck in the Legislative Process: Renewable Energy Act HB 613 Stalls Out*, RENEW MO. (May 13, 2011), http://www.renewmo.org/protect-prop-c.html (last visited Jan. 9, 2012).

174. H.B. 737, 96th Gen. Assemb., 1st Reg. Sess. at sec. A, § 135.953(5) (Mo. 2011), *available at* http://www.house.mo.gov/billtracking/bills111/billpdf/truly/HB0737T.PDF.

175. *Id.* § 135.963(1).

176. *Id.* § 137.010(7).

177. Legis. B. 360, 102nd Leg., 1st Reg. Sess. at sec. 1, § 77-105 (Neb. 2011), *available at* http://nebraskalegislature.gov/FloorDocs/Current/PDF/Slip/LB360.pdf.

178. *Id.* at sec. 2, § 77-202(9).

personal property utilized in such generation of electricity.[179] Finally, it provides for a renewable energy tax credit for a new renewable electric generation facility rather than just new zero emission facilities and eliminates the January 1, 2018 date by which such facilities must generate electricity to qualify for the tax credit.[180]

I. North Dakota

The State of North Dakota requires Certificates of Site Compatibility and Route Permits for energy conversion and transmission facilities. Senate Bill 2196 was enacted in 2011, amending the definition of "Energy Conversion Facility" to include "wind energy conversion [facilities] exceeding one-half megawatt of electricity" and providing for the payment of fees in connection with an application for the Certificates and Permits.[181] Facility siting has become an issue of greater concern due to the significant increase in wind energy development in the state.[182]

J. Ohio

In April 2011, the Toledo-Lucas County Port Authority launched the BetterBuildings Northwest Ohio program, which offers low-cost financing "to owners of virtually every type of building" for projects that focus on conserving energy and generating savings through equipment retrofits to existing facilities.[183] The Greater Cincinnati Energy Alliance offers similar low-cost financing to building owners in the Greater Cincinnati/Northern Kentucky region.[184]

K. Wisconsin

Senate Bill 81 was enacted in July 2011 to provide that large hydropower facilities, greater than 60 MW, can be counted toward Wisconsin's renewable energy portfolio standards if the facility is placed in service on or after December 31, 2010.[185]

On October 6, 2011, the Wisconsin PSC issued an Order adopting rules creating new definitions, and refining existing definitions, for those resources that qualify for meeting the renewable energy portfolio standards.[186] The rule

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179. *Id.*

180. *Id.* at sec. 3, § 77-27,235(1).

181. S.B. 2196, 62d Legis. Assemb., Reg. Sess. §§ 1, 2 (N.D. 2011), *available at* http://www.legis.nd.gov/assembly/62-2011/documents/11-8182-01000.pdf.

182. *See generally* Annette Bendish, *Wind Energy and Energy Conversion Facility Siting*, N.D. PSC (Oct. 21, 2011), http://www.psc.nd.gov/docs/consinfo/siting/NDACo%202011.pdf.

183. *BetterBuildings Northwest Ohio Can Help with Energy Improvements*, TOLEDOBLADE, Apr. 13, 2011, at T2, *available at* http://www.toledoportauthority.org/Portals/0/Toledo%20Blade%20Earth%20Day%20article%20041311.pdf.

184. *Better Buildings Neighborhood Program: Greater Cincinnati, Ohio, Energy Alliance Uses Community Organizers to Build Trust*, U.S. DEP'T OF ENERGY (Oct. 14, 2011), http://www1.eere.energy.gov/buildings/betterbuildings/neighborhoods/greater_cincinnati_profile.html.

185. S.B. 81, 100th Legis., 2011-2012 Biennial Sess. §§ 1, 5 (Wis. 2011), 2011-2012 Wis. Legis. Serv. 34 (West), *available at* http://docs.legis.wisconsin.gov/2011/related/acts/34.

186. Order Adopting Final Rules, *Rule Modifications to Wis. Admin. Code ch. PSC 118 Regarding Renewable Resource Credits*, Wis. PSC Docket No. 1-AC-234 (Oct. 7, 2011), *available at* http://psc.wi.gov/ap

specifically addresses the manner in which renewable resource credits may be created from displacement of conventional electricity.[187]

VI. FEDERAL

In 2011, the Federal Energy Regulatory Commission (FERC) issued a series of rulemakings and orders addressed at identifying and removing potential barriers to the delivery of renewable energy.

A. Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities

In July 2011, the FERC released an order amending its transmission planning and cost allocation requirements for public utility transmission providers.[188] The reforms announced in Order No. 1000 are intended to improve "transmission planning processes and cost allocation mechanisms under the *pro forma* Open Access Transmission Tariff (OATT) to ensure that the rates, terms and conditions of service provided by public utility transmission providers are just and reasonable and not unduly discriminatory or preferential."[189]

Order No. 1000 builds on Order No. 890, in which the Commission, among other things, reformed the *pro forma* OATT to require each public utility transmission provider to have a coordinated, open, and transparent regional transmission planning process.[190] In Order No. 1000, the FERC concluded "that the existing requirements of Order No. 890 [were] inadequate" because "[p]ublic utility transmission providers [were] under no affirmative obligation to develop a regional transmission plan that reflects the evaluation of whether alternative regional solutions may be more efficient or cost-effective than solutions identified in local transmission planning processes."[191] Similarly, the FERC found problematic that there "was no requirement that public utility transmission providers consider transmission needs at the local or regional level driven by [p]ublic [p]olicy [r]equirements."[192] The FERC found that "[n]onincumbent transmission developers seeking to invest in transmission can be discouraged from doing so as a result of federal rights of first refusal in tariffs and agreements subject to the Commission's jurisdiction."[193] In addition,

> [w]hile neighboring transmission planning regions may coordinate evaluation of the reliability impacts of transmission within their respective regions, few procedures

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ps35/ERF_view/viewdoc.aspx?docid=154332.

187. *Id.* at Attachment A-1, at 1-2.

188. Order No. 1000, *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, F.E.R.C. STATS. & REGS. ¶ 31,323, 76 Fed. Reg. 49,842 (2011) (to be codified at 18 C.F.R. pt. 35) [hereinafter Order No. 1000].

189. *Id.* at P 1.

190. Order No. 890, *Preventing Undue Discrimination and Preference in Transmission Service*, F.E.R.C. STATS. & REGS. ¶ 31,241 at P 84, 72 Fed. Reg. 12,266 (2007) (codified at 18 C.F.R. pts. 35, 37), *order on reh'g*, Order No. 890-A, F.E.R.C. STATS. & REGS. ¶ 31,261 (2007), 73 Fed. Reg. 2,984 (2008), *order on reh'g and clarification*, Order No. 890-B, 123 F.E.R.C. ¶ 61,299, 73 Fed. Reg. 39,092 (2008), *order on reh'g*, Order No. 890-C, 126 F.E.R.C. ¶ 61,228, 74 Fed. Reg. 12,540, *order on clarification*, Order No. 890-D, 129 F.E.R.C. ¶ 61,126, 74 Fed. Reg. 61,511 (2009).

191. Order No. 1000, *supra* note 188, at P 3.

192. *Id.*

193. *Id.*

> are in place for identifying and evaluating the benefits of alternative interregional transmission solutions. Finally, many cost allocation methods in place within transmission planning regions fail to account for the beneficiaries of new transmission facilities, while cost allocation methods for potential interregional facilities are largely nonexistent.[194]

Order No. 1000 requires that "each public utility transmission provider [must] participate in a regional transmission planning process."[195]

B. Promoting Transmission Investment Through Pricing Reform

In May 2011, the FERC released a Notice of Inquiry seeking "comment on the scope and implementation of its transmission incentives regulations and policies under Order No. 679."[196] Noting "the changes in the electric industry, the [FERC]'s experience to date applying Order No. 679, and the ongoing need to ensure that its incentives regulations and policies are encouraging the development of transmission infrastructure in a manner consistent with FPA sections . . . 205 and 206" and 219,[197] the Notice of Inquiry posed seventy-four questions to interested parties regarding various aspects of its transmission incentive policies and their implementation.[198] Among the wide variety of topics covered were the effects of the incentive policies,[199] possible adjustments to these policies,[200] certain rebuttable presumptions for satisfying the statutory basis for applicants to obtain transmission incentives,[201] and promotion of other goals in the statute.[202]

C. FERC Technical Conference on Priority Access to New Participant-Funded Transmission

In March 2011, the FERC hosted a conference to consider issues related to the ownership of, and priority rights to, new transmission projects, with a focus on "merchant transmission and generator lead lines."[203] Participants were "encouraged to identify and discuss the appropriate balance between the Commission's requirements for open access and the needs of project developers."[204] With respect to merchant transmission, panelists were encouraged to address "the effect of the [FERC]'s current affiliate rules and pricing structures . . . on the economics of a proposed project, [and] efforts to"

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194. *Id.*

195. *Id.* at P 68.

196. Notice of Inquiry, *Promoting Transmission Investment Through Pricing Reform*, F.E.R.C. STATS. & REGS. ¶ 35,572, 76 Fed. Reg. 30,869 (2011) [hereinafter Notice of Inquiry]; *see generally* Order No. 679, *Promoting Transmission Investment Through Pricing Reform*, F.E.R.C. STATS. & REGS. ¶ 31,222, 71 Fed. Reg. 43,294 (2006) (codified at 18 C.F.R. pt. 35), *order on reh'g*, Order No. 679-A, F.E.R.C. STATS. & REGS. ¶ 31,236, 72 Fed. Reg. 1,152, *order on reh'g*, 119 F.E.R.C. ¶ 61,062 (2007).

197. Notice of Inquiry, *supra* note 196, at P 2.

198. *Id.* at PP 15-44.

199. *Id.* at P 15.

200. *Id.*

201. *Id.* at P 17.

202. *Id.* at P 20.

203. *See generally* Agenda, *Priority Access to New Participant-Funded Transmission*, FERC Docket No. AD11-11-000 (Mar. 15, 2011).

204. *Id.*

adjust proposed project size[205] and "[t]he need for and appropriate application of mechanisms to ensure customer interest in and access to new transmission" and the implementation of such mechanisms.[206]

D. Variable Energy Resource Integration

In 2011, the FERC also continued to accept comments in response to a Notice of Proposed Rulemaking on the Integration of Variable Energy Resources.[207] The proceeding examined three particular areas in which market structures and practices might be leading to undue discrimination and "unjust and unreasonable rates for transmission service" provided to variable energy resources.[208] A description of the proceeding is provided in the 2011 Report of the Renewable Energy Committee.[209]

E. Frequency Regulation Compensation in the Organized Wholesale Power Markets

In October 2011, the FERC issued an order

> revising its regulations to remedy undue discrimination in the procurement of frequency regulation in the organized wholesale electric markets and ensure that providers of frequency regulation receive just and reasonable and not unduly discriminatory or preferential rates. Frequency regulation service is one of the tools regional transmission organizations (RTOs) and independent system operators (ISOs) use to balance supply and demand on the transmission system, maintaining reliable operations. In doing so, RTOs and ISOs deploy a variety of resources to meet frequency regulation needs.[210]

The FERC found "that current frequency regulation compensation practices of RTOs and ISOs result in rates that are unjust, unreasonable, and unduly discriminatory or preferential."[211] More specifically, the FERC found that "current compensation methods for regulation service in RTO and ISO markets fail to acknowledge the inherently greater amount of frequency regulation service being provided by faster-ramping resources. In addition, certain practices of some RTOs and ISOs result in economically inefficient economic dispatch of frequency regulation resources."[212]

Order No. 755

> requires RTOs and ISOs to compensate frequency regulation resources based on the actual service provided, including a capacity payment that includes the marginal unit's opportunity costs and a payment for performance that reflects the quantity of

205. *Id.* at 2.

206. *Id.*

207. *See generally* Notice of Proposed Rulemaking, *Integration of Variable Energy Resources*, F.E.R.C. STATS. & REGS. ¶ 32,664 at app. A, 75 Fed. Reg. 75,336 (2010) (to be codified at 18 C.F.R. pt. 35).

208. *Id.* at P 1.

209. *See generally*, *Report of the Renewable Energy Committee*, 32 ENERGY L.J. 405, 410-11 (2011).

210. Order No. 755, *Frequency Regulation Compensation in the Organized Wholesale Power Markets*, F.E.R.C. STATS. & REGS. ¶ 31,324, at p. 31,457, 76 Fed. Reg. 67,260 (2011) (to be codified at 18 C.F.R. pt. 35).

211. *Id.* at P 2.

212. *Id.*

> frequency regulation service provided by a resource when the resource is accurately following the dispatch signal.[213]

F. Notice of Request for Comments Regarding 1) Third-Party Provision of Ancillary Services and 2) Accounting and Financial Reporting for New Electric Storage Technologies

In June 2011, the FERC sought "comment on two separate but related issues. First, [the FERC sought] comment on ways in which [it could] facilitate the development of robust competitive markets for the provision of ancillary services from all resource types."[214] Second, the FERC sought to explore "issues unique to storage devices in light of the role they can play in providing multiple services, including ancillary services."[215]

G. FERC Cases Involving Integration of Renewables

In 2011, the FERC addressed the following cases involving renewables: transmission rate incentive orders; wind generator access to a federal power authority; RTO decisions involving Public Utility Regulatory Policies Act (PURPA) purchase obligations; provisions involving pseudo ties for renewable resources; reactive power requirements for renewable resources; balancing services for wind facilities; and curtailment of non-dispatchable resources.

1. Transmission Rate Incentives

As discussed below, the FERC issued a number of case-specific orders providing incentive rates for proposed new transmission facilities intended to integrate renewable energy resources into the grid. In *Atlantic Wind*,[216] the FERC granted incentive rate treatment for the proposed 250-mile Atlantic Wind Connection project, which is intended to "interconnect[] up to 6,000 MW of offshore wind power."[217] The FERC conditioned its approval of incentives on that project being included in the PJM Interconnection's regional transmission expansion plan.[218] Subject to that condition, the FERC granted an overall return on equity (ROE) that included 250 basis points in incentive ROE adders.[219] The FERC also granted Atlantic Wind's requests for several other incentives, such as inclusion of 100% of construction work in progress (CWIP) in rate base,[220] the opportunity to "recover 100 percent of prudently-incurred costs" if the project is abandoned for reasons outside the company's control,[221] and "a hypothetical capital structure based on 60 percent equity and 40 percent debt."[222]

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213. *Id.* at P 3.

214. Notice of Inquiry, *Third-Party Provision of Ancillary Services; Accounting and Financial Reporting for New Electric Storage Technologies*, 135 F.E.R.C. ¶ 61,240 at P 1 (2011).

215. *Id.*

216. *Atlantic Grid Operations A LLC*, 135 F.E.R.C. ¶ 61,144 (2011).

217. *Id.* at P 5.

218. *Id.* at P 59.

219. *Id.* at PP 75-78.

220. *Id.* at P 109.

221. *Id.* at P 116.

222. *Id.* at P 121.

The FERC also approved rate incentives for Desert Southwest Power's proposed 118-mile 500-kV transmission line to move power from renewable resources, including wind resources, to Southern California.[223] The order provided an incentive ROE adder of 150 basis points[224] and also granted Desert Southwest's requests for: a) inclusion "of 100 percent of CWIP in . . . rate base,"[225] b) the opportunity to recover "100 percent of prudently-incurred costs if the project is abandoned" for reasons outside the company's control,[226] and c) a "hypothetical capital structure of 50 percent debt and 50 percent equity."[227]

In other orders, the FERC:

- Granted incentives for Ameren Services' proposed 331-mile Illinois Rivers and 185-mile Big Muddy River projects, subject to the Midwest Independent Transmission System Operator approving those projects in its regional System plan but denied incentives for the Spoon River and Wabash River proposals.[228]
- Granted and denied, in part, incentives for Central Transmission's 345-kV Valley Project in Illinois, "contingent on PJM . . . including the Valley Project as an economic enhancement" in its regional System plan.[229]
- Denied rehearing of a September 2008 order that rejected a complaint seeking to prevent New England transmission owners from applying an incentive ROE adder to project costs in excess of those estimated at the time the incentive was approved.[230]
- Denied rehearing of an October 2008 order that authorized transmission rate incentives for "Central Maine Power Company's . . . Maine Power Reliability Program Project . . . , subject to . . . ISO New England, Inc. . . . approv[ing] the project in its Regional System Plan."[231]
- Denied rehearing of an April 2009 order that granted incentives for Green Power Express' "propos[al] to build approximately 3,000 miles of 765 kV transmission lines in the Midwest . . . to facilitate the interconnection of nearly 12,000 MW of new wind generation."[232]

2. Wind Generator Access to a Federal Power Authority: Iberdrola v. BPA

In June 2011, Iberdrola Renewables, Inc. and four other parties that own wind facilities in the Pacific Northwest (together, Complainants) jointly filed a

223. *Desert Sw. Power, LLC*, 135 F.E.R.C. ¶ 61,143 at P 1 (2011).

224. *Id.* at P 91.

225. *Id.* at P 66.

226. *Id.* at P 71.

227. *Id.* at P 102.

228. *Ameren Servs. Co*., 135 F.E.R.C. ¶ 61,142 at PP 1, 4 (2011).

229. *Central Transmission, LLC*, 135 F.E.R.C. ¶ 61,145 at PP 2, 4 (2011).

230. *New England Conference of Pub. Utils. Comm'rs, Inc. v. Bangor Hydro-Elec. Co.*, 135 F.E.R.C. ¶ 61,140 at P 1 (2011).

231. *Central Me. Power Co.*, 135 F.E.R.C. ¶ 61,136 at P 1 (2011).

232. *Green Power Express LP*, 135 F.E.R.C. ¶ 61,141 at P 1 (2011).

complaint and petition for an order under FPA section 211A[233] against Bonneville Power Administration (Bonneville).[234]

The complaint alleged that transmission provider Bonneville had abandoned adherence to the open access principles set forth in Order Nos. 888, 890, and 2003, by adopting a new, unduly discriminatory practice whereby it unilaterally curtails wind generators without compensation and "substitutes" its own generation for delivery to the wind generators' customers, in violation of the wind generators' interconnection contracts with Bonneville and the firm transmission rights associated with the delivery of the output of the wind generators' facilities.[235]

The Complainants allege that Bonneville's refusal to pay "negative prices" and its unilateral action to curtail wind generation instead, "improperly place[] the entire burden of its over-generation situation on one class of customers, those subject to Bonneville's Environmental Redispatch Protocol."[236] The Complainants contended that the FERC should exert its authority under FPA section 211A to regulate undue discrimination by unregulated transmitting utilities such as Bonneville, which is a federal agency.[237] The Complainants requested that the FERC order Bonneville to immediately revise its curtailment practices to comport with a) the undue discrimination standards of FPA Section 211A, b) its interconnection agreements with complainants, and c) order Bonneville to file and maintain with the FERC an OATT.[238]

In December 2011, the FERC exercised its authority under section 211A of the FPA and directed Bonneville to file a tariff providing "for transmission service on terms and conditions that are comparable to those under which Bonneville provides . . . to itself and that are not unduly discriminatory or preferential.[239] The FERC explained that Bonneville's Environmental Redispatch Policy "significantly diminishes open access to transmission, and results in Bonneville providing transmission service to others on terms and conditions that are not comparable to those it provides itself" and that the FERC, therefore, "find[s] it appropriate to act under FPA section 211A."[240]

The FERC directed Bonneville to file tariff revisions that "provide[] for transmission service on terms and conditions that are comparable to those under which Bonneville provides transmission services to itself and that are not unduly discriminatory or preferential."[241] The Commission also "reject[ed] Bonneville's assertion that certain provisions of its [large generator interconnection agreement

233. 16 U.S.C. § 824j-l (2006).

234. Complaint and Petition for Order Under the FPA, *Iberdrola Renewables, Inc. v. Bonneville Power Admin.*, FERC Docket No. EL11-44-000 (June 13, 2011). The complainants besides Iberdrola include PacifiCorp, NextEra Energy Resources, LLC, Invenergy Wind North America LLC, and Horizon Wind Energy LLC. Because the complaint is privileged under eLibrary accession no. 20110613-5116, all information regarding Iberdrola Renewables, Inc.'s complaint is taken from *Iberdrola Renewables, Inc.*, 137 F.E.R.C. ¶ 61,185 (2011).

235. 137 F.E.R.C. ¶ 61,185 at PP 1-9.

236. *Id.* at P 8.

237. *Id.* at P 9.

238. *Id.* at PP 8-10.

239. *Iberdrola Renewables, Inc. v. Bonneville Power Admin.*, 137 F.E.R.C. ¶ 61,185 at P 2 (2011).

240. *Id.* at P 33.

241. *Id.* at P 64.

(LGIA)] support environmental redispatch because of Bonneville's statutory obligations under its organic and applicable environmental statutes."[242]

3. Pseudo Ties for Renewable Resources: CAISO

In September 2011, the Commission accepted revisions by the California Independent System Operator Corporation (CAISO) "to its open access transmission tariff regarding dynamic transfers of energy and ancillary services into and out of its balancing authority area (BAA)."[243]

> A dynamic transfer is the transfer of energy or ancillary services from resources in one BAA into another BAA. The two basic categories of dynamic transfers are dynamic schedules and pseudo-ties. A dynamic transfer is considered a dynamic schedule when the resource supplying the energy or ancillary services remains under the control of the BAA where the resource is interconnected. A dynamic transfer is a pseudo-tie when the BAA into which the energy or ancillary services are delivered performs the BAA functions for the resource (i.e., supplying the energy or ancillary services) even though that resource is interconnected to another BAA's electric system.[244]
>
> CAISO state[d] that its tariff currently includes provisions that permit dynamic scheduling of imports from certain resources but does not include provisions providing for the dynamic scheduling of exports or the use of pseudo-ties.[245]

The CAISO stated that the tariff revisions that were accepted

> expand upon and clarify existing tariff provisions governing the dynamic scheduling of imports into CAISO BAA, facilitate the dynamic scheduling of energy exports out of CAISO BAA, and allow generators inside and outside of the CAISO BAA to use pseudo-ties. [The] CAISO propose[d] to treat dynamic schedules of imports and pseudo-ties into its BAA in a manner comparable to internal generating units that provide energy and ancillary services within its BAA. CAISO also propose[d] to treat dynamic schedules of exports and pseudo-ties out of its BAA in a manner comparable to its treatment of non-dynamic transfers of energy and ancillary services out of its BAA.[246]

In accepting the CAISO's OATT revisions, the FERC stated that it "agree[d] with CAISO that expanding the opportunities for dynamic transfers will enhance the ability of resources, particularly intermittent resources, to participate in electricity markets throughout the western interconnection, which could lead to greater market efficiency and help load-serving entities satisfy California's renewable energy portfolio standards."[247]

4. Reactive Power Supplies for Renewable Resources: CAISO.

In July 2010, the CAISO filed proposed tariff revisions

> applicable to large asynchronous generators, predominantly wind and solar photovoltaic resources. The CAISO's proposed tariff revisions would impose requirements in four specific areas: (1) power factor design and operations criteria;

242. *Id.* at P 73.

243. *California Indep. Sys. Operator Corp.*, 136 F.E.R.C. ¶ 61,239 at P 1 (2011), *reh'g pending*.

244. *Id.* at P 2.

245. *Id.* at P 3.

246. *Id.* at P 6.

247. *Id.* at P 16.

(2) voltage regulation and reactive power control requirements; (3) frequency and low voltage ride-through requirements; and (4) generator power management.[248]

According to the CAISO, the "proposed tariff revisions . . . [were] intended to address operational considerations arising from policies that encourage development of renewable resources."[249] The CAISO argued that the anticipated "displacement of conventional resources by variable energy resources will result in the displacement of technical characteristics [such as power management and voltage regulation] that are either inherent in, or historically required from, conventional resources."[250] The CAISO asserted that it was "[b]ased on these considerations . . . that it submitted the proposed tariff revisions . . . that . . . are comparable to the technical characteristics required for conventional generators."[251]

The FERC in August 2010 released an Order rejecting the CAISO's proposed tariff revisions for "power factor design and operations criteria," "voltage regulation and reactive power control," and "generator power management,"[252] finding that it had not adequately supported its proposed revisions.[253] The CAISO's proposed tariff revisions for frequency and low voltage ride-through requirements were conditionally accepted.[254]

In November 2011, the Commission denied the CAISO's request for rehearing.[255] However, it found the "CAISO's filing in [the] docket highlight[ed] potential issues regarding the need for reactive power capability among newly interconnecting asynchronous generators and raise[d] questions concerning the need and efficacy of continuing the process established for wind resources under Order No. 661-A" and, therefore, ordered FERC Staff to "commence a technical conference to examine whether the Commission should reconsider or modify the reactive power provisions of Order No. 661-A."[256]

5. Midwest ISO

On February 28, 2011, the FERC issued an order conditionally accepting Midwest ISO's proposal "to create a new category of market resources called Dispatchable Intermittent Resources."[257] In its November 2010 filing, the Midwest ISO (MISO) "proposed revisions to its Open Access Transmission, Energy and Operating Reserve Markets Tariff to [establish this] new category of resources" as a subset of the Generation Resource category and to treat

248. *California Indep. Sys. Operator Corp.*, 132 F.E.R.C. ¶ 61,196 at P 1 (2010).

249. *Id.* at P 2.

250. *Id.* at P 4.

251. *Id.* at P 5.

252. *Id.* at P 1.

253. *Id.* at P 45.

254. *Id.* at P 66.

255. *California Indep. Sys. Operator Corp.*, 137 F.E.R.C. ¶ 61,143 at P 1 (2011).

256. *Id.* at 14. *See generally* Order No. 661, *Interconnection for Wind Energy*, F.E.R.C. STATS. & REGS. ¶ 31,186, 70 Fed. Reg. 34,993, *order on reh'g*, Order No. 661-A, F.E.R.C. STATS. & REGS. ¶ 31,198, 70 Fed. Reg. 75,005 (2005) (codified at 18 C.F.R. pt. 35).

257. *Midwest Indep. Transmission Sys. Operator, Inc.*, 134 F.E.R.C. ¶ 61,141 at P 1, *order on reh'g*, 136 F.E.R.C. ¶ 61,100 (2011).

Dispatchable Intermittent Resources similarly to other Generation Resources in the MISO's real-time market.[258]

In the February 28 Order, the FERC found that incorporating Intermittent Resources into the MISO's "security-constrained economic dispatch process . . . would reduce the . . . need to manually curtail such resources," and would "thereby improv[e] the efficiency of [MISO]'s real-time energy market and reliability function."[259] The FERC also found that Dispatchable Intermittent Resources should be allowed "to set market prices and to receive real-time make-whole credits"[260] and be subject to "real-time Revenue Sufficiency Guarantee" (or uplift) charges.[261]

With regard to the MISO's proposal to exempt certain resources, the FERC also found that it was just and reasonable to exempt certain resources that do not "have the physical capability to be dispatchable" from the requirement that they "register as Dispatchable Intermittent Resources."[262] Specifically, the FERC permitted such an exemption for intermittent resources that either began "commercial operations before April 1, 2005" or "that have 100 percent of their capacity covered by Long-Term Firm Point-to-Point Transmission Service, [Network Integrated Transmission Service], and/or [Network Resource Interconnection Service transmission service]."[263] As part of its compliance filing, the FERC required the MISO "to submit . . . tariff revisions . . . providing that resources that have previously registered as Dispatchable Intermittent Resources may no longer register as Intermittent Resources."[264]

6. Southwest Power Pool

In August 2011, the FERC rejected "Southwest Power Pool, Inc.['s] (SPP) proposed revisions to its [OATT] designed to curtail non-dispatchable resources in the SPP Energy Imbalance Service (EIS) market during periods of congestion."[265]

Under the proposed tariff revisions, "non-dispatchable resources [would have been] instructed to reduce output during congestion management events through market [S]ystem software, as are all dispatchable resources, rather than by phone," as is currently the case for non-dispatchable resources.[266] "Non-dispatchable resources that fail[ed] to follow SPP's dispatch instructions during such events would have been subjected to uninstructed deviation charges except for qualifying facilities (QFs) exercising their rights under section 210 of the Public Utility Regulatory Policies Act (PURPA) to deliver all of their net output to their host utilities." [267]

258. *Id.* at PP 1, 2.
259. *Id.* at P 11.
260. *Id.*
261. *Id.* at P 93.
262. *Id.* at P 35.
263. *Id.* at PP 36, 37.
264. *Id.* at P 41.
265. *Southwest Power Pool, Inc.*, 136 F.E.R.C. ¶ 61,097 at P 1 (2011).
266. *Id.* at P 4.
267. *Id.* (footnotes omitted); *see generally* 16 U.S.C. § 824a-3 (2006).

The FERC found the SPP's proposal to be deficient and rejected it without prejudice.[268] The FERC stated that the filing could, on the one hand, "be viewed as SPP merely proposing to automate the curtailment process for non-dispatchable generators."[269] However, the FERC stated that the SPP's "allu[sion] to other things, like the curtailment priority of qualifying facilities . . . suggest[ed] the filing [wa]s intended to do more than merely automate the curtailment process for non-dispatchable generators"[270] and could, in fact, represent an "SPP propos[al] to fundamentally change transmission priorities for non-dispatchable resources,"[271] whereby the "SPP would curtail all non-firm resources, even if [they were] the lowest cost generators affecting the constraint,"[272] while exempting "traditional generators that self-schedule" from this "process because they are fully dispatchable."[273] The FERC also stated that the "proposal and the ramifications from the proposal were not clear from the filing,"[274] given the SPP did not file testimony or exhibits to clearly explain the proposal.[275] In addition, the SPP did not explain "how [its] proposal to curtail QFs selling energy on an as-available basis pursuant to PURPA [was] consistent with the [FERC]'s PURPA regulations."[276]

7. DOE Loan Guarantee Program

The Department of Energy's (DOE) Section 1705 loan guarantee program, which was enacted as part of the American Recovery and Reinvestment Act of 2009 (commonly referred to as the "Stimulus Act") and provides loan guarantees for a variety of renewable energy technologies, was only available for projects that commenced construction by September 30, 2011.[277] As a result, the program has effectively ended. Other DOE loan guarantee programs are continuing, as discussed below.

The DOE continues to operate a number of loan guarantee programs, despite controversy.[278] The Section 1703 program, administered under Title XVII of the Energy Policy Act, provides loan guarantees for projects incorporating non-commercial technologies that avoid or reduce air pollution.[279] Periodically, the DOE issues a solicitation for applications regarding a particular technology or energy industry segment.[280] Borrowers who are approved for

268. 136 F.E.R.C. ¶ 61,097 at P 9.

269. *Id.* at 10.

270. *Id.* at P 11.

271. *Id.*

272. *Id.*

273. *Id.*

274. *Id.* at P 12.

275. *Id.*

276. *Id.* at P 15.

277. *1705*, U.S. DEP'T OF ENERGY: LOANS PROGRAM OFFICE, https://lpo.energy.gov/?page_id=41 (last visited Feb. 29, 2011).

278. In particular, the bankruptcy of Solyndra, which had received a Department of Energy Section 1703 guarantee for a loan worth over $500 million, brought the question of loan guarantees into the spotlight during 2012. *See generally* Memorandum from the Subcomm. on Oversight and Investigations Staff to the Subcomm. on Oversight and Investigation 1 (Sept. 12, 2011), *available at* https://lpo.energy.gov/?page_id=58.

279. *1703*, U.S. DEPT OF ENERGY: LOANS PROGRAM OFFICE, https://lpo.energy.gov/?page_id=39 (last visited Feb. 12, 2012).

280. *Id.*

participation in the Section 1703 loan program receive a guarantee of their debts from the DOE, the "credit subsidy cost," in essence the cost of the DOE's risk from guaranteeing the loan.[281]

The DOE also offers the Advanced Technology Vehicles Manufacturing Loan Program, which provides loans to manufacturers of qualify as "ultra efficient vehicles" or "advanced technology vehicles."[282] The loans are means to facilitate the construction and expansion of manufacturing facilities and engineering costs but are generally not available for research and development costs.[283]

281. *Id.*

282. *Advanced Technology Vehicle (ATV) Manufacturing Incentives*, U.S. DEP'T OF ENERGY (June 15, 2011), http://www.afdc.energy.gov/afdc/laws/law/US/411.

283. *Id.*

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